

ISSN 1911-2017 (Print)
ISSN 1911-2025 (Online)

ASIAN SOCIAL SCIENCE

Vol. 11, No. 21 September 2015



CANADIAN CENTER OF SCIENCE AND EDUCATION

Editorial Board

Editor-in-Chief

I-Tsun Chiang, National Changhua University of Education, Taiwan

Associate Editors

Alexander S Takeuchi, University of North Alabama, United States

Nicholas Ruei-lin Lee, Chaoyang University of Technology, Taiwan

Polly Yeung, Massey University, Palmerston North, New Zealand

Editorial Assistant

Bruce Gao, Canadian Center of Science and Education, Canada

Jenny Zhang, Canadian Center of Science and Education, Canada

Editorial Board Members

Abdullahi Yibaikwal Shehu	José Noronha Rodrigues	Pablo Zanoor
Abu Bakar Abdul Hamid	Juli-Anna Aerila	Päivi Rasi
Alireza Salehi Nejad	Jun-Young Oh	Patricia Sloane-White
Andrew Schumann	Kahirool Mohd Salleh	Paul Allin
Anna H. Jankowiak	Kannan Subramaniam	Paulito Valeriano Hilario
Arshad Javed Rizvi	Kimburley Choi	R. K. Kavitha
Björn-Ola Linnér	Kishore Dere	Rakhyun Edward Kim
Boaventura DaCosta	Krishna Chandra Mishra	Ramajanaki Iyer
Cai Lian Tam	Kristina Johansson	Ramir Villaro Sonsona
Changjoo Kim	Lamartine Braga	Rickey Ray
Chen I Ju	Leon Cremonini	Rita Yi Man Li
Chia-Hung Lai	Lok P. Bhattarai	Rohana Kamaruddin
Cho-Ying Li	Marcelo Afonso Ribeiro	Sahbi Hidri
Christian Tamas	Maria Salvina Signorelli	Sandro Serpa
Chung-Jen Wang	Maria Virginia G. Aguilar	Sang-Bing Tsai
Chung-Khain Wye	Marian S. Harris	Shiwei Jiang
Colin Wark	Mariia Rubtcova	Shobha Kulathakattu
Deirdre M. Warren	Marja-Leena Rönkkö	Shu-Hsien Huang
Dong Yub Lee	Maryam Ahmadian	Shumaila Ahmad
Emine Özmete	Mauro Giuffrè	Simon Friederich
Esmail Zeiny	Mohamad Fazli Sabri	Siva b. Kulandaivel Chellappan
Garrett Mitchener	Mohamed Ajouaou	Stefan Stieger
Georgia Andreou	Mohammad J. Maghsoodi Tilaki	Stephen Healy
Ghizlane Lakhnati	N. Gokhan Torlak	Susana Cabaço
Gianvito D'Aprile	Nabeel M. Althabhwai	Tanveer Ahmed Naveed
Gulay Gunay	Nawaraj Chaulagain	Tsui-Yii Shih
Hyung Seok Lee	Nikos Amanatidis	Tugba Yilmaz
Ibrahim Akman	Niraj Mishra	U-maporn Kardkarnklai
Inda Sukati	Noor Mohammad	Vakur Sumer
Isidore Ekpe	Nooshin Sabour Esmaeili	Vasiliki Brinia
Ivy Haoyin Hsieh	Olaoluwa Olusanya	Wan-Hsiang Chou
Jake M. Laguardor	Ong Puay Liu	Won-Jun Lee
Jörg Balsiger	Osman Chuah Abdullah	Xingan Li
Jorma Enkenberg	Ötügen Senger	Yung-Jaan Lee
José María Ariso	Ozgur Demirtas	

Contents

Student Reflection on the Development of Intercultural Competence through the Education Abroad Experience	1
<i>Michaela Lukešová</i>	
The Description of Unfair Competition Under the Current Legislation of the Russian Federation	15
<i>Alexander Yurevich Pavlov, Vera Nikolaevna Batova, Alexander Yurevich Sokolov, Natalia Nikolaevna Kovaleva & Andrey Vladimirovich Kolesnikov</i>	
The Impact of Service Quality and Cultural Beliefs on Intention to Use Financial Services: The Moderating Role of Trust	20
<i>Khaled Mohammed Alqasa & Hamad Balhareth</i>	
Certain Issues of Human Rights' International Legal Regulation and Ways of Their Solution	28
<i>Viatcheslav Gavrilov</i>	
Ethical Sustainability in Scene Design of Iranian Children TV Shows	39
<i>Bushra Abbasi & Mojtaba Ansari</i>	
Study of the Heritage of Korkyt in the Turkic World	55
<i>Tynysbek A. Kongyratbay, Maira S. Sultanova, Nartai S. Bekmoldinov, Bolat Zh. Ospanov & Kalzhan T. Kongyratbay</i>	
The Relationship of Organizational Commitment and Political Behavior Tendency among the Employees of Tehran University of Medical Sciences	62
<i>Raadabadi Mehdi, Mojbafan Arezoo, Rajabi Vasokolae Ghasem & Dargahi Hossein</i>	
The Tradition for Spiritual Learning (Tariqat) through a Sequence of Holy Phrases (Tijaniyah): The Case of Darussalam Boarding School	71
<i>Aceng Kosasih</i>	
Financial Leading Indicators of Banking Distress: A Micro Prudential Approach - Evidence from Europe	78
<i>Ahlem Selma Messai & Mohamed Imen Gallali</i>	
An Overview of Foodpreneur Awareness among Small and Medium-Sized Enterprises (SME) of Halal Certification	91
<i>Norngainy Mohd Tawil, Shamshubaridah Ramlee, Jauhari Jaafar & Firdaus Mohd Saat</i>	
The Structure and Main Issues of "al-Tasdid" of Husam al-Din al-Syghnaqi	95
<i>Daniyar B. Shalkarov, Anar A. Mustafayeva & Dariga M. Kokeyeva</i>	
Influence of Organizational Leadership on Knowledge Transfer in Construction	102
<i>Katun M. İdris, Kherun N. Ali & Aliagha U. Godwin</i>	
Migration as a Social Problem	111
<i>Albina Alexandrovna Nesterova, Tatjana Fedorovna Suslova, Mihail Evgenevich Tsyiganov & Natal'ya Vladimirovna Kobzeva</i>	
Determinants that Influencing the Adoption of E-HRM: An Empirical Study on Bangladesh	117
<i>Abdul Kadar Muhammad Masum, Mohammad Jonaed Kabir & Mustafa Manir Chowdhury</i>	
Social and Humanitarian Expert Assessment of Biomedical Innovations	125
<i>Irina A. Aseeva & Vladimir G. Budanov</i>	
Analysis of Students' Errors in Solving Higher Order Thinking Skills (HOTS) Problems for the Topic of Fraction	133
<i>Abdul Halim Abdullah, Nur Liyana Zainal Abidin & Marlina Ali</i>	

Contents

The Impact of Organizational Justice on Turnover Intention of Bankers of KPK, Pakistan: The Mediator Role of Organizational Commitment	143
<i>Norhani Bakri & Nazim Ali</i>	
Investment in Employees and Research and Development and the Signalling of Intellectual Capital by UK Listed Companies	148
<i>Walter P. Mkumbuzi</i>	
Discourses of Non-Formal Pedagogy in Two Youth-Oriented Indonesian Environmental NGOs	162
<i>Pam Nilan</i>	
The Influence of Job Satisfaction, Job Motivation & Perceived Organizational Support towards Organizational Citizenship Behavior (OCB): A Perspective of American-Based Organization in Kulim, Malaysia	174
<i>Abdullah Osman, Yusuf Haji Othman, S M Sohel Rana, Mohammad Solaiman & Bharat Lal</i>	
The Role of Microfinance in Poverty Alleviation: Empirical Evidence from South-West Nigeria	183
<i>Taofeek Aremu Kasali, Siti Aznor Ahmad & Hock Eam Lim</i>	
Low Self-Control, Peer Delinquency and Aggression among Adolescents in Malaysia	193
<i>Pit-Wan Pung, Siti Nor Yaacob, Rozumah Baharudin & Syuhaily Osman</i>	
Marital Decline in the Asian North of Russia and Generational Transition of Family Values	203
<i>Anastasia S. Barashkova & Svetlana A. Sukneva</i>	
TQM and Performance Linkage in the Microfinance Institutions: The Mediating Role of IT Capability	213
<i>Abdo Ali Homaid, Mohd Sobri Minai & Hamzah Abdul Rahman</i>	
Factors Affecting the Choice of School and Students' Level of Interest towards the Maritime Program	231
<i>Carlos L. Aguado, Jake M. Laguardo & Joseph Cezar L. Deligero</i>	
The Empirical Analysis of the System of Risk Management on Small and Medium-Size Enterprises	240
<i>Raigul Doszhan, Akmaral Mustafina & Gulnazym Supugalieva</i>	
Comparative Performance Analysis between Conventional and Islamic Banks in Bangladesh- An Application of Binary Logistic Regression	248
<i>Abu Hanifa Md. Noman, Sajeda Pervin, Nazneen Jahan Chowdhury, Md. Amzad Hossain & Hasanul Banna</i>	
Delayed Goodwill Impairment Charges: An Examination of the Declined Market Capitalization	258
<i>Jamaliah Abdul Majid & Nor Asma Lode</i>	
An Empirical Investigation of the Relationship between Economic Growth, Urbanization, Energy Consumption, and CO2 Emission in GCC Countries: A Panel Data Analysis	270
<i>Mohammad Asif, Raj Bahadur Sharma & Anass Hamad Elneel Adow</i>	
Modern Tax System of the Republic of Kazakhstan	285
<i>M. Arzayeva, A. Mustafina & D. Sadykhanova</i>	
Developing the Therapeutic Relationship Assessment Tool of Nursing Students in the Northeastern Region of Thailand	293
<i>Somjittra Nawa, Pattanusorn Stabhonwong & Kanchana Chaipan</i>	
On the Mistranslation of Cultural Words in the English Versions of <i>Sun Tzu's Art of War</i>	300
<i>Jianchuan Zhou</i>	
Measuring Market Structures in the Dairy Market in the Czech Republic	306
<i>Ekaterina Mikhalkina, Mansoor Maitah & Karel Šrédľ</i>	

Contents

On the Teaching Management Mode of Sino-foreign Educational Cooperation Program in Higher Vocational Colleges	316
<i>Zhang Li & Lu Yang</i>	
Forms and Mechanisms of Public-Private Partnerships in Innovative Modernization of the Western Europe Economies	321
<i>Elena N. Zakharova, Aleksander A. Mokrushin, Anzhela R. Pshizova, Saida A. Khatukay & Svetlana K. Chinazirova</i>	
Islamic Transcendental Wellbeing Model for Malaysian Muslim Women: Implication on Counseling	331
<i>Siti Aishah Hassan</i>	
Influence of Local Leadership in Poverty Eradication among the Orang Asli Communities in the State of Terengganu, Malaysia	342
<i>Mohamad Hafis Amat Simin, Ramle Abdullah & Asmawi Ibrahim</i>	
The Consequences of Ataturk's Secularization on Turkey	350
<i>Asyraf Hj Ab Rahman, Wan Ibrahim Wan Ahmad, Fadzli Adam, Nooraihan Ali & Daud Ismail</i>	
The Effectiveness of Zakat in Reducing Poverty Incident: An Analysis in Kelantan, Malaysia	355
<i>Ahmad Fahme Mohd Ali, Zakariah Abd. Rashid, Fuadah Johari & Muhammad Ridhwan Ab. Aziz</i>	
Reviewer Acknowledgements for Asian Social Science, Vol. 11, No. 21	368
<i>Jenny Zhang</i>	

Student Reflection on the Development of Intercultural Competence through the Education Abroad Experience

Michaela Lukešová¹

¹ Tomas Bata University in Zlín, Faculty of Humanities, Czech Republic

Correspondence: Michaela Lukešová, Tomas Bata University in Zlín, Faculty of humanities, Mostní 5139, 760 01 Zlín, Czech Republic. Tel: 42-057-603-7418. E-mail: lukeso@fhs.utb.cz

Received: November 18, 2014 Accepted: April 7, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p1

URL: <http://dx.doi.org/10.5539/ass.v11n21p1>

Abstract

This study is devoted to the topic of intercultural competence. It aims to determine what intercultural competence students acquire through education abroad experience. Based on the results of our research we will introduce synthesized and identified fundamental structures and on their basis we will present research questions/hypotheses. We are not neglecting the recommendation for practice. We present recommendations for the development of these key competences through ideas such as “pre-departure intercultural training”, which would help students to find their way around their new environment and gain a deeper understanding of the cultural context.

Keywords: intercultural competence, intercultural communication, internationalization, education abroad experience

1. Introduction

The rise of globalisation has led to an increase in constant interaction between people, cultures and civilisations, and mobility and migration have resulted in the creation of a multicultural society. Scientists, teachers and students alike all agree that the world around them has changed both politically and economically, as well as in cultural, social and technological terms (Janebová, 2009). Universities are a part of the broader society – the contemporary globalisation process, as well as of society itself. Universities are becoming a microcosm of society, a “melting pot”, a place where individuals gather not only in the general sense of the word, but men and women with their own histories. And therefore these educational institutions should strive to develop key skills that will help students to succeed in our rapidly changing society. As they develop these key skills, students become “global-ready graduates” or “global citizens” (Hunter, White, & Godbey, 2006), who have mastered key intercultural competences.

One possible means of developing intercultural competence in university students is internationalisation, which becomes a natural part of universities. From the viewpoint of internationalisation, universities are places which provide their students and employees with an internationalised environment to enable them to develop the intercultural competences they need in today’s global society, and they aim to assure that international experience becomes a natural part of their studies for all students. To what extent do experience abroad and the internationalised environment of universities develop the aforementioned intercultural competences, or what are the key competences developed by students who have participated in a study visit abroad? This is the main question we attempt to answer through this study, which analyses the reflections of students who have returned from spending several months on a study visit abroad. This study aims to determine what key abilities and skills students acquire during a study visit abroad; however, we also attempt to find the most effective way of implementing cultural aspects into the educational curriculum in order to develop key abilities and skills and also ways of supporting students to go on study visits abroad.

2. The Theoretical Background of Intercultural Competence from the Point of View of Intercultural Communication

Experts specialising in intercultural communication and the development of intercultural competence in various different contexts have started to explore the question of what it means to be an effective communicator and how it is possible to develop the communication skills of people in an intercultural environment. This has gradually

led to the need to identify the different aspects of effective communication, with the aim of developing knowledge and improving the standard of research surveys.

Based on their research studies, Ruben (1977 see also Ruben & Kealey, 1979) recognised that the observable behaviour of the individual rather than knowledge of other cultures is a more suitable variable for analysing effective communication and identified seven behavioural evaluation components of communication competence (communicative competence): a) display of respect, b) interaction posture, c) orientation to knowledge, e) empathy, f) self-oriented role behavior, g) interaction management a h) tolerance for ambiguity.

Another research approach came from Hammer, Gudykunst, and Wiseman (1978) in which 24 abilities were identified based on a review of literature concerning intercultural effectiveness. Three dimensions were specified: a) the ability to deal with psychological stress, b) the ability to effectively communicate, and c) the ability to establish interpersonal relationships.

However, Spitzberg (1989) argued that competence is not only effectiveness. It also involves Appropriateness. Appropriateness refers to “avoiding the violation of valued rules or expectancies” whereas effectiveness is “the achievement of valued objectives or rewards” (Spitzberg, 1989, p. 250). Based on these key components of intercultural communication competence we may therefore define it as “the ability to effectively and appropriately execute communication behaviors to elicit a desired response in a specific environment” (Wiemann, 1977 In Chen 1990, p. 247).

If we focus on the concept of intercultural competence, we must say that we come across a number of different theoretical approaches. We present the outcome of our research, which identifies and assesses the intercultural competence of students who have experience of a study visit abroad (education abroad experience). One author who explores the topic of intercultural competence in relation to internationalisation is Deardorff (2006), who identified and evaluated students’ intercultural competence as the result of internationalisation (Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization). This study seeks to determine a definition and appropriate assessment methods of inter-cultural competence as agreed on by a panel of internationally known intercultural scholars. The result of the research was a consensual definition in which multicultural competences are seen as “*the ability to communicate effectively and appropriately in intercultural situations, which is based on intercultural awareness, skills and attitudes*”. This research led to the creation of two models of intercultural competence – pyramid and procedural. In the pyramid model, the lower levels (based on requisite attitudes, knowledge and skills) support and enhance the higher levels (those of desired internal and external outcomes). At the top, some of the desired external outcomes are the ability to both behave and communicate effectively to achieve goals. The desired internal outcomes include aspects of an individual’s frame of reference, including aspects of adaptability, flexibility, and empathy. These are supported by both knowledge and skills. Finally, the base of the pyramid rests on requisite attitudes, including those of respect, openness, and curiosity.

Intercultural competence therefore means the optimal integration of knowledge, mindfulness and communication skills when interacting in problematic situations in an appropriate, effective and adaptive manner. The criteria of communication appropriateness, effectiveness and adaptability may serve as evaluation criteria to determine whether intercultural conflict communication is perceived as competent or incompetent (Ting-Toomey, 2009).

Appropriateness means the extent to which a certain type of behaviour is seen as correct and in line with the expectations of others. In order to be able to act “correctly” in a cultural situation, not only do we need the relevant awareness of the broader context which could affect interaction, but we also require specific knowledge of the conflict, i.e. what constitutes appropriate or inappropriate behaviour and how such behaviour may influence the constructive or destructive outcome of the conflict. According to Ting-Toomey (2009), appropriateness in communication is a process of culturally-sensitive attunement, in which individuals not only acquire knowledge of values and norms in a conflict situation, but are also able to skilfully apply that knowledge in practice.

Effectiveness corresponds to communication skills, which encompass verbal and non-verbal behavioural manifestations that enable individuals to attain their communication goals in intercultural interaction through appropriate and effective action. In order to achieve an effective communication strategy in conflict situations, both parties must be capable of employing a wide range of verbal and non-verbal forms of behaviour, and must also be mentally and behaviourally flexible and adaptable.

Adaptability refers to our ability to adapt to different styles of communication and behaviour and to adapt to a new cultural environment. It implies our mental, affective and behavioural flexibility when dealing with an intercultural conflict. Adaptability signalises our attunement to the perspectives, interests, goals and approaches

of others, as well as our willingness to modify our own behaviour and aims to best suit the conflict situation in question (Ting-Toomey, 2009).

No matter how intercultural competence is theorized within intercultural communication. Scholars seem to agree on at least free core assumptions. First, most intercultural communication scholars agree that intercultural competence should be conceptualized based on cognitive, affective and behavioral approaches (Bennett, 2009). Second, the end result should be communication that is considered both effective and appropriate. Third, intercultural competence is culture-general. According to Bennett *is intercultural competence a set of cognitive, affective and behavioural skills* and characteristics that support effective and appropriate interaction in a variety of cultural contexts.

Table 1. Intercultural competence as a set of cognitive, affective and behavioral skills

Cognitive dimension	Affective dimension	Behavioral dimension
Cultural self- awareness	Curiosity	Relationship building skills
Culture-general knowledge	Cognitive flexibility	Behavioural skills: listening, problem solving
Culture-specific knowledge	Motivation	Empathy
Interaction analysis	Openmindedness	Information gathering skills

According to Morgensternová, Šulová (2009) *cognitive competence* consists of the ability to have a realistic view of myself (“inner self”) and the ability to realize our “cultural self”. It represents our cultural heritage which is characterized by the values, traditions and norms of our culture. Inner self and cultural self is forming our socio-cultural identity. There can also include the ability to realize our prejudices, stereotypes and think tolerantly. This category includes our ability to acquire and process knowledge about foreign culture, ability to properly analyze the behavior of individuals from different cultures, understand the differences between domestic and foreign culture and to be aware of them.

Affective competencies are related to our experience of the situation. Among very important attributes of affective competencies belong cultural sensitivity and empathy. Adaptability is key in the processing and the adoption of new cultural patterns of behavior. Adaptability is understood in a broad sense as the ability to adapt to new conditions. We understand it as art to maintain peace of mind, a feeling of safety and health at significant change in living conditions.

Behavioral competencies are the best seen externally, and can be the best influenced. They include the full range of complex skills, for example: the art of communication, conflict resolution, team work and problem-solving skills in intercultural situations. During communication is especially authenticity, listening skills, realize and respect the formal rules in a foreign culture and others.

Kim (1991) seems to summarize all of these findings with the hypothesis that intercultural communication competency results from adaptability, or the individual’s capacity to suspend or modify some of the old cultural ways, to learn and accommodate some of the new cultural ways, and to creatively find ways to manage the dynamics of cultural difference/unfamiliarity, intergroup posture, and the accompanying stress (p. 268). More precisely, Kim suggested that there are three dimensions that relate to this concept of cross-cultural adaptability or intercultural communication competence: the cognitive dimension (an individual’s interpretive mechanism or structures that assign meaning to messages), the affective dimension (an individual’s motivation or willingness to accommodate intercultural encounters), and the behavioural dimension (an individual’s abilities to be flexible and resourceful in using his or her cognitive and affective skills). Essentially, effective intercultural communicators must have an understanding of cultural communication differences, an ability to overcome those barriers, and a desire to use those skills.

This study explores the thoughts of students who have been on a study visit abroad, with the aim of identifying key components of intercultural competence. Therefore, the primary question is as follows: *To what extent do experience abroad and the internationalised environment of universities develop the aforementioned intercultural competences, or what are the key competences developed by students who have participated in a study visit abroad?*

3. Method

This study is based on phenomenological investigation, i.e. the description and analysis of the experiences of students of Tomas Bata University in Zlín, which participated in a European Union certified educational

programme aimed at supporting cooperation and mobility in all spheres of education, and one of the requirements of this programme is that the student must have studied abroad (education abroad experience). The aim of the certified programme is to prepare students for constantly changing society and to develop their intercultural competences, as well as to support students in their efforts to master skills that will help them in their own personal development and will increase their employability.

The aim of the study is to obtain feedback from students involved in the programme, i.e. to acquire a self-assessment report on the following: What experience students acquired through international experience and what specific abilities and skills they mastered?

3.1 Collection of Data

All the students who participated in the survey were contacted by the researchers by email. We acquired the contact details of all the students through faculty coordinators, who keep records of student mobility abroad. The first email sent to the students contained a request asking them to take part in the survey, with further details of the research – the aims of the research and a brief justification of the research problem.

A total of 33 students were contacted, i.e. all those involved in student mobility from 2011/2012 to 2013/2014. As this is a relatively broad time frame, we had to assume that some students had already graduated and their contact details had changed, and also had to count on the fact that some students would not be interested in participating in the research. In the end, a total of 10 students agreed to take part in the survey. This research sample we consider sufficient as well as Creswell (1998) recommends, in the framework of the phenomenological study, to realize interviews with 10 to 15 individuals.

All the students who participated in the survey have experience of a study visit in a country in Europe (Slovakia, Denmark, Finland, Germany, Austria and Estonia).

As research tools analysing intercultural competence through quantitative strategy continue to be unsystematic and inconsistent, with many experts focusing on the theoretical aspects of intercultural competence and debates over the components of competence and attempts to validate those components with the aim of subsequently gauging the effectiveness of intercultural communication, we opted for a qualitative strategy.

We collected the data through a qualitative **phenomenological interview**, in which participants were asked to reflect on their experience with mobility and describe how it was important to them. The respondents were asked to construe and explain the meaning of their conduct in specific social situations (Hendl, 2008).

In the first interview the participants were asked to give their thoughts on their general experience with cultural differences. The aim of this question was to place the individuals' experience into context by obtaining as much information as possible from them in relation to the topic.

The question was: *What is your personal experience with cultural differences?*

The second interview focused on the details of that experience. The interview revealed specific details of the participants' experience in relation to the topic. The questions were as follows:

Describe how you adapted during your international experience?

How was it to work (deal) with people from different cultures?

Describe your own experience using the local (official) language (communicating or speaking the local language).

During the **third interview** the participants were asked to give their thoughts on their experience, i.e. to identify the specific abilities and skills they acquired during their time spent abroad. The question was as follows:

Please describe your specific abilities and skills, the knowledge and attitudes you used or acquired during your international experience.

3.2 Data Analysis

In order to assure a descriptive phenomenological analysis we use bracketing, intuition, analysis and description. When using bracketing we realise our preconceived concepts and ideas about the phenomenon and when collecting the data we strive to understand the importance the participants ascribed to the given experience.

In the intuitive phase the aim is to gain a precise understanding of the importance of the students' experience with the phenomenon we are studying. We compare the various different data segments and the categories and topics that result, while using a content analysis (coding, categorisation and definition of themes). The intuitive phase will be followed by an in-depth description of the importance of those experiences (Hendl, 2008).

From the narratives of the participants we will try to detect and isolate thematic content of experiences of participants by using the method of selective approach according to Van Maanen (1988). In the frame of this approach, the researcher analyzes each sentence in the text. Once researcher identifies themes, he/she approaches to reflection and interpretation. This phase will be followed by in-depth description of meaning (Hendl, 2008) and we will introduce synthesized and identified fundamental structures and on their basis we will formulate research questions/hypotheses.

3.3 Results of the Research

On the basis of students' thoughts about their experiences abroad, we can say that the development of abilities and skills can be monitored in terms of the cognitive, behavioural and affective aspects. This part of the work is devoted to the results of our research survey.

3.3.1 Description of Acquired Cognitive Competencies

Cognitive competences in the broader sense of the word mean the field of knowledge, skills and abilities that goes to form our thought software. This software or equipment contains the whole range of our findings, experience and information not only about foreign culture, but also about the person himself or herself. Which of these were identified by the survey participants?

Students focused particularly on the **findings they acquired about foreign cultures**, how they adapted to the way people thought in the foreign culture and to the process of understanding the differences between their own culture and the foreign one.

Many of the students' comments were about specific aspects of the new culture, such as religion, as one student stated: *"I wasn't well prepared for it, especially not as a non-religious person. It's not that they tried to force their faith on us (my other classmate from the Czech Republic), but their certainly argued its case."* (H, Slovakia).

Other comments concerned information the students had acquired relating to the economic, political or historical aspects of the environment in question, or focused on comparing that culture with their own. One respondent's answer reflects all the others:

"As regards money, Finns are better paid than Czechs. This is mostly down to the fact that for some time now Finland has used the euro, but even so, in comparison with the Czech Republic, the standard of living and housing are better. The Finns love to have a good time, so there are some social events and concerts going on in town every day." (P, Finland).

A major role in developing knowledge of the local community was played by guides (the Buddy system), who were there for the students all the time they were abroad. *"We all went on various trips, to festivals and cultural events, which helped us to gain a better understanding of the country."* (K, Finland).

There are also courses taught as part of lessons which influence the development of these key skills. *"I attended a course: Identity in Motion, which was aptly named. We were a group of 17 students, everyone from a different part of the world. Our task was to create scenes depicting our culture and compare that culture with Austria. It was extremely interesting and informative. Over time, we realised that at the beginning we'd had a fairly different opinion of other cultures."* (K, Finland).

Last but not least there are also the "host mother/father", who can have a very positive influence on students. *"My landlord was very pleasant, ...he was interested in my culture, so we used to get together and inspire one another."* (S, Austria).

Students devoted a great deal of attention to making detailed comparisons of the situation in the Czech Republic and in the country they stayed in. The first topic was comparing the teaching styles used.

"At the school we had several joint projects we had to work on with people from various different countries. It was a great experience." (B, Denmark).

"We had to adapt to a completely different style of teaching. Everything was based on group work, so it was very important to get on with the people in the group and be able to discuss things with them." (S, Denmark).

"The greatest difference was probably in the style of teaching, practice and certain opinions, which were enormously influenced by the local faith." (H, Slovakia).

Another very common topic mentioned when comparing the two cultures was the behaviour of people in the Czech Republic as compared with the behaviour of the local people (e.g. local ethnic and national minorities). Comparisons were particularly along the lines of: *People in the Czech Republic behave in this way, and people*

in that country behave like that, either in a positive or negative manner. If a person is able to acquire and process findings about a new culture and analyse the behaviour of individuals from different cultures, understand the differences between their home culture and foreign culture, this means they have mastered a very important part of cognitive competence.

As part of cognitive competences students also developed their **ability to take a realistic look at themselves and become aware of their “cultural me” (cultural identity)**. “Cultural me” means the cultural heritage we carry with us and which encompasses the values, traditions and norms of our national culture.

“I got to know new cultures, and realised how happy I am that I live in the Czech Republic.” (J, Denmark).

“Everything is new for you. I realised many things there and a lot of people inspired me to do things which had never occurred to me in the Czech Republic.” (S, Austria).

Another important aspect of cognitive competence is **awareness of our prejudices and stereotypes and the ability to think “tolerantly”**. The expression “awareness” is important, as it cannot be completely separated from stereotypes or prejudices, as they simplify the world as we perceive it and make it easier to read. In this case we particularly mean enhancing positive attitudes towards foreign cultures and being “culturally” open and tolerant.

“Of course I got to know lots of new people, characters and opinions. Those people and experiences taught me to be more tolerant, adaptable and creative.” (P, Finland).

“Not focusing on the differences between people based on their country of origin, skill colour or faith was something I thought I wouldn’t have a problem with. However, at the beginning I noticed in myself that a person (who is not used to multicultural environments) constantly compartmentalises others based on these very attributes.” (B, Denmark).

“Thanks to my flatmates I learned to be more tolerant.” (V, Austria).

3.3.2 Description of Acquired Affective Competencies

Affective competences relate to how we experience a particular situation. Key concepts here are therefore intercultural sensitivity and adaptability. This particularly concerns our sensitivity to a foreign culture and our ability to adapt. It also involves empathy, i.e. the ability to empathise with foreign mentalities and their specifics and to better interpret foreign behavioural models and correctly interpret emotions in the culture in question, in relation to the knowledge we possess about that culture (the cognitive component of multicultural competence). Here we clearly see the interconnectedness and the correlation between the individual components of intercultural competence – cognitive, affective and behavioural.

A major role in the development of key abilities and skills was played by students’ previous multicultural experience. If students had already participated in a similar programme or work placement or have the chance to travel during their leisure time, this also reduces problems with **adapting to a new environment** and students learn to cope with cultural differences very quickly.

“Before my study visit I had spent two and a half months during the holidays in Austria (holiday job), which was a great advantage for me.” (V, Austria).

“As it wasn’t the first time I had been abroad for some time alone, I adapted to the cultural differences very quickly.” (S, Austria).

“Although it was the first time I had been away from home for a long time, I had already travelled all over Europe and through part of Asia and Africa, so I was generally used to seeing people of other nationalities with other customs and other languages.” (Z, Austria).

Adaptability means the ability to maintain one’s mental well-being and a feeling of being healthy and safe, even when one’s living conditions have changed dramatically.

“Mobility allows you to adapt not only to the cultural differences of the country you have chosen to visit, but also the cultural differences of different people from all over the world.” (S, Denmark).

“Most of all you probably acquire and enhance your own qualities and eventually you’ll see if those are enough or not, and you have to learn to adapt. That’s most likely what it’s all about adapting.” (H, Slovakia).

Intercultural courses were offered to enable students to adapt to the conditions of their chosen country as quickly as possible and to enable them to communicate effectively and appropriately in a variety of intercultural situations, i.e. courses which helped the students to broaden their understanding of the local community.

“For two hours a week we had a course in Estonian culture, where they taught us cultural customs and national dishes and drinks; we also went to various museums, where we learned more about their culture. However, ESN also prepared plenty of interesting trips and events for us with local and other students. The international dinner, for example, was a great event, at which teams from the various different countries cooked their national dishes and have a presentation about their country.” (S, Estonia).

According to the students, dealing with cultural differences is not just about understanding the environment in which we are to live, but also greatly depends on mastering a foreign language. When asked about how they adapted during their international experience, the students also referred to how long it took them to develop their language skills, which is a competence component discussed further below (behavioural competence).

Most of the students described not only the specifics of the culture in question, comparing aspects such as traditions, customs and the value system, but also the importance of **empathising with foreign mentalities and their specifics and appropriately interpreting foreign behavioural models.**

“First of all I had to recognise and understand how people behaved and why. I would never have believed what a long process that could be.” (S, Denmark).

“... I also had to adapt to various different forms of behaviour where I lived, which was very multicultural.” (B, Denmark).

Another of the main topics relating to the affective aspects of intercultural competence is the ability to deal with various different perspectives and be **open-minded.**

“As I came across a very diverse range of cultural differences, I had (if I really wanted to learn something) to really open up, to be “open-minded”. (B, Denmark).

“I also learned how to be more open and communicative and to not be afraid of new things and experiences.” (P, Finland).

“My multicultural and pro-European sentiments were enhanced by new experiences. I am more open to the world than I was before I left, and have more of a desire to travel. (B, Denmark).

On a similar note, the participants also described how their time abroad had become an **experience that had changed or at least affected their lives.**

“I realised that I didn’t want to be one of a thousand graduates, but that I wanted to be a confident student, one matured by experience, who would know what she wanted as soon as she finished her studies. I would be able to decide, as I would be aware of my options. And that’s probably me all over.” (S, Austria).

3.3.3 Description of Acquired Behavioral Competence

The third important category of acquired competence comprises behavioural competence. In this category particularly emphasis was placed on acquiring experience in relation to the development of language and communication skills, as well as on describing the development of a wide range of different life experiences.

Many times students commented on the problem of language **abilities and skills.** Many of the participants described how they had improved their language skills through their international experience and mentioned this development especially in relation to various aspects ranging from passive knowledge of the language, active use of the language, and the number of foreign languages they had learned.

One very interesting fact that all the students agreed on was that **English is a universal language.** English helped them a great deal in communicating during their international experience, even though that country used a different official language.

“It was a neutral language for us all.” (H, Slovakia).

“If there was a conflict, I was unable to speak a word of German. Only English. (Z, Germany).

“Most of all I used English ... the biggest problem could be when a person is unable to speak any language other than his native tongue, in which case it would be very difficult to integrate oneself into an international community. (Z, Germany).

The universality of English did not make it more effective to communicate with the local people and other students from other countries, but also meant it could be used when learning local languages.

“Every week I went to Finnish lessons, which were taught in English.” (K, Finland).

Students also mentioned the approximate length of time needed to adapt to a foreign language, which in their view took around two weeks.

"It took me around 2 weeks to adapt to the fact that English was used everywhere, and I used to have to go and rest for a while in the afternoons, as I felt my head bursting from the information overload. However, people are very adaptable and after two weeks I had pretty much effortlessly adapted to the conditions in Denmark." (B, Denmark).

One of the many reasons for using English as a universal language was the fact that the **local language** is too complicated, or is not spoken anywhere else in the world.

"My study visit wasn't really long enough for me to master the local language. And Danish isn't spoken anywhere else outside Denmark, so you could say I didn't really have the need or the time to learn that language." (B, Denmark)

However, there were some students who were interested in mastering at least the **basics of the local language, and so they attended courses.**

"First and foremost my friends and I saw our Danish language course as being a meaningful way of spending our leisure time, and secondly as something truly interesting. (S, Denmark).

"During my studies I had the chance to attend an optional Danish language course, and as I was interested in learning something about the language, I set myself the task of learning to speak some Danish." (J, Denmark).

"Before starting school I had attended a German language course and there we had a large ethnic mix. Classmates from France, Denmark, Brazil, Vietnam, the USA, Greece, Palestine, Iraq, Jordan, Slovenia, Holland, etc. The course lasted for two weeks and we were all "forced" to speak only German in class. We were only allowed to use English during break times and after school. (Z, Germany).

The students also tried to make meaningful use of what they had picked up of the local language when communicating with the local people, during their work experience, etc.

"I tried to use Finnish, or at least a few words or short sentences, when communicating with my friends from other countries or with our Finnish friends and also in the hospital in which I was doing my work experience. The patients were happy to engage in at least a short conversation." (K, Finland).

"I spoke Estonian to the patients in the hospital, as well as in shops and wherever it was needed." (S, Estonia)

The students also commented on their experience with non-verbal communication and how valuable it is to develop those skills.

"Communication was obviously very difficult at the beginning, but I managed to get my meaning across using body language." (S, Estonia).

"...it was sometimes harder with the dialect, which was very strong in the area I was staying in, so I had absolutely no chance of understanding some of the older people, but I got around everything using my hands and feet." (S, Austria).

The prevalence of comments about the importance of non-verbal communication is significant for two reasons. The first is that the students were immersed in an environment in which they had to use a foreign language that they still did not feel confident using and did not want to rely entirely on their ability to speak. Therefore, gestures and other non-verbal strategies became essential in order to maintain communication. The second reason is the relative isolation of the participant or time spent in an environment in which the local community does not use English as a universal language, meaning that students had to quickly learn the language that was officially used in that environment in order to be able to communicate with the people in the community.

Ability to cooperate, communicate and work in an intercultural team, as well as to respect others, understand one's role in the team, facilitate and contribute towards the development of the team are some of the main skills involved in the behavioural component of intercultural competence. And, from what the students said, it is obvious that the ability to cooperate in a team is a crucial skill if one wants to succeed in an intercultural situation.

"It was sometimes difficult to make one's voice heard in a larger group, but you could say that we all respected one another. Cooperation was always brisk and we were able to do a lot of work as a team in just a few days." (B, Denmark).

"Once we'd got past the language barrier, there was nothing to stop us from working together on our group projects." (S, Denmark).

Perceiving and correctly **interpreting conflict situations and learning strategies for resolving intercultural conflicts**/problems are important skills that are needed by anyone who enters an intercultural environment. From

what the participants said, it is clear that that they do not have much experience with conflicts or how to resolve them. Most often they faced problems relating to teamwork, but managed to respond appropriately by drawing on their adaptability skills.

“Of course, when working together there were people who did not join in much and wanted to just be “carried by the group”, and it was hard to work with those – luckily these were merely exceptions.” (B, Denmark).

“Students from Romania have a completely different sort of day than we do. They really don’t worry about being late for everything. They sit at the computer at night and are not bothered that their flatmates want to sleep and relax. I will always have fond memories of my classmates from Romania, although perhaps tinged with a touch of bitterness about their inconsiderate behaviour towards others.” (S, Denmark), and an almost identical opinion is also given (J, Denmark).

Elsewhere, with a view to acquired behavioural skills, emphasis was placed on acquired basic **life experience**. Many of the participants described new experiences through which they acquired skills such as: independence, responsibility, using local public transport, abiding by unwritten local rules, exchanging money, etc. This is all reflected in the answer given by a student describing his experience from Denmark: *“Once I had got hold of an old bike, which I used to ride in all weathers (just like everyone else), I felt like a Danish citizen. I also had to adapt to being away from home and to the responsibility of having money on my account which had to keep me going for the rest of my stay. I had to adapt to the local prices and the unwritten rules about being out alone in the big city. Also to various different types of behaviour in the place where I lived, which was very multicultural.” (B, Denmark).*

“I learned to be independent, responsible, active. I had to deal with everything myself; I had practically no help from anyone and the results were always my own accomplishments.” (P, Finland).

4. Discussion

The partial results of the research enable us to interpret the in-depth description of the importance of such experiences for the entire group of participants. We therefore explore the findings and experience we have gained through our contact with the participants when collecting this data.

It is evident that experience abroad, or a study visit abroad, had a significant influence on the students. We can say that we have achieved our objectives and identified the components of intercultural competence students acquired during their stay abroad.

The participants learned something new about the culture in question, and learned to apply what they had learnt in the real life of the community. Most of the participants stated that it was their first experience living abroad (apart from holidays with parents, for example), where they were left to rely on their own resources, skills and experience, and had to take responsibility for their own behaviour. This fact also highlighted the importance of developing language skills (and knowledge of a foreign language) and non-verbal communication, which earlier they might have taken for granted. Even more important is the fact that many participants claimed that their experience had prompted them to be more open, patient and flexible.

One student stated: *“I realised that I didn’t want to be one of a thousand graduates, but that I wanted to be a confident student, one matured by experience, who would know what she wanted as soon as she finished her studies. I would be able to decide, as I would be aware of my options. And that’s probably me all over.”*

We will not repeat the results that we have presented above, but we will introduce synthesized and identified fundamental structures of the realized research. Key acquired abilities and skills, we see at the level of cognitive, affective and behavioral. We also recognize identified specific skills and abilities that students acquired on the basis of the study abroad experience. The following model presents these fundamental structures.

We can discuss how the findings are consistent with previous knowledge on intercultural competence. Intercultural competencies can be categorized into three elementary areas: cognitive, affective and behavioral. One of the most critical components of cognitive intercultural competence is self-exploration or the development of our own cultural awareness and identity (Hofstede, 2004). Identity, as well as understanding the lens through we each view the world, becomes a foundational point for exploring intercultural competence. As Kim (2009) discusses, research has shown that an inclusive identity orientation and a strong identity security (the degree to which an individual feels secure in his or her identity) are both important in successful intercultural engagement, leading to greater degrees of adaptability, flexibility and cultural empathy, all elements of intercultural competence. Indeed, Kim sees this inclusive identity orientation and identity security as „a necessity for anyone striving to develop meaningful and fruitful intercultural relationships” (p. 62).

Table 2. Fundamental structure of intercultural competence

Cognitive dimension	
Knowledge of cultures	<i>Approaching the way of thinking in a given culture. Awareness of the differences between own and foreign cultures.</i>
Cultural identity	<i>Awareness of my own "cultural background" - ie. cultural self. Knowledge of models of identity development and process of acculturation. Self-awareness - be aware of my own values, attitudes, norms and their significance for my personality.</i>
Enhancing self-reflection, self-conception	<i>Willingness to self-development in my own values, worldview and prejudices.</i>
Preventing prejudice and stereotypes, to be tolerant	<i>Becoming aware of our prejudices, stereotypes and to be open-minded and tolerant.</i>
Affective dimension	
Intercultural adaptability and sensitivity	<i>Sensitivity to foreign cultures and adaptability. Ability to use own cultural knowledge and sensitivity to culturally sensitive and better cooperation.</i>
Empathy	<i>Empathy with foreign mentalities, their specifics and better interpret foreign behavior patterns.</i>
Open mind	<i>The ability to deal with different perspectives.</i>
Experiencing interpersonal relationships	<i>Awareness of interpersonal distance and closeness in a given culture and other specifics.</i>
Behavioral dimension	
Language skills	<i>Mastering the universal language to communicate effectively with people from other cultures. Mastering the official (local) language.</i>
Intercultural communication	<i>Communication without communication noise and confusion. Ability to work with non-verbal communication. Respect formal rules in foreign cultures.</i>
Capacity to cooperate and work in intercultural teams	<i>Respect of others. Understanding own role in a team. Contribute to effective team collaboration.</i>
Interpretation of intercultural conflict situations and intercultural conflict resolution	<i>Ability to identify problems and intercultural conflicts. Ability to learn different strategies to address and manage intercultural conflicts.</i>

Based on the research, we found out, that students see abilities and skills very important for adapting to a new culture during study abroad experience. It is adaptability and language skills. Adaptability is the ability to adapt and accommodate one's own behavior to people from other groups. One important aspect is to know more than one language, but language skills does not translate automatically into intercultural skill. One can be a fool in more than one language, and it is quite easy to behave foolishly in an unfamiliar culture. Language does not automatically endow one with cultural knowledge or the ability to adapt to different communicative styles or behaviors. This can be supported by the Deardorff (2004) study in which the experts did not reach consensus on the role of language in intercultural competence. Interestingly, one successful leader noted that „I used to think language skills were as important as cultural adaptability, but I now believe adaptability is far more important... It can be very dangerous to pick people because they have language skills and then to find out they have very little cultural adaptability and little interest in adapting” (Brake, 1997, p. 62). With or without language skill, the ability to encourage in chameleon-like behavior remains critical to functioning interculturally (Pusch, 1994).

Another of the main topics relating to the affective aspects of intercultural competence is the ability to deal with various different perspectives and be open minded. For example Hunter et al. (2006) define global competence: Having an open mind while actively seeking to understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate and work effectively outside one's environment.

As we already said, perceiving and correctly interpreting conflict situation and learning strategies for resolving intercultural conflicts are important skills that are needed by anyone who enters an intercultural environment. According Ting-Toomey (2009) as the global economy becomes an everyday reality in most societies,

individuals will inevitably encounter people who are culturally different in diverse workplaces and social environments. Developing intercultural conflict competence within larger intercultural competence setting is critical because conflict creates further perceptual distortions and emotional flooding in the cultural encountering process. Sharpening the knowledge, mindfulness, and skills of intercultural conflict competence can simultaneously enhance general intercultural competence tendencies and vice versa. Under emotional anxiety and stress, even if an individual is well honed in general intercultural competence, she or he might still be overwhelmed by her or his verbal and nonverbal inaptness and awkwardness. Thus, it is important to pay close attention to the topic of intercultural conflict competence within the broad umbrella of intercultural competence.

Ability to cooperate, communicate and work in an intercultural team are some of the main skills involved in the behavioral component of intercultural competence. According to Fantini (2000) is ability very important too because, intercultural competence consists of the following components: First, the *attributes* most commonly cited in the literature are flexibility, humor, patience, openness, interest, curiosity, empathy, tolerance for ambiguity, and suspending judgments. The *three interrelated areas* are the ability to establish and maintain relationships, the ability to communicate with minimal loss or distortion, and the ability to cooperate to accomplish tasks of mutual interest or need. The *four dimensions* are knowledge, (positive) attitudes (or affect), skills, and awareness.

In research it is important to examine the *validity*. That is the validity of the obtained results due to the fact. Degree of validity is the answer to the question of whether we examine what we want to investigate, and it is one of the requirements of objectivity. Our phenomenological research can be validated by using ecological and construct validation.

Ecological validity determines the applicability of the results in practice. Ecological validity is a form of an external validity. External validity represent a problem for qualitative researchers because their tendency to employ case studies and small samples. Some test may very well measure a hypothetical construct, but in practice the results are unenforceable, or do not show in everyday life. This is particularly important to identify in a laboratory test. In our case, we can say that there was no laboratory research.

The ecological validity is very crucial for our research, because, as we have said, is oriented towards practice. The results of our research are objective and applicable in practice, because we realized the research that presents an experiential profile of respondents on their real life. We selected the students who participated in a long-term stay abroad. It means that they spend at least one semester (five months) abroad. Based on this long experience they were able to adequately answer our questions. The questions for an interview were formulated in such a way as to check whether individual students / respondents objectively describe their experiences.

Based on the results of the research we have created the fundamental structure of intercultural competence. After comparing this structure with theoretical studies, we can say that the result represents the theoretically determined construct, and we applied the *construct validity*.

Internal validity means whether there is a good match between researchers' observations and theoretical ideas they develop. Le Compte, Goetz (in Bryman, 2012) argue that internal validity tends to be a strength of qualitative research, because the prolonged participation in social life of a group over a long period of time allows the researcher to ensure high level of congruence between concepts and observations.

To summarize, we can determine the potential drawbacks together with a recommendation how they can be remedied. This study is based on only 10 students' description of their own education abroad experiences. Therefore, there is still space for the implementation of research and data are still asking for insight into the experience with intercultural competences. We are aware that the analysis is not intended to be representative of all education abroad experiences. Future studies could investigate more participants' experiences and more written accounts to obtain more comprehensive result.

Another limitation of this study may be the questions we asked students, which could be very specific and prompt. These prompt questions shaped how students reflected on their experiences and what stories were reported.

The limits of the research can also relate to the research sample of respondents. Data was collected from one university. The sample of the students is limited to the cultural background of the student population at that specific university. To address this, one possibility would be to compare similar type of data across institutions that have similar education abroad programs.

This research examined the experiences of respondents on the basis of one research method. Future studies may consider triangulation by investigating different types of data including, for example, observation of participants,

or quantitative-based pretests and posttest of cultural sensitivity. The triangulation method may provide a more holistic understanding of students' intercultural behaviors (Deardorff, 2009). Longitudinal research will also need to assess a specific predeparture and postdeparture training programs to see what impact these programs have on the continuing development of intercultural competence in education abroad students.

In the field in which we carried out our research survey it was found that there is a lack of any form of education for students who are preparing for a study visit abroad. There is a lack of education at the level of "*pre-departure intercultural training*". The increasing importance of intercultural sensitivity in the global and multicultural society has led many scholars and experts to examine the concept from different perspectives. Practically, the concept has been integrated into intercultural training programs that are initiated to develop the ability of intercultural sensitivity. Those training programs include "T-groups," critical incidents, case studies, role playing, and cultural orientation programs (Seidel, 1981).

A common goal of intercultural training is to develop intercultural sensitivity by increasing awareness of cultural differences and attempts to develop one's communication potential while lessening the likelihood of intercultural misunderstandings (Cargile & Giles, 1996). In other words, the intercultural training programs aim to "develop an appreciation and understanding of cross-cultural differences and to acquire some of the necessary abilities, such as an increased awareness and sensitivity to cultural stimuli and better human relations skills" (Seidel, 1981, p. 184). Morgan and Weigel (1988) pointed out that the major purpose of the above mentioned training programs is to develop intercultural sensitivity, and intercultural sensitivity is a prerequisite for intercultural effectiveness.

As an essential element to the positive outcome of intercultural encounter, the importance of intercultural sensitivity can also be examined from the six general categories of intercultural training programs: affective training, cognitive training, behavioral training, area simulation training, cultural awareness training, and self-awareness training (Gudykunst, Hammer, & Wiseman, 1977; Seidel, 1981).

According to Gudykunst, Ting-Toomey, and Wiseman (1991), the affective training is designed to increase trainees' motivation and sensitivity to communication with people from other cultures and ethnic groups. The cognitive training is to promote understanding of cultural differences and similarities. The behavioral training provides skill training so that participants learn to communicate more effectively with people of other cultures.

The area simulation training requires that participants spend a period of time in a cultural or ethnic neighborhood and to interact fully with the residents in order to gain the real experience of intercultural encounters. The cultural awareness training requires participants to understand the aspects of culture that are universal and specific. Finally, the self-awareness training is to help participants identify attitudes, opinions, and biases that influence the way they communicate.

Among these training programs the affective training, cognitive training, self-awareness training, and cultural awareness training focus on the cognitive and affective understanding of one's own as well as the host culture. The area simulation training and the behavioral training focus on the teaching of "specific behaviors" that are used to better adjust to a new culture. Seidel's (1981) integrated the purposes of these training programs into sensitivity approach that clearly defines specific spheres of training in the three areas: appreciation and sensitivity (affective), understanding and awareness (cognitive), and skills (behavioral).

There is also a lack of any analysis (assessment) of students' intercultural competence at the self-report level, e.g. through pre-tests and post-tests, as suggested, for example, by Deardorff (2006). The author also suggests other possible means of gauging intercultural competence, both qualitative (interviews, observation, case studies, narrative) and quantitative. These are also accompanied by a number of recommendations.

We can present some questions and recommendations for further research surveys aimed at verifying whether the acquisition of a certain level of intercultural understanding is merely superficial, i.e. whether the students relate the knowledge they have gained concerning the cultural norms of a particular country to deeper values and cultural prerequisites, for example.

After determining how students described the skills they acquired during their experience of living abroad, the following question arises: How is it possible to develop cooperation between intercultural communication and intercultural education in order to enable us to help create an education system that assures more effective teaching and the development of intercultural competence?

5. Conclusion

This study was devoted to the topic of intercultural competence in students of tertiary education. The article presents the results of our research, which aimed to determine which components of intercultural competence students mastered during a study visit abroad. Data was acquired through phenomenological interviews, in which

the participants were asked to reflect on their experience with mobility and describe the importance it had for them, particularly in relation to the development of the aforementioned competences.

Based on the results of our research we present recommendations for the development of these key competences through ideas such as “pre-departure intercultural training”, which would help students to find their way around their new environment and gain a deeper understanding of the cultural context.

References

- Bennett, J. M. (2009). Cultivating intercultural competence: A process perspective. In D. K. Deardorff (Ed.), *The SAGE handbook of intercultural competence* (pp. 121-140). Thousand Oaks, CA: Sage.
- Brake, T. (1997). *The global leader: Critical factors for creating the world class organization*. Chicago: Irwin.
- Bryman, A. (2012). *Social research methods* (4th ed.). New York: Oxford University Press, xli, 766 s.
- Cargile, A. C., & Giles, H. (1996). Intercultural communication training: Review, critique, and a new theoretical framework. *Communication Yearbook, 19*, 385-423.
- Chen, G. M. (1990). Intercultural communication competence: Some perspectives of research. *The Howard Journal of Communications, 2*, 243-261. <http://dx.doi.org/10.1080/10646179009359718>
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks: Sage Publications.
- Deardorff, D. K. (2004). *Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United States* (Dissertation). North Carolina, Raleigh: North Carolina State University.
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in Intercultural Education, 10*, 241- 266. <http://dx.doi.org/10.1177/1028315306287002>
- Fantini, A. E. (2000). A Central Concern: Developing Intercultural Competence. In *SIT Occasional Papers*.
- Gudykunst, W. B., Hammer, M. R., & Wiseman, R. L. (1977). An analysis of an integrated approach to cross-cultural training. *International Journal of Intercultural Relations, 2*, 99-110. [http://dx.doi.org/10.1016/0147-1767\(77\)90045-1](http://dx.doi.org/10.1016/0147-1767(77)90045-1)
- Gudykunst, W. B., Ting-Toomey, S., & Wiseman, R. (1991). Taming the beast: Designing a course in intercultural communication. *Communication Quarterly, 40*, 272-286. <http://dx.doi.org/10.1080/03634529109378851>
- Hammer, M. R., Gudykunst, W. B., & Wiseman, R. L. (1978). Dimensions of intercultural effectiveness: An exploratory study. *International Journal of Intercultural Relations, 2*, 382-393. [http://dx.doi.org/10.1016/0147-1767\(78\)90036-6](http://dx.doi.org/10.1016/0147-1767(78)90036-6)
- Hendl, J. (2008). *Kvalitativní výzkum: Základní teorie, metody a aplikace*. Praha: Portál.
- Hunter, B., White, G. P., & Godbey, G. C. (2006). What does it mean to be globally competent? *Journal of Studies in International Education, 10*, 267-285. <http://dx.doi.org/10.1177/1028315306286930>
- Janebová, E. (2009). Vedení internacionalizace vysokých škol. *Studia paedagogica, 14*(2).
- Kim, Y. Y. (1991). Intercultural communication competence: A systems-theoretic view. In S. Ting-Toomey, & F. Korzeny (Eds.), *International and Intercultural communication annual 17: Cross cultural interpersonal communication* (pp. 259-275). Newbury Park, CA: Sage.
- Kim, Y. Y. (2009). The Identity Factor in Intercultural Competence. In D. K. Deardorff (Ed.), *The Sage Handbook of Intercultural Competence*. CA: SAGE.
- Morgan, E., & Weigel, V. (1988). *Credits and credibility: Educating professionals for cultural sensitivity*. Paper presented at the Conference on Science and Technology for International Development, Myrtle Beach, SC.
- Morgensternová, M., & Šulová, L. a kol. (2009). *Interkulturní psychologie: Rozvoj interkulturní sensitivity*. Praha: Karolinum.
- Pusch, M. (1994). The Chameleon Capacity. In R. D. Lambert (Ed.), *Educational exchange and global competence* (pp. 205-210). New York: Council on International Educational Exchange.
- Ruben, B. D. (1977). Guidelines for cross-cultural communication effectiveness. *Group & Organization Studies, 2*, 470-479. <http://dx.doi.org/10.1177/105960117700200408>

- Ruben, B. D., & Kealey, D. J. (1979). Behavioral assessment of communication competency and the prediction of cross-cultural adaptation. *International Journal of Intercultural Relations*, 3, 15-47. [http://dx.doi.org/10.1016/0147-1767\(79\)90045-2](http://dx.doi.org/10.1016/0147-1767(79)90045-2)
- Seidel, G. (1981). Cross-cultural training procedures: Their theoretical framework and evaluation. In S. Bochner (Ed.), *The mediating person: Bridge between cultures*. Cambridge: Schenman.
- Series Addressing Intercultural Education, Training & Service*. [online]. [cit. 10-06-2015]. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.117.8512&rep=rep1&type=pdf#page=33>
- Spitzberg, B. H. (1989). Issues in the development of a theory of interpersonal competence in the intercultural context. *International Journal of Intercultural Relations*, 13, 241-268. <http://dx.doi.org/10.1177/105960117700200408>
- Ting-Toomey, S. (2009). Intercultural Conflict Competence as a Facet of Intercultural Competence Development. In D. K. Deardorff (Ed.), *The Sage Handbook of Intercultural Competence*. CA: SAGE.
- Van Maanen, J. (1988). *Tales of the field: on writing ethnography*. Chicago: University of Chicago Press.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Description of Unfair Competition under the Current Legislation of the Russian Federation

Alexander Yurevich Pavlov¹, Vera Nikolaevna Batova¹, Alexander Yurevich Sokolov², Natalia Nikolaevna Kovaleva² & Andrey Vladimirovich Kolesnikov²

¹ Penza State Technological University, Penza, Russian Federation

² Saratov State Law Academy, Saratov, Russian Federation

Correspondence: Vera Nikolaevna Batova, Penza State Technological University, Prospect Baydukova, Gagarin Street, d.1a/11, Penza, 440039, Russian Federation. E-mail: batova.v.n@yandex.ru

Received: November 18, 2014 Accepted: April 7, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p15

URL: <http://dx.doi.org/10.5539/ass.v11n21p15>

Abstract

This scientific paper examines the concept of unfair competition existing in international and Russian law and legal literature. It identifies and explores distinctive characteristics comprising this legal phenomenon. The authors analyze the types of liability established by the legislation of the Russian Federation for unfair competition in the commodity market. It is administrative, criminal and civil law types of legal liability. The paper examines some of the offenses entailing a public responsibility. The antitrust bodies practice research can help to improve Russian antitrust laws and law of foreign countries.

Keywords: unfair competition, responsibility for unfair competition, administrative responsibility, criminal responsibility, civil liability, antitrust laws

1. Introduction

Economic competition carries out a number of important regulating functions and ensures development of the market, and therefore has a special government support. Unfair competition is prohibited action, based on dishonest and unfair ways of doing business.

Unfair competition has traditionally been a constant companion of free competition serving as a basic condition for ensuring the harmony of supply and demand on the market of goods and services (Gorodov, 2007, p. 29).

If any areas are not to be regulated by the state, they will be regulated by element, criminals, or oligarchy. This was vividly demonstrated in the Russian economy in the 90-ies of the last century. Now, however, market regulation can be discussed only abstracting from the existing practice, because such regulation is almost impossible to be imagined in a pure form. Market is unable to balance and counterpoise the total demand and supply. It is inclined to monopolize of the spheres of social production. Therefore, the society insures itself by opposing the monopolization of markets by state regulation of their manifestations. (Veselovsky at al., 2015)

2. Methods and Materials

When carrying out theoretical and practical research on the state Antimonopoly regulation the authors have used the monographic method. The empirical base of the research and the source of ensuring the conclusiveness of issues and conclusions presented in the work were the official data of The Federal Antimonopoly service, the native and foreign periodical press; the results of researches of scientific centers, the materials of statistical surveys including the results of experts' reports and opinions, the data of reports about the innovative, financial and economic activity of enterprise structures, the materials of the Russian and international scientific and research-to-practice conferences, seminars, "roundtables", the information sources and the Internet.

The regulatory framework of the study is the Constitution of the Russian Federation, antitrust laws and legislative acts providing for administrative, civil and criminal penalties for its violation.

3. The Main Part

3.1

The most common definition of unfair competition is codified in Art. 10-bis of the Convention for the Protection of Industrial Property of March 20, 1883 (Convention for the Protection of Industrial Property of 20.03.1883). It

began to form European legislation aimed to restrict unfair competition. Under this article an act of unfair competition is any act of competition which is in conflict with honest practices in industrial or commercial matters and including all acts capable to create confusion towards the company, products or industrial or trade activities of a competitor, and statements capable to discredit the company and products or industrial or trade activity of a competitor or to put the public across the nature and manufacturing process, the characteristics, the suitability for use or quantity of goods.

Legal doctrine attempted to give the interpretation of the unfair competition definition for many times. G. C. Hins suggested the following definition of unfair competition. It is the use of the right to compete, which is accompanied by ways morally unacceptable, lowering business decency of merchants in relation to each other and discrediting them in the eyes of consumers (Hins, 1931, p. 211). Yu. I. Svyadosts considers unfair competition as doing an action in industrial or commercial matters aimed to gain the benefits through fraud contrary to fair rules or custom of competitors behavior in the capitalist stream of commerce (Svyadosts, 1969, p. 170).

The Russian science worked out various concepts of unfair competition. V. A. Dozortsev considers unfair competition as a provision of a customer (a potential customer) with true or false information which is contrary to usual and customary business practices, requirements of decency, reasonableness and fairness which is able to cause false impression discrediting a competitor, its activities and/or goods (including the ability to cause confusion concerning the nature, manufacturing process, the characteristics, the suitability or quantity of the goods) or to cause confusion with a competitor, his activities and/or his goods (Dozortsev, 1997, p. 33).

Yu. Kasyanov considers unfair competition as competitiveness of independent economic entities in the commodity market targeted to obtain any economic benefits or benefits by generating negative attitude of the consumer towards the products of competitors or generating consumer's attitude towards the goods, which is not in conformity with reality (Kasyanov, 2000, p. 37).

In accordance with the M. G. Dolgikh's definition (Dolgikh, 2003, p. 34), unfair competition is a form of abuse of privilege expressed in wrongful act of market relations subject, which interferes in competitors business rights exercise or harms to consumers by forms of a right exercise contradicting to the law or contrary to usual and customary business practices.

Russian legislature significantly narrowed the unfair competition definition codified in the Convention for the Protection of Industrial Property. Art. 4 of the Federal Law of 26 July 2006 #135-FZ "On Protection of Competition" (hereinafter - the Law on Protection of Competition), identify unfair competition as any act of economic subjects (group of persons) aimed to receive benefits in business activities contradicting to the laws of the Russian Federation, to usual and customary business practices, to requirements of decency, to reasonableness and fairness and that have caused or will cause damages to other economic entities (competitors) or damaged or will harm their reputation.

3.2

The unfair competition definition, which is codified in the Law on Protection of Competition does not provide on-inclusive criterion for accurate determination of an unfair competition act.

Unfair competition is characterized by the following points, which are based on the definition of the Law on Protection of Competition:

1) It is focused to obtain competitive advantages on the relevant commodity market;

This characteristic limits a number of actions, which can be regarded as unfair competition. The actions, which are unprofitable for competitors, cannot be regarded as unfair competition.

2) It contradicts the legislation of the Russian Federation, to usual and customary business practices, requirements of decency, reasonableness and fairness;

This characteristic of unfair competition's contradiction to the legislation of the Russian Federation actually makes illegal and unfair competition similar. Certain incorrect exercise of competition, which do not meet all the criterion of unfair competition, recognized by law, and its bad faith should not be treated as identical concepts.

Under part 1 of Art. 5 of the Civil Code of the Russian Federation dated November 30, 1994 #51-FZ (hereinafter – Civil Code) the customs of business shall be recognized as the rule of behavior, which has taken shape and is widely applied in a certain sphere of business activities, and which has not been stipulated by legislation, regardless of whether it has or has not been fixed in any document.

3) It damages or can damage other economic entities - competitors;

Infliction of damages is not essential criterion to establish a fact of unfair competition. Judicial authorities reasonably presume this fact when there is sufficient evidence of causing damages' possibility (The decision of Volga District Arbitraznyy Court of Russian Federation of 01.06.2009 #A06-6373/2008).

4) It harms or can harm the reputation of other economic entities - competitors.

3.3

The Law on Protection of Competition does not provide the concept of "economic entity's business reputation". Analysis of the provisions of the Civil Code and the acts of judicial bodies allows to conclude that business reputation is an intangible benefit (Art. 150 of the Civil Code). It is one of the conditions of its activity representing a set of trustworthy information about this legal entity, goods it produces, performed works, rendered services. Business reputation is of essential value for the productive activities of the organization on the relevant commodity market, which arise in the period of economic activity of the legal entity.

Detailed unfair competition's forms list is contained in the Model Law for Developing Countries "On trademarks, trade names and unfair competition" (The decision of the Supreme Arbitraznyy Court Presidium of Russian Federation of 17.07.2012 #17 528/11.), elaborated by the World Intellectual Property Organization in 1967:

bribing of competitor's customers with the aim to attract them as clients;

spying or bribery of competitor's employees with the aim to identify industrial or trade secrets;

unauthorized use or disclosure of competitor's know-how;

motivation of competitor's employee to violate or break their contracts with the employer;

threat of competitors by infringement of patents and trademarks suits, if it is done in bad faith and with the purpose to limit competition;

sitting out of another company's trade with the aim to counterstand or prevent competition;

dumping, that is sale of goods on a price lower than it is with the intention to counterstand competition or to suppress it;

creation of impression that customer has an opportunity of purchase on extremely beneficial terms, when in fact it does not so;

intentional imitation of goods, services, advertisement or other aspects of the commercial activities of a competitor;

encouragement of breach of a contract which was concluded by competitors;

production of advertising in which the comparison is made with the goods or services of competitors;

violation of laws which do not regulate competition directly when such a violation allows to achieve unfair advantages over competitors.

3.4

The list of actions that constitute the *actus reus* of this offense is in the art. 14 of the Law, which include:

1) Dissemination of false, inaccurate or falsified information, which may inflict damages to economic entity or damage its reputation;

2) False representation of the nature, method and place of production, usability, quality and quantity of goods or its producers;

3) Economic entity incorrect comparison of produced or sold goods with goods produced or sold by other economic entities;

Incorrect comparison is regarded to be an act of unfair competition in judicial practice, irrespective of whether this information is false (Intellectual property: main materials, 1993. Novosibirsk).

4) Sale, exchange or other introduction into turnover of goods, if there was illegal use of results of intellectual activity and means of individualization equated to them of a legal entity, means of goods, works and services individualization;

At the same time in accordance with Art. 1487 of the Civil Code the use of a trade mark in relation to the goods that were put into circulation in the territory of the Russian Federation by the trademark's holder or with his consent does not stipulate an infringement of the exclusionary trademark rights.

In this case courts reasonably conclude that the use of means of goods, works and services individualization when goods are put into circulation with the consent of the trademark holder does not set off all elements of unfair competition.

5) illegal receive, use or disclosure of information constituting commercial, official and other protected by law secrets.

Other actions of economic entities can be determined as unfair competition, whether they meet the general concept of unfair competition.

3.5

Russian law identifies three types of legal responsibility of economic entities for acts containing elements of unfair competition: administrative, criminal and civil ones.

Generally actions regarded as unfair competition, entail the responsibility under Art. 14.33 of the Code of Administrative Offences of the Russian Federation of December 30, 2001 # 195-FZ (hereinafter – Administrative Code).

Part. 2, Art. 14.33 of Administrative Code provides responsibility for unfair competition that is introduction of goods into circulation with illegal use of results of intellectual activity and equated means of individualization of a legal entity, means of individualization of products, services.

Set of the elements of the offense under Art. 14.33 Administrative Code does not deal with cases of unfair competition in which the law on advertising is violated. Such acts should be determined under Art. 14.3 Administrative Code.

At the same time judicial practice distinguishes actions containing both features of improper advertising and unfair competition.

Creation of a trade name in promotional materials which is confusingly similar to a trade name previously registered by another business entity or to the verbal element of another firm's trademark is an example of such actions (The Law of Russian Federation "Code of Administrative Offences of the Russian Federation" of 30.12.2001).

It appears that if advertisement contrasts some goods with others inflicting damage to business reputation of competitor economic entity, it must be treated as an act of unfair competition under Art. 14.33 Administrative Code.

Several acts of unfair competition entail criminal responsibility.

Thus, the prevention, restriction or elimination of competition by entering of economic entities into agreement restricting competition (cartel), the repeated abuse of a dominant position on establishment and (or) maintaining monopolistically high or low prices of goods, unjustified refusal or evasion of the contract, restricting access to the market, caused large damage to citizens, organizations or state (over 1 million rubles) or resulted high income (over 5 million rubles) are treated as a crime in accordance with Art. 178 of the Criminal Code of the Russian Federation of June 13, 1996 # 63-FZ (The decision of East-Siberia District Arbitrazniy Court of Russian Federation of 06.04.2009 #A19-9804/08-35-Φ02-1165/09) (hereinafter – Criminal Code).

Illegal use of a trademark, service mark, appellation of origin or similar designations for homogeneous goods, and illegal use of a trademark, service mark, appellation of origin or similar designations for homogeneous goods, if these acts were committed repeatedly or caused considerable damage exceeded one million five hundred thousand rubles entail criminal responsibility in accordance with Art. 180 of the Criminal Code.

Art. 183 of the Criminal Code criminalize the following cases of illegal acceptance, use, disclosure of information constituting commercial, official or other secrets protected by law: collecting of such information, by stealing of documents, bribery or menace, as well as other unlawful ways; unlawful disclosure or use of such information without consent of the owner by a person to whom it was entrusted or became known at service or work.

Civil liability is the most widespread kind. It arises when economic entity is harmed by the violation of the antimonopoly legislation. Then, in accordance with Part. 3 art. 37 of the Law on Protection of Competition, a person whose rights and interests are violated should bring lawsuits to the court, the Arbitrazniy court under established procedure. A court will restore violated right, compensate damages including loss of expected profit, damages caused to property.

4. Conclusion

Analysis of the antitrust laws allows to state that the absence of a clear legislative definition of unfair competition and actions that are parts of it causes significant problems with enforcement. Thus, it is necessary to improve the protection of economic entities from unfair competition, to formulate the definition of unfair competition, which contains a comprehensive list of its criterion.

Acknowledgments

The article was written in the framework of State order of the Ministry of education and science of the Russian Federation, project “Inter-disciplinary socio-humanitarian studies in the context of innovative development and world relations” (project code 2232).

References

- Dolgikh, M. G. (2003). Legal nature of unfair competition. *Legislation*, 11, 34-50.
- Dozortsev, V. A. (1997). Unjust or unfair competition? *Jurisprudential world*, 4, 29-33.
- Gorodov, O. A. (2007). The research of unfair competition’s notion. *News of higher education institute. Jurisprudence*, 6, 29-36.
- Gorodov, O. A. (2008). *Unfair competition: theory and practice* (p. 216). Statut.
- Hins G. C. (1931). *New ideas in the law and main problems of our time* (p. 211). Harbin.
- Ivanov, I. D. (1980). *Modern monopoly and competition* (p. 234). Moscow.
- Kasyanov, Yu. (2000). Problems of Russian antitrust laws. *Legislation and Economy*, 6, 25-45.
- Svyatosts, Yu. I. (1969). *Legal protection of trademarks in the capitalist states* (p. 170). Moscow.
- Tot'ev, K. Yu. (2003). *Competition law (legal regulation of competition and monopolies)* (p. 316). Moscow.
- Veselovsky, M. Y., Abrashkin, M. S., Aleksakhina, V. G., & Pogodina, T. V. (2015). Features of State Regulation of the economy in terms of its transition to innovative way of development. *Asian Social Science*, 11(1), 288-296. <http://dx.doi.org/10.5539/ass.v11n1p288>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Impact of Service Quality and Cultural Beliefs on Intention to Use Financial Services: The Moderating Role of Trust

Khaled Mohammed Alqasa¹ & Hamad Balhareth²

¹ School of Business Management, Universiti Utara Malaysia, Malaysia. University of Aden, Yemen

² University of Hail, College of Business Administration, Saudi Arabia

Correspondence: Ebrahim Mohammed Al-Matari, School of Accountancy (SOA), College of Business (COB), Universiti Utara Malaysia (UUM), Malaysia, Amran University, Yemen. E-mail: ibrahim_matri7@yahoo.com

Received: January 3, 2015 Accepted: February 2, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p20

URL: <http://dx.doi.org/10.5539/ass.v11n21p20>

Abstract

In the context of developed countries and in several Middle Eastern countries, the problem of motivating consumers to make use of banking services has been resolved. However, in Yemen, majority of the citizens are non-bank users. This fact leads to a major issue and negatively affects the economy of the country. In this regard, the present study aims to shed a light on the factors that have the potential to influence Yemeni citizen's use of the country's banking system like service quality and Yemeni culture. For this purpose, 850 questionnaires were distributed to part-time university going students. Data collected was analyzed with the help of correlation and multiple regression analysis to determine the factors prediction of the behavioral intention to use Yemeni banking system. The results showed the positive and significant effect of service quality and the significant and negative effect of culture on the consumers' use of Yemeni banking system. Moreover, hierarchical regressions were used to test the effect of trust as a moderator variable. Student's trust had a statistically moderating the relationship between cultural belief and intention but in the negative direction. The study contributes to the academic understanding of the behavioral intention of consumers in the context of Yemen and to the practitioners and policy makers use of the effective strategy to attract customers to the country's banking system.

Keywords: service quality, cultural beliefs, financial services, trust, behavioral intention

1. Introduction

A country's requires a reliable banking system as it is one of the primary resources that facilitate investments. The banking system is deemed by economists as the core of the country's economy as it brings about economic stability and dynamics, and in turn, it drives exchange, production and investment (Adamu & Adeola, 2012) More importantly, a banking system is as strong as the number of people supporting it or using financial services (depositors and investors) and banks with ample numbers of customers are more able to help the economy owing to the considerable deposits for investment (Allen & Carletti, 2008) In this regard, majority of citizens in Yemen are distrustful of the country's banking system and thus many refuse to use the system for their financial transactions.

The Yemeni banking system mechanism mirrors those existing in several Middle Eastern countries with the difference being the Yemeni system has been facing countless of challenges in the recent years that influenced economic aspects. One of these challenges is the lack of consumers using the banking system. Specifically, based on several reports, citizens with bank accounts constitute less than 4% of the population and this negatively impacts the economy of the country (Swidi & Mahmood, 2011).

This unresolved issue minimizes the banks performance and their support of the economy. The economy of Yemen is referred to as a cash economy in that majority of the citizens prefer to deal in cash in their transactions – even while buying durable goods requiring significant amount of cash (Al-Mushrqui, 2008).

Based on the statement of one of the executives in the Central Bank of Yemen, in the past, financial authorities largely ignore the importance of attracting more consumers to use the banking system and hence, banks failed to encourage depositors to make use of their services in order to facilitate money circulation throughout the banking sector (Aladhi, 2009). This might be one of the reasons why less than 4% of the population takes advantage of banking services and why the Yemeni banking system is too weak to support its economy.

Additionally, the lack of bank consumers is attributed to low banking culture of among the country's citizens. The citizens are either unaware of the advantages of the services or they are skeptical of using such services because of issues concerning safety and security (Aladhi, 2009). Banking services are still new to Yemeni citizens and this explains why majority of them prefer to keep their money at home (Alqasa, 2013).

2. Literature Review

2.1 Banking Services Purchasing Behavior

The effective and efficient running of a country's economy calls for an effective banking system as banking services significantly contributes to the country's various sectors. In other words, the industries are considerably reliant on the banking system's strength and durability (Hussein & Omran, 2003).

In this background, although marketers have been attempting to understand consumers' behavior, information concerning consumers' use of financial services is still lacking. In the banking industry, consumer behavior is considered to be a very complex phenomenon. It is a dynamic aspect that requires constant examination. While a consumer would reach to certain decisions easily, sometimes critical decisions take time as it needs deep thinking. This may happen when risk is involved when selecting among options (Gaur, 2006).

In other words, understanding the purchase behavior of consumers is a critical step in attracting and retaining consumers in the banking sector. This attraction will maximize the number of bank customers and the opportunity for the economy to succeed and develop. This supports the contention that bankers should understand consumer purchase behavior towards banking services. In addition to this, consumer purchase behavior is also a topic of crucial significance to monetary authorities that can benefit from understanding it. For instance, through this understanding, the government can create strategies that motivate and encourage consumers to take advantage of the country's banking system services (Hamin & Elliot, 2006).

2.2 Perceived Service Quality and Behavioral Intention

In the context of the service industry, service quality has become one of the top issues, particularly in the dynamic and competitive marketing of the banking services. Service quality is what sets a bank aside from its counterparts (Pont & McQuilken, 2002), where the services offered should go over the expectations of consumers (Gill, Flaschner, & Shachar, 2006).

Along the same line of contention, service quality holds the key to the banking industry's success and survival. It has been considered to be a crucial determinant of the intention of the consumers to make use of financial services and hence, its extensive examination in literature (Patricio, Fisk, & Cunha, 2003). Several prior studies showed that poor services lead to bank switching (Garland, 2005). Specifically, Schmidt, Bergsiek and Kolesnikova (2008) reported that in the U.S., 40% of consumers switched banks owing to ineffective services. Similarly, Allred and Addams (2000) also reported that 50% of their total respondents switched banks owing to issues regarding service.

The quality-intention to use products relationship has been investigated in literature, and quality was reported to antecede consumer's behavioral intention (Gottlieb, Brown, & Drennan, 2011) where positive perceptions of service quality was known to be related to service/product use via intention to use. Contrastingly, negative perceptions of it lead to lack of intention to purchase service/product (Kouthouris & Alexandris, 2005).

2.3 Culture and Behavioral Intention

Culture regulates the behavior of individuals automatically and naturally and this is why its influence on personal behavior is considered a given. The difference in behavior towards a specific action is highlighted upon exposure to different cultural beliefs and at that point, it is realized that culture shapes behavior (Alqasa, 2014).

Several studies have been dedicated to the examination of the cultural belief's influence on consumer purchase intention, where the primary objective is to provide an insight in the people's behavioral pattern in different groups. For instance, Jung and Kau (2004) found that differences in consumers' behavior are based on their cultural belief. However, mixed findings were reported in literature concerning the influence of culture on behavior intention. Some found cultural belief's influence on consumers' behavioral intention towards a particular service/product to be positive and significant (Alqasa, Md Isa, & Siti, 2013), others found it to be negative and significant, while some others found it to be insignificant depending on the culture of the society (Teng & Laroche, 2007).

Back to the context of Yemen, consumers have never been inclined to the banking services as a mechanism for saving, financing or investing. People steer clear of opening bank accounts unless they really have to and they refuse to maintain a bank account unless it is unavoidable (Yemen Times Staff, 2008).

In other words, Yemeni consumers prefer to save their money in their houses. One of the reasons for this phenomenon is that fact that dealing with banking services is still new to the Yemeni culture. Hence, it is important for banks to expend efforts to modify potential consumers' attitude for their benefit. Efforts have to be increased as consumers confidence in banks has already been tarnished following the bankruptcy incident of the Watani Bank in 2006 (Aladhi, 2009). This motivated the researchers, through the present study, to provide an insight in the influence of Yemen's cultural belief on the use of banking services among university students.

2.4 Student's Trust (Moderator)

Trust in general means that a person is willing to take a risk, or expose himself, in relation to somebody else (Svensson, 2005). In addition, trust is an influential element in many social interactions that engage uncertainties and dependency (Esmaili et al., 2011). That means trust is referred to the people's intention to act in a certain way. This kind of action reflects the confidence of one party on the other (Geyskens et al., 1996; Olmos, 2011). In addition, it refers to a person's expectation, beliefs or assumption about the possibility of other future actions to be favorable, beneficial, or at least not detrimental to person's interests.

Generally, trust is a key factor in many social interactions that engage dependency and uncertainties. Banking services are not only described by ambiguity, but they also are described as vulnerable to crisis, lack of control and exposure to financial difficulties or default to pay their debts. All these factors have raised the important role of risk and trust on banks.

Higher level of trust among the university students reflects a higher possibility of using banking services and vice versa. Baron and Kenny (1986) reported that a moderator affects the direction or strength of the relationship between IV and DV variables. The relation in this context between an independent and dependent variables differs owing to the function of the moderator variable. Trust is viewed as a significant variable because of its ability to moderate risk in the consumer behavior process and it allows the consumer to make risk estimation of what could happen as a result of a specific decision, or the benefit that may be gained (Galli & Nardin, 2002).

3. Research Framework and Methodology

A review of literature highlighted the factors that influence consumers' behavioral intention to using banking services. On this basis, the following conceptual framework is developed:

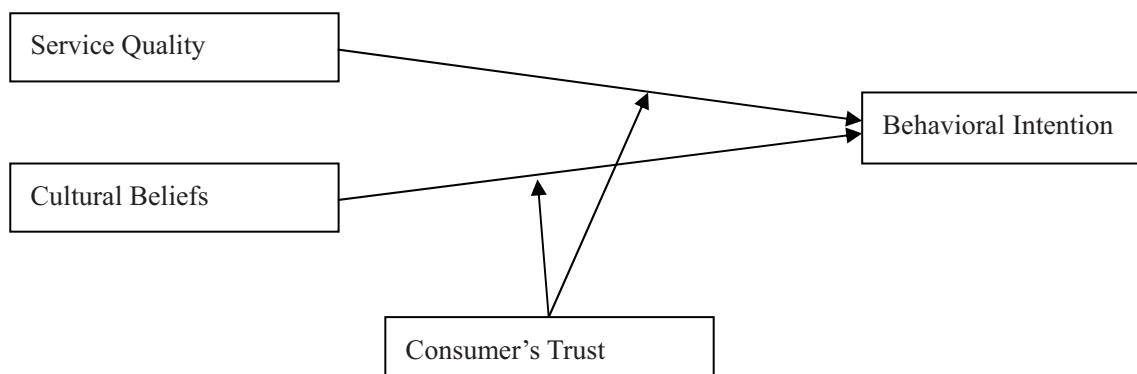


Figure 1. Theoretical framework of the study

On the basis of the above theoretical framework, the following hypotheses are proposed;

H1: There is a significant relationship between perceived service quality and student's behavioral intention to use bank services.

H2: There is a significant relationship between cultural belief and student's behavioral intention to use bank services.

H3: The relationship between service quality and behavioral intention to use bank services is moderated by student's trust.

H4: The relationship between cultural belief and behavioral intention to use bank services is moderated by student's trust.

3.1 Data Analysis

Data was collected through systematic random sampling method from university students via questionnaire. From 850 questionnaires, 598 were retrieved and hence, the response rate equals to 70.4%. The questionnaire items were measured through a five-point Likert scale that ranged from 1 representing strongly disagree, and 5 representing strongly agree.

The result of the correlation test is presented in Table 1. According to the table, the result obtained for service quality is ($r=0.121$, $p<0.05$), cultural belief is ($r=-0.511$, $p<0.05$), and for students' trust is ($r=0.142$, $p<0.05$) indicating that the variables are significantly correlated with behavioral intention.

Table 1. Correlations among summated study variables

Variables	DV	IV1	IV2	Trust (Moderator)
DV- Behavioural intention (BI)	1			
IV1- Service quality (SQ)	.121**	1		
IV2- Cultural Belief (CB)	-.511**	-.074	1	
Trust (Moderator)	.142**	.056	-.023	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

In the present study, the direct influence of components on intention to use banking services was tested with the help of multiple regression analysis, the result of which is presented in Table 2. Based on the figures listed in the table, the three dimensions explained 26.8% of the behavioral intention variance. Specifically, standardized beta coefficient for service quality is significant and positive at ($\beta= .084^*$, $p < 0.05$) and thus supporting the first hypothesis. Similarly, the second hypothesis was also supported as beta for cultural belief is significant and negative at ($\beta=-.505^{**}$, $p < 0.05$).

Table 2. Summary of multiple regression results

Independent Variables	Standardized Coefficient Beta (β)
Service quality H1	.084*
Cultural belief H2	-.505**
R ²	.268
Adjusted R ²	.265
Sig. F Change	0.000**

Note: * $p < 0.05$, ** $p < 0.01$

Dependent Variable: Behavioural intention (BI)

4. Testing Trust as a Moderator on the Relationship between IVs and DV

The researcher used hierarchical regression in conducting the examination of the moderating effect of student's trust on the relationship between IVs and behavioral intention.

To achieve this approach in this study, three models were used. The three Models are illustrated in Table 3.

Table 3. Model summary of the moderating effect of student's trust on IVs and DV

Model	R Square	Adjusted R Square	Change Statistics	
			R Square Change	Sig. F Change
1	.268	.265	.268	.000
2	.284	.280	.016	.000
3	.309	.303	.025	.000

As it is seen in the summary of the model, Table 3 as well as in Table 4, all independent variables were entered into the regression equation in step 1. Coefficient determination R square was found to be 0.268 indicating that

26.8% of behavioral intention can be explained by variables namely service quality and cultural belief. The ANOVA indicates that the model as a whole in this line is significant.

Table 4. The moderating effect of student's trust on IVs and DV (Behavioral Intention)

Independent Variables	Standard Beta Step	Standard Beta Step	Standard Beta Step
	1	2	3
	Beta	Beta	Beta
service quality (SQ)	.084**	.077**	.096
Cultural belief (CB)	-.505**	-.502**	-.814**
Moderating variable			
Students' trust (STR)		.126**	-.182
Students' trust*Attitude toward service quality			-.019
Students' trust* Cultural belief			-.471**
R square	0.268	0.284	0.309
Adjusted R square	0.265	0.280	0.303
R square changed	0.268	0.016	0.025
Sig F change	0.000	0.000	0.000

** Significant at $\alpha < 0.01$ level; * Significant at $\alpha < 0.05$

In the subsequent step, student's trust is included as a predictor variable alongside with IV. In this model, the R square value seems to increase from 26.8% to 28.4% indicating a change of 0.016, which means trust added 1.6% which is significant at $p < 0.01$. Finally, in step 3 the two interaction terms were entered accordingly into the model.

In the third mode, student's trust has been interacted with IV variables. In this line, the additional variance explained by the interaction terms revealed that 2.5% was found to be significant and statistically contributed as indicated by the change value of this model (000). ANOVA implies that the whole model which included both blocks of variables is significant.

Thus, from the regression equation, it can be shown that in the first step, all the predictor variables are significant and in the expected positive direction except cultural belief that was significant but in the negative way. In step two, the student trust is included as a predictor variable and as shown, the student's trust is significant ($\beta=.126^{**}$, $p < 0.01$).

In scanning the significant column in Table 4 in step three regarding interaction terms, it shows only the interaction between trust and culture made a statistically significant contribution ($\beta-.471^{**}$, $p < 0.01$).

5. Discussion

On the basis of this study's results, it is evident that service quality predicts the Yemeni consumers' perception of dealing with the banking system and that Yemeni consumers are concerned with the efficient delivery of banking services. The results show that the Yemeni consumers, represented by the University students, perceive the banks are able to efficiently provide them with services. Thus, when the consumers perceive that banking quality is according to their expectations, they are more likely have behavioral intentions to use banking services.

Nevertheless, although a positive significant perception was found, consumers may still make their decisions to use bank services on the basis of other specific variables that relate to priorities and preferences – service quality may not be the only antecedent of use. Many variables have been proposed to influence consumers' behavior intention to use banking services (Al-Hajri, 2008) and according to Esmaili et al. (2011) even though service quality is significant among Yemeni consumers, they hold other priorities to be equally significant including trust, protection, among others. This could explain the Yemeni scenario and as such, further research is required to examine other variables in order to shed sufficient light on the Yemeni consumers' behavioral intention to use banks and the factors that prevent them from availing bank services.

In addition, based on the results of this study, cultural belief is significantly and negatively related with behavioral intention at ($\beta = -.505^{**}$, $p < 0.01$), meaning to say, high cultural belief is accompanied by low use of banking services.

This result is consistent with that reported by Teng and Laroche (2007) who revealed conflicting results regarding culture influence on consumer purchasing intention. While some results regarding the culture-purchase intention are positive, others are negative depending upon the culture of the society. In a similar contention, Liu and McClure (2001) stated that customers hailing from different cultures tend to display different behaviors and intention to a specific product/service.

This may explain why Yemeni citizens steer clear of interacting with banks and prefer to keep their money at home. Yemeni society is characterized by low dealings with banking services (Aladhi, 2009). Additionally, according to Mushrqui (2009), the perception of holding cash in hand while dealing with financial interactions forms confidence among people and thus most trading transactions are conducted by cash, even when dealing with expensive goods.

On the other hand, the moderating effect of trust was significant on the relationship between culture and intention despite the negative effect. Based on the information gathered from Table 4, it was revealed that cultural belief*student's trust beta -0.471^{**} , $p < 0.05$). Despite the opposite direction in this relationship, it displayed significant influences on student's behavioral intention. This result explains the concern that many consumers hold regarding saving their money in the Yemeni banking system, whereby they think that it is possible to take the risk and lose part of their money. This result reflects the hesitation of many Yemeni consumers to keep their money in banks due to the historical crisis in the Yemeni banking system (Yemen Times, 2008). For example, the failure of the Watani bank of Yemen to pay its debts in 2006 led to many of the bank customers losing some of their deposits and they did not get compensation from the monetary authorities. This incident may still influence consumer confidence toward dealing with banks (Aqamry, 2008).

On the other hand, culture can be a key element in forming some fundamental aspects of the consumer's behavior. Regarding this point, the culture of dealing with the banking system does not yet exist in the Yemeni society. In addition, a study conducted by the Malaysian company SIRIM Berhad (2010) reported that Yemen has a cash economy, with only 4% of the Yemeni population having bank accounts and majority of the Yemeni people deal with cash in many aspects of trading and commercial transactions (Swidi & Mahmood, 2011). Consequently, bankers require doing a lot of effort in order to change people's attitudes towards banking services.

Despite the Islamic society, most of the banks are traditional banks and deal with interest (Reba). Due to the fact that Islamic banks entered the Yemeni financial market recently, there are only four Islamic banks to date. By looking at the Islamic banks shorter existence compared to traditional banks in Yemen, it has been reported that the Islamic banks have taken significant market shares in just a few years (Al-Hamady, 2010). In consequence, it is important for banks to exert effort to modify the attitudes of citizens towards banking services. In Yemen, the society is predominantly Islamic. It has been reported that 99.1% of the Yemeni society constitutes Muslims and they prefer to deal according to the Shariah law. But majority of the banks are convention and they deal with interest. In fact, Islamic banking activities only began in 2008 and there are only 4 Islamic banks in the country (Al-Hamdy, 2010). A close look at the lifespan of Islamic banks compared to their convention counterparts, it is evident that the former obtained significant market share over the past years indicating that people are attracted towards Islamic banks, particularly in the context of Yemen, as these banks are based on Shariah principles.

6. Study Contributions

Cultural belief is a crucial point in the Yemeni banking system and it could be the main factor preventing consumers' use of banking services as evident from the results. Hence, authorities should initiate an advertising campaign in an effort to modify the cultural beliefs of citizens in a positive way and make them aware of the financial services benefits. Monetary authorities should develop a new culture of trust and confidence among potential consumers to attract more depositors to the banking institutions. Attempts should also be made by relevant parties to make the population aware of the advantages of adopting banking services for the individual, the society and the economic development and stability.

7. Future Research

In this study, cultural belief was revealed to have a negative effect on banking services use in Yemen. Culture is a crucial factor that shapes basic aspects of the individual's attitude. Further research is needed to examine this point in Yemen, where majority of the population (99.1%) constitutes of Muslims. It appears that Yemeni

citizens steer clear of using conventional banks on account of their dealings involving riba (interest), which is forbidden in Islam. This contention calls for further research.

8. Study Limitations

One of the limitations of this study is its context, which is Yemen wherein traditional culture is practiced in daily life. This appeared to impact the response rate of genders. Female respondents showed insufficient cooperation and provided excuses not to complete the survey. Hence, there is a gender disparity in data collection, where male respondents constitute 78.6% while female respondents only constitute 21.4% indicating the collected data's predominant male point of view.

References

- Adamu, O., & Adeola, S. (2012). A statistical evaluation of factors that attract customers to banks in Lagos, Nigeria. *Global Journal of Management and Business Research*, 12(3), 1-7.
- Aladhi, N. (2009). *Central bank of Yemen*. Sana'a, Republic of Yemen.
- Al-Hajri, S. (2008). The adoption of e-banking: the case of Omani banks. *International Review of Business Research Papers*, 4(5), 120-128.
- Al-Hamady, Y. (2010). *Assessment the role of the Yemeni Islamic banks in mobilizing and recruitment financial resources*. Paper presented at the conference of the Yemeni Islamic banks between reality and future prospects.
- Allen, F., & Carletti, E. (2008). *The roles of banks in financial systems*. University of Pennsylvania and University of Frankfurt and CFS.
- Allred, A., & Addams, H. (2000). Service quality at banks and credit unions: what do their customers say? *International Journal of Bank Marketing*, 18(4).
- Al-Mushrqui. (2009). *Doing business in Yemen: A country commercial guide for U.S. Companies*. U.S. Department of State.
- Alqasa, K. (2013). *Factors determining the purchase intention of bank services in the Republic of Yemen*. Doctor of Philosophy. Universiti Utara Malaysia, January 2013.
- Alqasa, K. (2014). *The banking services in Yemen: Reality and challenges*. Lambert academic publishing.
- ALqasa, K., Isa Md, F., Norezam, S., & Faaeq, M. K. (2013). Factors affecting intentions to use banking services in Yemen. *Journal of Internet Banking and Commerce*, 18(3). 1-14
- AME Info. (2002). *Tough times for banks in Yemen. The ultimate Middle East business resource*. Retrieved November 8, 2008, from <http://http://www.ameinfo.com/16688.html>
- Aqamry, M. (2008). *End the services of 300 employees in the National Bank of Yemen*. Elaph Electronic Newspaper. Retrieved July 2, 2008, from <http://www.elaph.com/Web/Webform/SearchArticle.aspx?>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>
- Esmaili, E., Desa, M., Moradi, H., & Hemmati, A. (2011). The role of trust and other behavioural intention determinants on intention toward using internet banking. *International Journal of Innovation, Management and Technology*, 2(1), 95-100.
- Fernández-Olmos, M. (2011). The moderating role of trust in contractual choice. *British Food Journal*, 113(3), 374-390. <http://dx.doi.org/10.1108/00070701111116446>
- Galli, G., & Nardin, G. (2002). *Choice under Uncertainty: The role of trust*. Faculty of Economics, University of Modena.
- Gaur, S. (2006). *Consumers' effortful decision making and the self-regulatory orientation* (pp. 3598-3604). Indian institute of technology.
- Geyskens, I., Steenkamp, J., & Scheer, L. K. (1996). The effects of trust and interdependence on relationship commitment: a transatlantic study. *International Journal of Research in Marketing*, 13, 303-17. [http://dx.doi.org/10.1016/S0167-8116\(96\)00006-7](http://dx.doi.org/10.1016/S0167-8116(96)00006-7)
- Gill, A. S., Flaschner, A., & Shachar, M. (2006). Factors that affect the trust of business clients in their banks. *International Journal of Bank Marketing*, 24(6), 384-405. <http://dx.doi.org/10.1108/02652320610701726>

- Gottlieb, U. R., Brown, M. R., & Drennan, J. (2011). The influence of service quality and trade show effectiveness on post-show purchase intention. *European Journal of Marketing*, 45(11/12), 1642-1659. <http://dx.doi.org/10.1108/03090561111167324>
- Hamin, C., & Elliott, G. (2006). A less-developed country perspective of consumer ethnocentrism and "country of origin" effects: Indonesian evidence. *Asia Pacific Journal of Marketing and Logistics*, 18(2), 79-92. <http://dx.doi.org/10.1108/13555850610658246>
- Hussein, & Omran, M. (2003). *Financial development in Arab countries*. Islamic Research and Training Institute, Islamic development bank. Jeddah Saudi Arabia.
- Jung, K., & Kau, A. (2004). Culture's influence on consumer behaviour: Differences among ethnic groups in a multiracial Asian country. *Advances in consumer research*, 31, 366-372.
- Kouthouris, C., & Alexandris, K. (2005). Can service quality predict customer satisfaction and behavioural Intentions in the sport tourism industry? An application of the SERVQUAL model in an outdoors setting. *Journal of Sport Tourism*, 10(2), 101-111. <http://dx.doi.org/10.1080/14775080500223165>
- Lees, G., Garland, R., & Wright, M. (2005). *Brand switching in New Zealand retail banking*. Conference: services marketing.
- Liu, R. R., & McClure, P. (2001). Recognizing cross-cultural differences in consumer complaint behaviour and intentions: an empirical examination. *Journal of Consumer Marketing*, 18(1), 54-75. <http://dx.doi.org/10.1108/07363760110365813>
- Masood, O., Niazi, G. S. K., & Ahmad, N. (2011). An analysis of the growth and rise of smaller Islamic banks in last decade. *Qualitative Research in Financial Markets*, 3(2), 105-116. <http://dx.doi.org/10.1108/17554171111155348>
- Patricio, L., Fisk, R. P., & Cunha, J. (2003). Improving satisfaction with bank service offerings: Measuring the contribution of each delivery channel. *Managing Service Quality*, 13(6), 471-482. <http://dx.doi.org/10.1108/09604520310506531>
- Pont, M., & McQuilken, L. (2002). *Testing the fit of the bankserv model to bankperf data* (pp. 861-867). Conference proceedings, Melbourne, Victoria, 2-4 December 2002, Geelong, Vic., Deakin University.
- Schmidt, Bergsiek, Kolesnikova. (2008). Customer preferences of financial services across the US, Germany and Russia. *Journal of International Business and Cultural Studies*, 1-20.
- Svensson, G. (2005). Mutual and interactive trust in business dyads: condition and process. *European Business Review*, 17(5), 411-427. <http://dx.doi.org/10.1108/09555340510620320>
- Teng, L., & Laroche, M. (2007). Building and testing models of consumer purchase intention in competitive and multicultural environments. *Journal of Business Research*, 60(3), 260-268. <http://dx.doi.org/10.1016/j.jbusres.2006.09.028>
- Yemen times staff. (2008). *Retail banking services in Yemen: A brighter future*. Retrieved June 5, 2010, from <http://Yementimes.com>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Certain Issues of Human Rights' International Legal Regulation and Ways of Their Solution

Viatcheslav Gavrilov¹

¹ School of Law, Far Eastern Federal University, Vladivostok, Russian Federation

Correspondence: Viatcheslav Gavrilov, School of Law, Far Eastern Federal University, off. 436, Building D, FEFU Campus, 10, Ajaks str., Ostrov Russky, Vladivostok, 690922, Russian Federation. Tel: 7-924-232-5121. E-mail: gavrilovfirst@gmail.com

Received: March 26, 2015 Accepted: May 4, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p28

URL: <http://dx.doi.org/10.5539/ass.v11n21p28>

Abstract

Nowadays, the universal nature of main international treaties on human rights is being called into question by certain countries with increasing frequency. At present time, representatives of some Asian, African and Near Eastern countries state that the contemporary international law of human rights is more oriented to Western countries, which had accepted Christian religion values and extensively fell under the influence of Roman law. This point of view is worth noticing, despite the fact that Western scholars and experts permanently assert that the international law as a whole and the law of human rights in particular are not a product of the West only, but are a global one.

This paper is devoted to searching for an answer to the question of to what extent positions of the both parties have been proved and what the international community should do to find a common ground between the opposite camps in this issue. It also determines the nature and peculiarities of the International Law of Human Rights as part of the universal international legal system, reveals the merits and defects of "Universalism" and "Cultural Relativism" conceptions and shows that the effective implementation of international legal norms on human rights is impossible without taking into consideration the peculiarities of historical and cultural development as well as ethnical structure of different countries, which determine specific character and content of national archetypes of the attitude to the law.

Keywords: human rights, international law, universalism, cultural relativism, legal consciousness

1. Introduction

For the first time in the centuries-old history of civilization, at the end of XX – the beginning of XXI century, the world community realized that to conduct the policy that stimulates split of the humanity into antagonistic parties means to invite a global catastrophe. The majority of states refused to engage in political and ideological confrontation, which allowed to change the state of "cold war" between the countries into the joint search for ways and means of effective solutions to global problems, including maintenance and further realization of human rights and freedoms.

As it was noted in the Final Outcome of the World Conference on Human Rights 1993, "the promotion and protection of human rights is a matter of priority for the international community" (Vienna Declaration, 1993). The international community "must treat human rights globally, in a fair and equal manner, on the same footing and with the same emphasis" (Vienna Declaration, 1993). Later the world community once more reaffirmed that "all human rights are universal, indivisible, interrelated, interdependent and mutually reinforcing and that all human rights must be treated in a fair and equal manner, on the same footing and with the same emphasis" (2005 World Summit Outcome, 2005).

The beginning of an era of international relations' post-confrontation development gave unprecedented opportunities for the further development of inter-state cooperation in humanitarian field. In recent years the number of international treaties has increased; their content illustrates that more and more problems concerning the legal status of a person, which have always been within the scope of each country's internal affairs, are to be regarded as an object of international regulation. The role and meaning of supervising bodies designed for the proper and timely implementation of human rights acts have been consistently increasing.

At the same time, due to the fact that changes taking place in the present-day world are fast-moving and widespread, they are followed by the increase of political instability and of local and regional conflicts, by the occurrence of new problems and aggravation of old ones. These problems have deconstructive influence on the process of universal recognition and proper implementation of international standards in the field of human rights worked out at the universal level. The universal nature of principal international treaties on human rights is frequently disputed, and at the same time countries offer their own individual ways in this field. In this paper, we shall try to illustrate whether such statements are well-grounded or not.

2. Human Rights and International Law: Nature and Problems of Regulation

A human being is not just a part of nature. He/She is a social creature and communication with other people constitutes an integral component of his/her everyday life. All human communities interact with one another. In our time, no group is hermetically secluded from the outside world (Tomuschat, 2011, p. 231). Society dictates a person's way of behavior, defines his/her position in it. These aspects are determined mainly by means of legal norms that define rights that shall be granted to a human being, things to which he/she may lay claim and make a list of his/her do's and don'ts.

Together such permits, possibilities and guarantees, enshrined in regulatory legal acts, form the content of human rights and freedoms in their legal sense. Human rights belong to an individual as a consequence of being human and depend on a level of social development, economic system and political regime of a state, its historical conditions and other characteristics.

The problem of nature and content of human rights, their origin, legal recognition and enforcement are deeply rooted in the history of all humanity. Being initially presented only in a form of moral and political concepts and views of outstanding antique thinkers, this problem has gradually obtained political and further legal recognition in the period of bourgeois revolutions in USA, England and France. In this regard, the well-known Declaration of the Rights of Man and of the Citizen (August 26, 1789) had great significance, for, as opposed to the feudal arbitrariness, it declared the equality and freedom of all people in respect of their rights, along with their protection by the state. It has also established a number of specific rights of a citizen, including the right of personal security, presumption of innocence, freedom of speech and of the press.

Later on, questions concerning the regulation of an individual's legal status obtained "civilized" formulation, having become the principles of law and developed legal forms; therefore, they became more formalized. Nevertheless, till the middle of the XX century, legal regulation in this field developed almost exclusively at the national level.

The problem of human rights' regulation reached the level of international law in its full only after the establishment of the United Nations. Flagrant disregard of basic human rights and freedoms as well as mass extermination of people during the Second World War encouraged the world community to search for new organizational, political and legal methods for the maintenance of fundamental human rights and freedoms by virtue of joint actions of states. Provisions concerning the necessity for the international cooperation, which were included into the Charter of the United Nations as a universal international organization for the maintenance of international peace and security, speak about the need for "promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion" (Charter of the United Nations, 1945). A special mechanism for the realization of this goal has been created within the UN.

Thereby it was admitted that the effective international protection of human rights and freedoms is one of the most important conditions of guaranteeing peace and progress, and the international community should undertake a new function — the function to support the democratic state system and idea of supremacy of human rights in certain countries. In turn, such actions as apartheid, genocide, racism, propaganda and incitement of national conflicts were recognized as unlawful and as following with the international legal liability.

The Universal Declaration of Human Rights, adopted by the United Nations General Assembly on December 10, 1948, became one of the first international normative documents to regulate relations that influence the determination of an individual's legal status. With the adoption of this Declaration, certain issues that had been in the scope of each country's internal affairs for a long time were included into traditional spheres of international legal regulation, along with the list of an individual's basic rights and freedoms, which all peoples and all nations should try to ensure. Many researchers consider that this document has built a basis for a new freestanding branch of international law – international law of human rights.

Now, more than 60 years later, the maintenance of human rights is still a supreme principle of the international legal system, while the most dangerous international crimes are still crimes against humanity, which cause

humanitarian catastrophes and threaten not only local, but global security as well. Nowadays, the number of universally recognized human rights has extremely increased. Currently, human rights and freedoms are divided into the following large groups: civil, political, social and economic, and cultural. Scientific and technical progress and civilization development created new rights and freedoms, e.g. the right to a healthy environment, certain quality of life, information security, collective rights of nations and peoples, etc.

Despite the possibility of making gradations among human rights, all of them are equally important and constitute one system. They are indivisible, interdependent and interrelated. That is why it is inadmissible to oppose one right or freedom to another. Otherwise, striving to achieve the observance of one group of rights and freedoms can be used to infringe another one. In just the same way, the principle of universal respect for human rights, as one of the basic principles of the modern international law, should not be set against its other principles but rather harmonize with them.

Nowadays, the international law of human rights finally took the shape of a freestanding branch of the international public law. From the legalistic point of view, it represents a complex of international legal principles and norms that determine universal standards and limits of states' behavior in recognizing, protecting and exercising control over the observance of individuals' socially determined rights and freedoms and their associations on a particular territory, and also for the international cooperation in this sphere. As well as any other branch of international law, the international law of human rights has its own specific sources, special principles and self-standing subject of legal regulation. That is why it should be distinguished, for example, from the international humanitarian law the norms of which are directed exclusively to protect participants and victims of armed conflicts and, in this regard, to the limitation of means and methods of warfare.

Analyzing the nature and mission of the international human rights law, it is important to take into account the fact that intensive influence of its norms on the internal competence of states does not mean that it is possible to completely replace the national regulation of corresponding issues with the international legal regulation. Due to the differences in points of view of states regarding the determination human rights' nature and content, it is impossible nowadays to provide an exhaustive and exclusive regulation at the level of international relations arising in the sphere of human rights.

Furthermore, the international law, generally, due to its interstate nature, is not designed for the direct regulation of individuals' rights and freedoms, and its mechanisms of functioning on their own cannot provide their enforcement in the everyday life. International law of human rights directs and supplements the national law by promoting the correction of weaknesses of states' constitutions and laws, but it does not replace and in reality cannot replace the corresponding national legislation. It should be noted that in all these cases we must tell about the interaction and adjustment of international and national legal norms but not about converting them into each other or joining each other. International and national legal systems have different nature, playground and mission. That is why international treaty or custom on human rights will never become a part of any national legislation (Gavrilov, 2005, p. 155). In this regard, very illustrative is the statement of the Chinese Professor Le Zhaojie, who noted that "there is no such thing as 'Chinese international law' any more than there is such a thing as 'Chinese mathematics', there can only be a Chinese theory and practice of international law" (Zhaojie, 2001, p. 326).

As long as the statehood and institute of citizenship exist, the protection of human rights will create legal relations between the state and a person. That is why in the nearest decades changes will hardly take place in the situation where the majority of international legal norms sounding the impact on a person's legal status are addressed to states and oblige them to guarantee a particular complex of rights and freedoms to their individuals via domestic legislation.

Main objectives of the international law "consist not in the submission to the internal life of a state, but in the creation of optimal international conditions for its comprehensive development". In this view, the main aim of treaties and other international acts on human rights is not to substitute national legislation, but to establish well-defined universal standards for states' activity and to ensure their universal recognition and uniform application. It is another matter that the limits of freedom of states' discretion concerning such standards are getting narrower with each year, while the control of the international community over their practical application and proper fixation in the national legislation is becoming more rigid.

However, we should ask ourselves: can we obtain much by increasing the obligatory force of international human rights acts and by strengthening international control over their enforcement (including the enforcement within international courts and tribunals of different levels)? It is unlikely.

The thing is that the effectiveness of legal norms' impact on public relations, including the sphere of human rights, is determined not only by the content of relevant legal prescriptions, but by the equivalence of other elements of legal validity, structurally and functionally necessary for the normal functioning of legal control mechanism, and such norms. The balance of the idea of human rights and the national archetype of the attitude towards the law, actual for a particular society, along with the status of its legal culture, which differs greatly in various parts of the world, is of particular importance among such elements.

The above-mentioned circumstances foreshadow the tendencies for the further development of the international human rights law. The main tendency among them, to our opinion, lies in the formation, on the basis of pan-democratic ideas on an individual's place and role in the present-day world, of a global inter-civilizational conception concerning the essence and content of human rights and freedoms, collective rights of peoples and nations and, consequently, in step-by-step resolution of conflicts between universal and regional acts on human rights as well as in comprehensive and practicable implementation of their provisions into states' practices.

3. National Differences in Perception and Understanding of Human Rights Conception

It is generally known that one of the main principles that underlies the modern system of human rights and determines its essence is that all rights and freedoms are equally important, indivisible and interrelated. But, at the same time, it should be mentioned that universal nature of human rights is being disputed more and more frequently nowadays, and some countries offer their own ways in this field.

In our opinion, there are two main reasons explaining such state of things. The first one is determined by the specifics of human rights' legal regulation at the international level. Obviously, as it was mentioned above, the international law, due to its interstate nature, is not designed for direct regulation of rights and freedoms of certain individuals. In this view, the main purpose of international instruments on human rights consists not in the substitution of national legislation, but in the creation of general standards for states' activity and in the maintenance of their universal recognition and uniform application.

But the last task is difficult to achieve because these standards often include only general description of the required status of humans, and, therefore, they can be interpreted by different countries in different ways. Thereby international norms create legal possibilities for a "special perception" of human rights' content from the side of states that have cultural, religious, historical and other peculiarities. It is another reason for the universal character of human rights to be disputed and even for some of them not to be recognized.

Both the international and national legal systems have "human" filling and function due to human activity. "The law not only goes through an individual's mind, it is also implemented in a social sphere, and an individual (as a psychological creature) is always engaged in joint psychological exchanges. Such interaction is considered to be the realization of law apprehension. Although apprehension of law is individual, groups of people and different communities may have similar ideas concerning the law" (Isaeva, 2004, pp. 107-108).

This statement is true with respect to both national and international law. Therefore, the effectiveness of their norms' implementation in a certain state or in state-to-state relations to a large extent depends on a level of individual or collective legal consciousness and legal culture as a whole existing in this or that community. It also depends on the intensity and direction of external cultural and value-orientated influence on this community as well.

Since ancient times a cross-cultural interaction has been one of the most important means of state and legal institutions' development. Nowadays a pure national legal culture or a national archetype without any outside influence can hardly be found. "All of them represent a symbiosis of local, native categories and external, extra-national ones or those that have gained international recognition" (Martyshin, 2005, p. 9). In this regard, it should be noted that the role of international law is extremely significant because its influence on individual and collective legal consciousness is steadily increasing. As famous Russian professor I. Lukashuk puts it, "the international law gradually goes far beyond the limits of diplomacy and begins to influence mass consciousness and public opinion formation. The effectiveness of international law and, consequently, success of world problems' solving depends a lot on a sanction of public opinion" (Lukashuk, 2004, p. 61).

Therefore, the interaction of international and national legal systems in the field of human rights extends not only to legal rules themselves, enforcement and lawmaking activity of international and domestic bodies and organizations, but to the legal consciousness as an important element of these systems as well. The events of foreign policy and domestic legal reality give an impulse to the mutual interaction of legal systems. The influence of such events on the legal consciousness of people can be either positive or negative depending on the

circumstances. It can be caused by the activity or inactivity of particular states or their competent bodies, which touch peoples' legal consciousness in certain countries.

Positive influence of contemporary international law on collective and individual legal consciousness is caused, first of all, by the fact that it is a democratic normative legal system. Among its sources there are such understandable to the majority of people values as sovereign equality of states, inadmissibility of threat or use of force, non-interference in domestic affairs, respect for human rights, disarmament, international cooperation, etc. It is also important that with the help of international legal norms "independent, actually equal states form a sustainable international system, become dependent not on the discretion of a strong one, but on agreed norms of international dialog" (Rybackov, Skotnickov, & Zmeevsky, 1989, pp. 61-62). This is the basis of international legal order and stability.

Nothing else stimulates every person's or nation's perception of their belonging to a united human race so effectively as providing them by the international community with specific technical, financial, military or material assistance in cases of economic crisis, armed conflicts, natural or man-made disasters. The more rapidly the process of globalization is developing in the world, the more advanced means of information exchange and modes of individuals' and capitals' moving become, the deeper the cross-cultural interaction becomes and the more inevitable is the elaboration of common standards of individuals' attitude towards each other and surrounding reality, including the law. This process is greatly facilitated by global tasks concerning environmental conservation; climate change prevention; search for alternative sources of energy; Space exploration and study of the World Ocean; struggle with new diseases, demographic and social anomalies, extremism and terrorism. The necessity of these tasks' quick solution is getting more and more obvious every year, and it can be reached only by the joint efforts of all the mankind based on the rules of conduct applicable to all.

Having accepted the idea of a united human civilization as a basis, we can state that the international law is one of the most important factors that enable its existence. Unprecedented interrelation of states and nations, which should more often be treated as mutual dependence, is a characteristic feature of our time. Together with the aggravation of local conflicts and common problems, there arises the universal awareness of the necessity for a dialogue and joint search for the ways of overcoming contradictions. In such situation, international legal mechanisms are proved to be the most preferable because they mean concurrence of actions among the subjects and quest for compromise in reaching decisions. Besides that, declarations, conventions, pacts and resolutions created as a result of different countries' joint efforts contain a ready system of progressive ideas and values. These ideas and values have been tested by many states and are recognized to be universal and panhuman due to their progressivism and prevalence.

But, there is another side to this problem. Nowadays the world community still remains divided in regard to many topics, and not all of its subjects encourage changes occurring in the world. We should not forget about the movement of antiglobalists, who are strongly against the integration process in some areas. The process of "reverse" globalization has recently spread and represents a movement of significant masses of population from their habitual geographic, climate, economic, social and cultural areas to the conditions completely new for them. This fact causes a serious problem for migrants' adaptation and the system of social values they profess. In opinion of many researchers, "direct" and "reverse" globalization, which is typical for the present stage of the world development and has different directions, create a new basis for social conflicts under which racial, ethnical, religious and other contradictions largely take multicultural form" (Polenina, 2005, pp. 70-71).

Existing differences between the Western and Eastern ways of thinking, ways of life and national legal systems of relevant states are the most significant in this sense. For example, M. Sornarajah considers that "prescribes democracy and a value system of human rights that favors highly individual rights will be opposed by many Asian states. Again, the freedom should be saved for the Asian people to decide which way they will go rather than to have that way prescribed for them or forced upon them by others. Asian problems relating to the development and ethnicity are different from those that the Europe faced. The solutions to these problems must be fashioned by the Asian people" (Sornarajah, 2001, p. 312). Russian researcher V. Khizhnyak also claims that "while unforced limiting of rights inherent in sovereignty is occurring in the West, struggle for separation from the West is taking place in the East. The East does not accept Western way of life which shakes its own foundations, and no solutions have been found for this obstacle yet" (Khizhnyak, 2004, p. 210).

Despite certain categoricalness of the last-mentioned thesis, topics raised in it are really up-to-date. Cultural, ethnical, religious and historical specifics should be taken into consideration while estimating the possibilities of different countries' for participation in one or another universal project or the effectiveness of their international

obligations' fulfillment. It is determined by the fact that, as it was mentioned above, the international law is a "product of mind, both mental and rational phenomenon. Its subject depends on the legal consciousness of nations and law enforcement practice – on behavioral stereotypes and psychological peculiarities of this or that ethnos" (Rogozhin, 2002, p. 20). Nevertheless, unfortunately, nowadays the achievements of judicial anthropology and comparative jurisprudence are not actively used in the international rule-making process, which directly influences the effectiveness of implementation of numerous agreements on human rights by states and nations, especially representing the non-Western legal tradition.

Representatives of some Asian, African and Near Eastern countries consider the contemporary international law of human rights to be mainly oriented to Western countries, which had accepted the values of Christian religion and to a considerable degree fell under the influence of Roman law. This point of view is worth noticing, despite the fact that Western scholars and experts constantly assert that the international law as a whole and the law of human rights in particular are not the work of the West, but are a global one, and that they represent "the product of numerous traditions and civilizations, and this fact should frustrate the antipathy towards it still existing in some regions" (Weeramantry, 2000, p. 281).

The understanding of nature of human rights' concept and mechanisms of their realization at the national level still vary vitally from country to country depending on peculiarities of historical and cultural development, religious traditions and ethnical structure.

Thus, animist African communities have their own conception of a man. A traditional African community is impregnated with community feeling. The principle of supremacy of genealogical reasoning dominates in it. In accordance with this principle, the elders have absolute authority and are held in high respect, especially in terms of inheritance and representation; women are totally dependent. Due to such situation, African states do not accept many forms of judicial or arbitration methods of dispute resolution. Extralegal and non-institutional methods of peaceful settlement are most typical for them.

In some Muslim countries, the Western conception of human rights, introduced into judicial culture by progress, often contradicts the national law based on Islamic principles. As a result, many provisions of international documents on human rights are recognized to be non-admissible. For instance, Muslim women are exposed to discrimination because they are allowed to work, as a rule, only in few government institutions. There are also some restrictions on matrimony: marriages between Muslims and non-Muslims are prohibited. As for the law of succession, a man's portion is twice larger than a woman's one, which contradicts the universal principle of equality, etc.

The state of affairs in Hindu-Confucian civilization is similar to that in African and Arabic-Muslim traditional civilizations. Their values and concepts are frequently opposite to the European Christian culture (it is subject to the philosophy of human rights as well). As it has been mentioned above, the fundamental difference consists in many Asian states' refusal to share one of basic postulates of the Western concept of democratic society; proclaiming a priority of individual rights.

Representatives of law schools from other parts of the world also emphasize the necessity of taking national peculiarities into account for the development and implementation of international legal norms. The Russian Federation is not an exception. "There is a traditionally large role of the state in the economy, which has been typical for the Russian statehood throughout its existence. It is reflected in legal psychology of the majority of population as a rejection of such forms of private property institutions that are traditional for the West-European culture and as legal nihilism expressed in indifferent, distrustful and scornful attitude towards the law and the state" (Polenina, Gavrilov, Koldaeva, Kukjanova, & Surko, 2004, p. 14).

Therefore, the idea of regionalization is being actively developed nowadays, along with the process of globalization and attempt to universalize human rights law. The standards that are recognized at the international level and should be followed always and everywhere face the opposition in certain socio-cultural systems. In this regard, the standards become comparative, losing their features of universality.

4. Conceptions of 'Universalism' and 'Cultural Relativism'

Differences between the 'Western (Northern)' and the 'Eastern (Southern)' approach to the understanding and content of the idea of human rights and its realization into legal regulations and law enforcement practice are quite clearly represented in the conceptions of 'universalism' and 'cultural relativism'.

4.1 Content

In accordance with the conception of 'universalism', the hierarchy of cultures and traditions of different peoples must not be taken into account in the process of evolution of human rights' conception and of their regulation at

the international and national legal levels as well as at the stage of practical realization of individuals' rights and freedoms and provision of their implementation monitoring. Universalists assert that every human being has certain human rights by virtue of being human. These human rights are meant to protect their human dignity, and all individuals should be able to equally enjoy them. In other words, this conception relies upon the opinion that human rights cannot be subject to erosion because of diverse understandings and interpretations of them in different regions of the world. Therefore, the development of national legal systems and their basic principles should go under the conditions of uniform understanding and application of universal international acts on human rights.

Unlike universalists, the supporters of 'cultural relativism' conception consider that only local traditions (religious, legal, political) can clarify what practical forms will the rules fixed in universal acts on human rights obtain within the legislation and legal practice of a particular country. From their point of view, it is impossible to work out and effectively implement international and corresponding national legal acts on human rights without taking into account the peculiarities of historic, religious, cultural development and ethnical structure of different countries because these factors determine the specific character and content of existent national archetypes of the attitude towards the law. Thus, in opinion of 'cultural relativism' supporters, the pressing attempts of Western countries to impose their own conception of human rights under the veil of universal values on the Eastern and Southern states appear to be an act of 'cultural imperialism'.

4.2 Advantages and Disadvantages

Arguments of both universalists and relativists are not doubtless. Their approaches to the understanding of human rights' nature and content require some correction.

It cannot be doubted that the universality and universal recognition are the cornerstone of the idea of human rights, without which it would not only be ineffective but would also lose the reason for its existence. From this point of view, it is necessary to agree with the supporters of 'universalism'. The question arises concerning both what rights should be regarded as universal and how imperative in matter should the drafting of international normative acts determining the content of these rights be and by what means they should be implemented. In this regard, the position of the universalists appears to be much more arguable.

The right to health protection and social security, for example, is unlikely to be implemented to an equal extent of success and effectiveness in all countries. It is caused by different levels of economic development of states and their possibilities for the full enforcement of social and economic rights. It is difficult to find real universalism in political rights' realization as well. It is quite impossible to suppose that the right to legal defense or the right to participation in governing the state by virtue of democratic election will be equally guaranteed, for example, for civilians of the European Union and for the people of countries where neither democratic traditions of Western type nor political and administrative institutions that can provide such traditions are developed.

It does not mean, of course, that the world community should make no efforts to change the situation in relevant countries for the better. However, these actions should be exclusively evolutionary and respectful, and the final result not necessarily may be a one more Western model of human rights' implementation. No country or group of countries can have monopoly to set the truth in that matter. Only authorized universal international bodies and organizations have the right to judge whether law enforcement practice of a state corresponds to the letter and spirit of the international human rights standards.

The issues we stated above are of great interest because nowadays a topical problem exists concerning the limits of expansion of universal ideas and values and the permissibility of any form of coercion in this process. In other words, how necessary and justified are the attempts to impose some ideas, way of life, ideology on a person, countries, peoples to whom these ideas can be alien? And if a state refuses to accept offered standards, is it justified to implant such standards by force while being "wiser and stronger"?

The above mentioned problem is of interest because in the recent years the international human rights law, unfortunately, has been actively used to serve national interests of particular states. If the observance of international legal instructions does not satisfy their requirements, these rules are easily ignored and replaced by doctrines and principles that are rather abstract and doubtful from the legal point of view. As a consequence of such actions, forcible implanting of a particular system of values into the countries the historical development of which greatly differs from the Western takes place, and the religious basis that determines the most important rules of social life has nothing to do with Christianity.

Such practice is inadmissible. No state is prohibited to defend its national interests at the international level or to propagandize the way of life typical for its citizens. However, it should be remembered that in conditions of

globalization there is a close connection between the national and international interests and these vital national interests can be ensured only in the context of joint interests of all countries, the importance of which is getting more significant.

On the other hand, constant appealing to national traditions and cultural peculiarities cannot be considered as a lawful and justified reason for the violation and failure to ensure individual rights and freedoms recognized by the world community. Furthermore, the specific character of national archetype of attitude towards the law that allows actions oriented to abolition or excessive limitation of human rights should not justify such interpretation of international acts on human rights.

While debates between universalists and cultural universalist will exist as long as the human rights movement does, the academic attention has in recent years shifted from the realm of conceptual to more practical and empirical examinations of how exactly human rights' norms are transferred from one culture to another, under what circumstances they are accepted or rejected and under what circumstances new norms take on hybridized characteristics following the influence of receiving culture (Wolman, 2013, p. 80).

Many authors consider the fact that today's predominant political thinking falls behind time requirements to be the main obstacle on the way to the formation of a new world's order on the basis of humanity integration. It is difficult to argue with this idea. That is why the efforts should be applied in order to raise the level of such thinking and level of mass consciousness on the basis of the contemporary perception of the outside world and of the understanding of the complexity of all problems that our planet faces. The success of this deal much depends on mass media and bodies of education. Their activity, supported by the government, should be focused on the fixation of common moral norms and principles of law that determine people's attitude to each other, to the society, to other nations in their consciousness (Lukashuk, 2002, pp. 5-7).

The science of international law also should contribute to the internationalization of all-level legal consciousness, and it is necessary to increase the implementation of its research results by political and governmental bodies while exercising their functions. By means of legal doctrine and with the use of methods of legal acculturation it will be possible to figure out the factor of impact that will these or those international principles and norms make on economic, political and other social processes, on the individual and social psychology in a particular country.

5. In Searching for a Consent

The aforesaid shows that human rights are a product of historical development of the society. Therefore, their understanding and enforcement differ at different stages of development in separate societies, which have their socio-cultural peculiarities. That is why various rights and freedoms can have different meanings when applying in different societies. For instance, the right to take part in elections in a particular state, the right to a fair trial, freedom of thought and movement, freedom of association, prohibition of discrimination and other rights can be interpreted in different ways.

However, drawing a distinction between ways of life, cultures and other characteristics can serve not only as a basis for the intolerance and intrusion of one's own system of values upon another subject. Although it may seem to be strange, but exactly the understanding of the fact that such distinctions exist can entail a motive to find common features and to treat each other more tolerantly. This idea is not a discovery of the Western democracy. Ancient religions, especially Oriental ones, are permeated with this idea. Therefore, the East as well can provide the West with some of its experience to borrow. Thus, only the perception of commonness and admission of peculiarities of each other's way of development can help to discover universal pan-human values and to give an impulse to the further development of the international system.

In order to fulfill its functions, the international law should become genuinely inter-civilizational, reflect cooperation and compromise in an ideological struggle of different religions, ideologies, legal systems, values, and it should work for their synthesis. It would be logical to assume the idea of human and inter-ethnic interaction, a dialogue of civilizations, co-creation of cultures to be the basis for the international law on human rights. In case of conflict of different moral and legal doctrines and approaches to international legal regulation, only ideas that are not alien to any states or nations and accepted by all of them can serve as a basis for the harmonization of their wills and for the distinction of their interests. In this context, the overcoming of main differences between modern Western law and legal consciousness and other contemporary legal systems plays a significant role.

It is also doubtless that there are some basic human rights of an absolute meaning, and even cultural traditions cannot distort their sense. The Universal Declaration of Human Rights and other international acts on human rights contain a number of common standards that are equally acceptable for all states and nations and are

regarded and applied in the same sense. These standards include, for example, protection of life, freedom from torture, freedom of thought, the right to a trial and some others. In accordance with the international law, all people regardless of race, residence, cultural and others peculiarities are entitled to fundamental rights. International law does not release countries from their duties to observe and protect human rights only because certain human rights do not correlate with local traditions or cultural values. Therefore, despite various distinctions, the idea of human rights remains to be universal. As it was underlined in the 2005 World Summit Outcome, “while the significance of national and regional particularities and various historical, cultural and religious backgrounds must be borne in mind, all States, regardless of their political, economic and cultural systems, have the duty to promote and protect all human rights and fundamental freedoms” (2005 World Summit Outcome, 2005).

Another problem is connected with the practical implementation of human rights’ international standards: regional peculiarities cause different understandings of what human rights are, along with different methods of their enforcement. Harmonization of legal cultures, traditions, economic and political peculiarities is a solution to this problem. Undoubtedly, every culture is unique and has its own way of human rights’ expression and enforcement. But at the same time, every society should not be limited only to its concepts because human rights law goes far beyond the limits of one country. Thus, it is possible to take into account the peculiarities of every culture and to work out common standards, minimal set of universal rights that can be guaranteed to everyone without distinction of any kind, such as race, ethnic status, sex, language, religion, etc. A dialogue, exchange of ideas and experience are required in order to find a common understanding of human rights’ nature, so that the international law in this sphere would be effective and all countries be able to support it and in such a way to guarantee practical realization of elementary, universal volume of rights and freedoms. As it has fairly been noted, “universality will have to find its way through diversity” (Kobila, 2003, p. 105).

It is also necessary to keep in mind that one of the most important factors influencing the status of human rights in a particular country is the level of its social, economic and political development. In this regard the economic backwardness, poverty, corruption, absence of law and order, and other problems block up the protection of human rights. Consequently, every state can provide its population with real guarantees only within the scope of its current possibilities. This circumstance should be constantly taken into consideration in the process of execution and adoption of any international agreement and other normative documents on human rights.

The aforesaid convinces us that it will take a lot of time for the principle of universality to become a real part of the world community’s everyday life. There exist two key ways for that principle’s realization: first, we can proclaim the demand for a unified perception of human rights all over the world regardless existing national features, but in this case it will take a very long period of time for us to be able to achieve the real universality of human rights, after having overcome various obstacles and maybe even after the use of force actions; or, second, we should admit that the way towards the real universality of human rights goes via taking into account national peculiarities and that we should ensure their absolute ‘presence’ in the course of creation and implementation of relevant legal norms.

Though the second way is longer, at the same time, it has more chances to become successful in comparison with the first one. For its realization, two main groups of rights should be clearly determined, depending on their aims and mechanism of their possible implementation. The first one is the group of fundamental rights common to all the mankind (determination of a full list of these rights could be a subject of discussion at international conferences). Another group should consist of rights related only to an individual’s position in the society or conditions of his/her living.

The first group of rights can and should be equally (or almost equally) implemented around the world. Freedom of states’ discretion with respect to the implementation of such rights on their territory is to be limited. The second group of rights can be implemented into national legal systems with a certain level of states’ discretion in two ways: 1) “the way of formal choice”, in which case states will be entitled to choose rights for their further implementation in accordance with provisions of relevant international agreement (for example, the European Social Charter of 1996), but, as a rule, they will have no choice with respect to the determination of the implementation process framework; 2) “the way of essence choice”, in which case states will have obligations to recognize and enforce all rights mentioned in the sources of international law, but their possible choice with respect to the determination of the implementation process framework is much more wide (though it also depends on provisions of relevant international documents).

Using all these three ways of determination and enforcement of human rights and taking into account different states' peculiarities, the world community will be able to guarantee effective realization of the majority of rights and freedoms all over the world.

In exercising the above-mentioned procedures, existing regional competent bodies, for example, African Union or Association of South East Asian Nations, should obtain authorities to assist states in enforcing human rights by means they consider effective in their particular region. In this case, thanks to joint efforts of states and relevant regional centers, human rights will be developed and granted to population keeping in mind local peculiarities. Over time, appropriate regional structures cooperating with each other will create one global space of pan-human rights. But, as it was mentioned above, some basic rights understood and accepted by all states in the same way should be singled out. These rights will not permit regional centers to destroy the integrity of the idea of human rights by referring to regional specifics.

6. Conclusion

As a result, it is necessary to underline that the effective implementation of international legal norms is impossible without taking into account historical, cultural and ethnical peculiarities of different countries, which determine the content and specific character of national archetypes of the attitude towards the law. In other words, "the implementation of human rights must be done with due regard to the domestic ecosystem" (Menon, 2014, p. 14).

This condition should be taken into consideration while establishing and implementing statutory provisions of any level or character. This process should be accompanied by a package of measures designed to raise the level of legal culture of all law enforcement activity's subjects, on the one hand, and by the actions promoting internalization of their legal consciousness and perception of their belonging to a common world community, on the other hand. The intrusion of ideas, ways of thinking and ways of life upon any state and nation should be excluded on the way towards promoting and providing universal respect for human rights. The compulsion will not give rise to true recognition and real guarantees, but on the contrary will cause rejection of what was imposed by force. All nations on an equal basis should participate in the creation of standards and structures that will help to promote the recognition of human dignity and equality of fundamental rights of all people without exceptions: adults and children, men and women, believers and unbelievers, of all races and all societies.

References

- 2005 World Summit Outcome. A/RES/60/1, 24 October 2005, para, 121. Retrieved from http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/60/1
- Charter of the United Nations*. (1945). art. 1, para 3. Retrieved from <http://www.un.org/en/documents/charter/chapter1.shtml>
- Gavrilov, V. V. (2005). *Notion and Interaction of International and National Legal Systems*. Vladivostok: FESU Publishing House.
- Isaeva, L. N. (2004). Consciousness and Legal Consciousness. *State and Law*, 8, 106-110.
- Khizhnyak, V. S. (2004). International Law and Russian Constitutionalism. *Moscow Journal of International Law*, 2, 208-218.
- Kobila, J. M. (2003). Comparative Practice on Human Rights: North-South. In J.-M. Coicaud, M. W. Doyle, & A.-M. Gardner (Eds.), *The Globalization of Human Rights* (pp. 89-115). Tokyo, New York, Paris: United Nations University Press.
- Lukashuk, I. I. (2004). *Contemporary Law of International Treaties: Conclusion of International Treaties, 1*. Moscow: Wolters Kluwer.
- Lukashuk, I. I. (2002). World Order of XXI Century. *International Public and Private Law*, 1, 4-10.
- Martyshin, O. (2005). National Political and Legal Culture in Context of Globalization. *State and Law*, 4, 9-17.
- Menon, S. (2014). International Terrorism and Human Rights. *Asian Journal of International Law*, 4, 1-33. <http://dx.doi.org/10.1017/S2044251313000337>
- Polenina, S. V. (2005). Multiculturalism and Human Rights in Conditions of Globalization. *State and Law*, 5, 66-77.
- Polenina, S. V., Gavrilov, O. A., Koldaeva, N. P., Kukjanova, E. G., & Surko, E. V. (2004). Influence of Globalization upon the Legal System of Russia. *State and Law*, 3, 5-15.

- Rogozhin, S. L. (2002). International Law as a Dialogue and Confrontation of Civilizations. *Moscow Journal of International Law*, 3, 16-30.
- Rybackov, Y., Skotnickov, L., & Zmeevsky, A. (1989). Primate of Law in Policy. *International Life*, 4, 58-69.
- Sornarajah, M. (2001). The Asian Perspective to International Law in the Age of Globalization. *Singapore Journal of International and Comparative Law*, 5, 284-313.
- Tomuschat, C. (2011). Asia and International Law – Common Ground and Regional Diversity. *Asian Journal of International Law*, 1, 217-231. <http://dx.doi.org/10.1017/S2044251311000026>
- Vienna Declaration and Program of Action of the World Conference on Human Rights*. (1993, June 25). Retrieved from <http://www.ohchr.org/EN/ProfessionalInterest/Pages/Vienna.aspx>
- Weeramantry, C. G. (2000). Keynote Address. Symposium Issue: International Law and the Developing World: A Millennial Analysis. *Harvard International Law Journal*, 41, 277-286.
- Wolman, A. (2013). National Human Rights Commissions and Asian Human Rights Norms. *Asian Journal of International Law*, 3, 77-99. <http://dx.doi.org/10.1017/S2044251312000306>
- Zhaojie, L. (2001). Legacy of Modern Chinese History: Its Relevance to the Chinese Perspective of the Contemporary International Legal Order. *Singapore Journal of International and Comparative Law*, 5, 314-326.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Ethical Sustainability in Scene Design of Iranian Children TV Shows

Bushra Abbasi¹ & Mojtaba Ansari¹

¹ Faculty of Art and Architecture, Tarbiat Modares University, Tehran, Iran

Correspondence: Mojtaba Ansari, Faculty of Art and Architecture, Tarbiat Modares University, Iran. E-mail: x_abbasi@yahoo.com; ansari_m@modares.ac.ir

Received: January 11, 2015 Accepted: February 3, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p39

URL: <http://dx.doi.org/10.5539/ass.v11n21p39>

Abstract

As the most efficient cognition source of children, TV programs can play an important role in fostering the priorities of Ethical Sustainability. Lack of attention in the field of scene design is addressing the absence of ethical sustainability requirements in the scene design principles. But, do the scene design principles in Iran have shortcomings? The aim of this paper is to define these shortcomings on the basis of ethical sustainability and present recommendations which can be considered by Iranian scene designers. The adopted methodology of research is case study, answering the research questions via qualitative data collection and descriptive-analytical technique. To achieve the aim of the research, the importance of ethical sustainability in the scene design of children TV shows is highlighted and the effect of design principles established by Islamic Republic of Iran Broadcasting Organization are reviewed through relevant literature and reliable documents. Then, through a comparison between Sustainable Principles of Hannover and the mentioned Iranian design principles on the basis of sustainable relations, shortcomings of principles are discovered. In addition, the selected case study of the research is the scene of "Fitileh TV show" which was successfully designed in accordance to the mentioned Iranian design principles. The current practice of established design principles are examined through direct observation and visual evaluation and presented in a clear view. The effects of the shortcomings of the afore-mentioned design principles on the designed scene are evaluated afterwards and the recommendations are presented.

Keywords: children TV Shows, Hannover principles, ethical sustainability, scene design, interior design, Iran

1. Introduction

Sustainability, as the major topic of the our century, has in its evolutionary development been mentioned through important international documents such as Brundtland Report (World Commission on Environment and Development 1987), the Rio Declaration (United Nations, 1992a), the Agenda 21 (United Nations, 1992b), and the Johannesburg Declaration (United Nations, 2002). Sustainable approaches chose ethical dimension to create a comprehensive image of all sustainable priorities on the basis of sustainable relations, addressed by Becker in his book of "Sustainability Ethics and Sustainability Research", as the relationship between humans and other contemporaries, the relationship between currently living humans and future generation and the relationship between humans and nature (Becker, 2012, p. 13). These relationships were shaped on the basis of Brundtland Report's description about sustainable development. The report indicates promoting harmony among human beings and between humanity and nature as the aim of sustainable development strategy (World Commission on Environment and Development, 1987, p. 81), and states that the humanity has the ability to make development sustainable and to ensure that it meets the needs of the present without compromising the ability of future generation to meet their own needs (Bennetts, 2003, p. 3). Even though ethical aspect of sustainability accessed its way through environmental ethics (Warner & DeCosse, 2009) and found its place in economic and social approaches by terms such as equality, social justice and global development, it was first mentioned through a holistic view towards sustainable development at 1996 in the 9th item of Hannover Principles which notes directly to "sustainable considerations" beside "ethical responsibility", including all of the mentioned sustainable relations. "Seek constant improvement by the sharing of knowledge. Encourage direct and open communication between colleagues, patrons, manufacturers and users to link long term sustainable considerations with ethical responsibility, and re-establish the integral relationship between natural processes and human activity" (McDonogh, 1992, p. 6), is the context of the last item of Hannover principles which are also known as the design principles of Expo 2000. As mentioned, all three sustainable relations including: the relationship between

human and other contemporaries, the relationship between human and future generation and the relationship between human and nature can be clearly noted in this context as the first established and internationally accepted principle which highlighted the ethical aspect of sustainability side by side of its environmental, social and economic priorities.

It is from this dimension that ethical approach of sustainability becomes as the most integrated aspect of sustainability. As shown in Figure 1, this aspect covers the priorities of all sustainable approaches and can therefore be the most efficient paragon of analysis for evaluating sustainability in recent design practices.

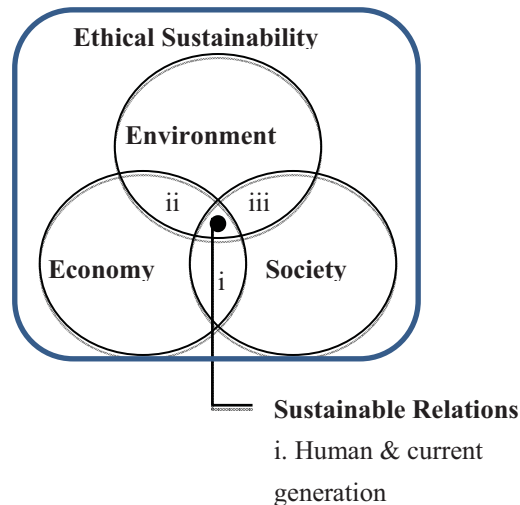


Figure1. Ethical sustainability as an integrated approach of sustainable development
Source: Hamzenazhad, Mahmoudi, and Abbasi (2014)

Best education for young children is the one which reveals itself in the form of entertainment and joy (Tominga 1995). In this sense, children TV shows, as one of the children's communicational tools with their surrounding environment and the rest of the world, can play an important role in teaching sustainability to Iranian young generation. Therefore, the design of scenes in these shows should be also treated as a teaching tool of sustainability. Budget of the show producer, aesthetical priorities, viewer's requirements and needs, the proficiency of the designer and cultural obligations, are all part of the factors which affect the quality and the sustainability of the scene design. Yet, the guiding design principles established by Islamic Republic of Iran Broadcasting organization can be called as the most effective factor in scene design of Iranian TV shows (Zahedi, 2014). The approach of this Organization in the last decade, and the control it has over the design of TV scenes in this developing country, makes it obvious that improving organizational design principles by sustainable considerations will lead to the sustainability of scene design.

In this study, the design principles of Islamic Republic of Iran Broadcasting organization (IRIB) are examined through an ethical approach to explore the current shortcomings in the principles of scene design for children TV shows. It is hoped that by fulfilling the defined shortcomings, gaining entertainment and education through a sustainable view point becomes a possibility for Iranian children.

1.1 Sustainability in Iran and Designer's Responsibility

A sustainable development is a development which is based on a commitment for creating better life for all people. In order to reach higher quality of life, much more attention should be paid towards immaterial properties, human interrelationship and environment, and this would not be achieved except by better acquirement of knowledge and promotion of culture (Khan Mohammadi, 2014). The importance of reaching sustainability through an uprising development of the third world is an undeniable matter which has been accepted by Iranian designers and decision makers. As Lahsayeezadeh correctly stated in his book of *Sociology of Development*, Iran today is standing on the edge of cognition towards sustainable priorities, yet seems like this understanding is taking too much time to reveal itself in practice (Lahsayeezadeh, 2012). Academic environment of Iran has already taken its part in the field of sustainability, and design schools in particular, are strongly teaching sustainable approaches to Iranian students as the first step of creating sustainable built environment. Yet, recognizing these priorities in the physical practices of Iranian designers is a hard task. It seems like even though

cognition has been reached towards this important issue, there is still lack of consideration in presenting them as actual design projects.

This deficiency might be due to the fact that academic cognition does not necessarily lead to social acceptance, and it is only through social acceptance that the priorities of a development can be reached (Lynch & Hack, 1984). Since decision makers and organizations are also parts of this society, their approaches towards presenting sustainable considerations in practice can strongly affect the approach of the rest of the society towards sustainable development. Therefore, a two sided relationship is created, between the Iranian society and its decision makers, which is unknowingly forcing the whole community towards avoiding sustainable considerations while its academic sources are concentrating on its emanation. This is the point where educated designers, as the main creators of national viewpoints and the effective connecting chain of academic circles and the society, can solve this problem by breaking the above mentioned vain circulation and indirectly educate the priorities of sustainability through their design practices. This could be the most efficient way of rising national awareness towards sustainability and reaching sustainable development in Iran.

1.2 Necessity of Ethical Sustainability in Scene Design of Children TV Shows

Recognizing the necessity of gaining an integrated approach towards sustainability in architecture and design has lead Iranian sustainability theorist to accept spiritual value system, side by side of the material factors, as the moving engine of sustainability considerations (Hamzenazhad, Mahmoudi, & Abbasi, 2014). Yet, sustainable approaches are still considered separately in design projects which can obviously not end to a sustainable achievement. As the most comprehensive aspect of sustainable development, ethics has the ability to offer an integrated view point for sustainability analysis in different design projects which will lead to achieving sustainability priorities (Thompson, 1998). In this sense, the design projects which are related to children contain high importance. Since acceptance is only achieved through cognition, the best starting time of teaching sustainability is in the childhood years of a nation's young generation (Abbasi, Khan Mohammadi, & Mahmoudi, 2014). Even though scenes of children TV shows are not exactly known as the built environment which children spend their time in, yet, they are certainly the true image of an environment which children today use to connect with the rest of the world. The influence of children TV shows on shaping a child's priorities and value system is undeniable and its effect on child's behavior and viewpoint towards the world makes an effective teaching tool out of their scenes beside the context of their program.

Spaces related to children are the best beginning point of gaining social awareness towards sustainable consideration (Tominga, 1995), and children TV shows which are known to be the cognition gate of education and entertainment for children, are the exact space children connect with for a noticeable time of their days. It is from this point of view that the design of scenes in TV programs, become an important and effective factor in mental education, environmental cognition and psychological health of a child.

Child, in the early years of life, has a fresh, soft and supple character which could be shaped correctly (Della-Piana, 1973), but this chance faints as years pass. It is the designer's responsibility to create a space to meet all of the child's needs and requirements, yet most of the scenes designed for children TV shows have not paid enough attention to all of the existing aspects of a child and are not congruous with child's perception, activity model and mental health. These scenes have actually been designed in accordance to adults' perception of childhood and this could certainly not allow them to act as an indirect teaching tool of ethical sustainability or any other value system for children. In designing a scene, the designer creates an art piece using colors, shapes, lines and forms, and defines the idea and context of the design through these mentioned materialistic factors. Therefore, in order to transfer the educational message of the show to the child, a comprehensive approach is needed. This is the only path in which the designer can consume all of the related factors as a whole with an integrated goal, which due to its nature, could be only obtained in the boundaries of an integrated framework (Dahl, 2012).

In the current era, indirect education of sustainability through sustainable design is known to be the most efficient tool of development and can prepare the society for facing future challenges (Curlwell, 2005). As the most comprehensive dimension of sustainable development, Ethical sustainability is able to offer the integrated framework needed for a comprehensive, ethical sustainable scene design and it is only through this holistic view point that the design of scenes can make them act as a teaching tool for children whom their today's education, will shape our world of future.

2. Methods and Materials

The best way to explore the shortcomings of Scene design principles set by Islamic Republic of Iran Broadcasting organization (IRIB) is through comparative examination of these principles and "Hannover

Principles” which are known to be the design principles of Expo.2000 and have strongly noted the ethical aspect of sustainability, through an integrated approach and on the basis of sustainable relations. Through comparison between Iranian design principles and globally accepted and known principles of Hannover, shortcomings of scene design in children TV shows are revealed. In order to conduct this comparative examination, case study approach is selected as the methodology. In addition, scene of the most famous and internationally recognized children TV show, under the name of Fitileh TV Show, is chosen as the case study of this research. Since the evaluation of this case study is a post occupancy research, observation is used as the most applied tool for post occupancy evaluation (Whyte, 1988; Biddulph, 2012; Marcus & Francis, 1998). So, the scene design of Fitileh TV Show is visited by the second author several times. In order to evaluate the scene design of Fitileh TV and collect data, several photos are taken and field notes are made during observation. The collected data and visual appraisal help to analyze the result of established design principles in practice.

The Fitile TV Show scene is selected as the case study because apart from being completely designed in accordance to the above mentioned Iranian design principles, it has been on the edge of success and popularity for nearly a decade and has managed to receive two national awards for education and entertainment from Islamic Republic of Iran Broadcasting organization and is one of the numerous TV shows which has been able to get promoted from national to international level and Iranian children outside the borders of Iran can also enjoy this program. The other reason of this selection is that Fitileh TV Show is presented through an Iranian public channel and therefore, it’s viewers are from the average level families of Iranian society which are mainly in need of gaining cognition towards sustainable priorities, and mostly efficient for the realization of these priorities in the society. The following sections demonstrate on this process.

2.1 Design Principle Approach

2.1.1 Sustainable Principles of Hannover

Hannover Principles are well known design principles which have been shaped in accordance to sustainable concerns during 20th century. As mentioned in the previous sections, these principles highlighted the relationship between material and spirit and can be known as the sustainability principles which focus on the value systems beside materialistic priorities. Hannover principles cover all three sustainable relations which have also been recognized in the Brundtland Report, as the most internationally accepted description of sustainability, through an integrated viewpoint of accepting the spiritual aspect of human beside their material needs. Ethics, as a value system in complete relate with spiritual and immaterial aspect of human beings, have also been mentioned in these principles. These principles include nine items:

1. Insist on rights of humanity and nature to co-exist in a healthy, supportive, diverse and sustainable condition.
2. Recognize interdependence. The elements of human design interact with and depend upon the natural world, with broad and diverse implications at every scale. Expand design considerations to recognizing even distant effects.
3. Respect relationships between spirit and matter. Consider all aspects of human settlement including community, dwelling, industry and trade in terms of existing and evolving connections between spiritual and material consciousness.
4. Accept responsibility for the consequences of design decisions upon human well-being, the viability of natural systems and their right to co-exist.
5. Create safe objects of long-term value. Do not burden future generations with requirements for maintenance or vigilant administration of potential danger due to the careless creation of products, processes or standards.
6. Eliminate the concept of waste. Evaluate and optimize the full life-cycle of products and processes, to approach the state of natural systems, in which there is no waste.
7. Rely on natural energy flows. Human designs should, like the living world, derive their creative forces from perpetual solar income. Incorporate this energy efficiently and safely for responsible use.
8. Understand the limitations of design. No human creation lasts forever and design does not solve all problems. Those who create and plan should practice humility in the face of nature. Treat nature as a model and mentor, not as an inconvenience to be evaded or controlled.
9. Seek constant improvement by the sharing of knowledge. Encourage direct and open communication between colleagues, patrons, manufacturers and users to link long term sustainable considerations with ethical responsibility, and re-establish the integral relationship between natural processes and human activity.

Even though all of the items are addressing to sustainable relations either directly, or indirectly, it is mostly in item no.9 where three relations are considered as a whole and ethics is noted directly as an immaterial aspect of sustainability. This is while respecting the relationships between spirit and matter has already been mentioned in the 3rd item.

2.1.2 Comparison of Hannover Principles and Design Principle of IRIB

Scene design of children TV shows and space creation in these programs is actually a visual language, created by the designer, to transfer the subject and concept of the program to its viewers. Since children can relate mostly through visual objects and are proved to be more impressive in learning through a joyful experience rather than direct teaching system, the visual language of scene design can finely transfer the priorities and concerns of ethical sustainability to its viewers. Recognizing the importance of this visual language, directed the decision makers of IRIB to shape the following principles for the scene design of children TV shows;

1. Designing the scene should be in complete relate with aesthetical priorities and in accordance with the concept of the show.
2. The design should be shaped on the economy basis of providence and the designer should hesitate from costly design material or techniques. The scene should only include a limited percentage of the whole program budget.
3. Living social, cultural and economic indicators of the country's middle class families should be considered in the design of scene.
4. Consumerism shouldn't be encouraged through the utilization of costly elements in the design of scenes.
5. Reuse of the recycled elements and parts of older scenes is encouraged in the new scenes and their design in order to reach optimization in consumption.
6. Favors, taste and cognition of the child as the program's viewer should be considered in the scene design.
7. Besides transferring the concept of calmness and encouraging public social composure, the design of the scene should not be doleful and discouraging.
8. Religious values, social culture and national consensus should be considered in the scene design.
9. Scene designers should present their ideas based on a structured research and with the help of dominant consultants and professional advisers.
10. Iranian traditional Symbols, colors and designs ideas should be considered in the scene design.
11. Creativity and innovation in design is important and imitation and repetition should be strongly avoided.
12. Scene design should respect subcultures of the country and treat their related symbols as national evidence.
13. Scene design shouldn't encourage or promulgate baseless believes and superstitious customs.
14. Elements which carry national or cultural sensitivity should be used with accuracy and delicacy in the scene design.
15. The scene design should conduct calmness besides promoting joy, happiness and mobility in children.
16. In the TV shows with longer duration, the main structure of the scene should be saved and the diversity should be obtained through graphical and color changes.

A review on the presented principles of IRIB indicates high attention on economy factures and consumption rates which are important priorities of sustainability. Considering national cultures and even current subcultures of the country in the design of the scenes is also a strong sign of respecting the relationship between spirit and matter as one the items in Hannover principles. it seems like no conflict can be noticed between these two set of principles, yet comprehensiveness of IRIB design principles and the level of their attention on sustainable relations is a matter which will be analyzed in the following tables. Table1, 2 and 3 are presenting an accurate comparison of Hannover and IRIB principles on the basis of sustainable relations. In order to reach more accuracy in this comparative analysis, each relation is stated in one table and the two sets of principles are also directly compared with each other. This analysis will clearly show the shortcomings of IRIB design principles both in relate with Hannover principles and sustainability relations. In an overall view, it will also indicate the comprehensiveness of both sets of principles due to their ability in conducting with all three sustainability relations as the integrated approach of each of their principles;

Table 1. Comparative analysis of Hannover and IRIB design principles on the basis of human relationship with other contemporaries

Sustainability relations	Hannover Design Principles	IRIB Design Principles
The relationship between human and other contemporaries	1. Respect relationships between spirit and matter. Consider all aspects of human settlement including community, dwelling, industry and trade in terms of existing and evolving connections between spiritual and material consciousness.	1. Designing the scene should be in complete relate with aesthetical priorities.
	2. Accept responsibility for the consequences of design decisions upon human well-being, the viability of natural systems and their right to co-exist.	2. Living social, cultural and economic indicators of the country’s middle class families should be considered.
		3. Consumerism shouldn’t be encouraged through the utilization of costly elements in the design of scenes.
		4. Favors, taste and cognition of the child as the program’s viewer should be considered in the scene design.
		5. Besides transferring the concept of calmness, the design of the scene should not be doleful.
		6. Religious values, social culture and national consensus should be considered in the scene design.
		7. Iranian traditional Symbols, colors and designs ideas should be considered.
		8. Scene design should respect subcultures of the country.
		9. Scene design shouldn’t encourage or promulgate baseless believes and superstitious customs.
		10. Elements which carry national or cultural sensitivity should be used with accuracy and delicacy.
		11. The scene design should conduct calmness besides promoting joy, happiness and mobility in children.
	3. Seek constant improvement by the sharing of knowledge. Encourage direct communication, long term sustainable considerations with ethical responsibility, re-establish the integral relationship between natural processes and human activity.	12. Scene designers should present their ideas based on a structured research and with the help of dominant consultants and professional advisers.
		13. Creativity and innovation in design is important.
	4. Create safe objects of long-term value.	-----
	5. Understand the limitations of design	

Table 2. Comparative analysis of Hannover and IRIB design principles on the basis of human relationship with future generation

Sustainability relations	Hannover Design Principles	IRIB Design Principles	
The relationship between human and future generation	1. Recognize interdependence. Expand design considerations to recognizing even distant effects.	1. The design should be shaped on the economy basis of providence and the designer should hesitate from costly design material or techniques.	
	2. Accept responsibility for the consequences of design decisions upon human well-being, the viability of natural systems and their right to co-exist.	2. Consumerism shouldn’t be encouraged through the utilization of costly elements in the design of scenes.	
		3. In the TV shows with longer duration, the main structure of the scene should be saved and the diversity should be obtained through graphical and color changes.	
		4. Reuse of the recycled elements and parts of older scenes is encouraged in the new scenes and their design in order to reach optimization in consumption.	

		4. Create safe objects of long-term value.	
		5. Rely on natural energy flows.	
	6. Understand the limitations of design.		
	7. Seek constant improvement by the sharing of knowledge. Encourage direct communication, long term sustainable considerations with ethical responsibility, re-establish the integral relationship between natural processes and human activity.		

Table 3. Comparative analysis of Hannover and IRIB design principles on the basis of human relationship with nature

Sustainability relations	Hannover Design Principles	IRIB Design Principles
The relationship between human and nature	1. Recognize interdependence. Expand design considerations to recognizing even distant effects.	1. The design should be shaped on the economy basis of providence and the designer should hesitate from costly design material or techniques. The scene should only include a limited percentage of the whole program budget.
		2. In the TV shows with longer duration, the main structure of the scene should be saved and the diversity should be obtained through graphical and color changes.
	2. Eliminate the concept of waste.	3. Reuse of the recycled elements and parts of older scenes is encouraged in the new scenes and their design in order to reach optimization in consumption.
	3. Insist on rights of humanity and nature to co-exist in a healthy, supportive, diverse and sustainable condition.	
	4. Accept responsibility for the consequences of design decisions upon human well-being, the viability of natural systems and their right to co-exist.	
	5. Seek constant improvement by the sharing of knowledge. Encourage direct communication, long term sustainable considerations with ethical responsibility, re-establish the integral relationship between natural processes and human activity.	
	6. Rely on natural energy flows.	
7. Understand the limitations of design.		

Table 1 Indicates high attention of IRIB design principles on the relationship between human and other contemporaries, while this attention decrease noticeably when it gets to other tow sustainable relations in table 2 and 3. This is understandable due to the nature of TV shows and the scenes which should be designed in relate to that nature. On the other hand, Hannover principles have manages to put attention on all sustainable relations equally. As mentioned before, no conflict can be observed between the compared principles, yet, there are three Hannover principles which are not in relate with any of IRIB principles. These principles include sustainable priorities such as relying on natural energy flows and creating objects of long term value. The absence of these priorities in IRIB principles indicate lack of sustainability concerns between the decision makers of this filed, which will obviously not lead to ethical sustainable scene design of children TV shows.

It should also be noted that because of the influences of energy and material consumption on both nature and the ability of human future generation in meeting their needs, there are always some common items between these two sustainable relations when it gets to sustainable analysis, yet, a comprehensive principle is the one which could be called common in all of the sustainable relations (Becker, 2012). From this view point, Hannover principles are more comprehensive than IRIB principles because even though only 3items of IRIB design principles are common between two sustainable relations of human with other contemporaries and human with nature, Hannover principles with an inverse situation, have only three items which are not common between all sustainable relations and the rest can be strongly noted as integrated, ethical sustainable design principles.

2.2 Case Study Method

Exploring the effect of Current Design principles on the design of a TV show scene, and examining their shortcomings in accordance to the requirements of Ethical Sustainability, can be clearly achieved through analyzing a scene of the show which apart from being popular and publically consented, it has also been awarded for education and entertainment from Islamic Republic of Iran Broadcasting organization. Different scenes have been designed and built in various Iranian children TV shows recently, all following the design principles of IRIB, yet, the selected scene of this study is a scene located in one of the most facilitated studios of Tehran which is known as Tak Ta Studio. As the capital city of Iran, design samples of Tehran are known to be pioneers for the rest of the country and they are usually used for international examples. Therefore, findings based on a well publically known design example of an equipped studio in Tehran will be spotted and emulated in the rest of the country as well as Tehran Itself. As shown in Figure 1 Tak Ta Studio is located at the intersection of Molla

Sadra St. and Chamran Highway, near to Vanak Square at central north of Tehran. Also, Figure 2 shows the location of Vanak Square in Tehran.



Figure 1. Location of Tak Ta Studio at Central North of Tehran



Figure 2. Location of Vanak Square in Tehran

The campus of Tak Ta Studio is nearly $2000sq^2$, with its main entrance at Chamran Highway and its studio halls at the eastern extreme of the campus to avoid the noise pollution of the highway. The research aim is to evaluate ethical sustainability of the case study, based on visual data, on the grounds of Hannover design principles. As a set of sustainably integrated design principles, Hannover principles can be considered in the whole design and construction process of the scene which is outside the boundaries of research limitation in data collection, therefore, the constructed scene which is now being utilized for Fitileh children TV show is visually evaluated as detailed as possible and the design and construction process is not considered in the final analysis result.

It should also be noted that the influence of TV shows has already been spotted by the decision makers of IRIB and their established design principles have been considered in the scene design of Fitileh TV show. Therefore, an actual practice of IRIB design principles for the scene design of children TV shows can be visually evaluated in this case study.

2.2.1 Data Collection and Analysis

Fitileh TV show has been presented through the channel2 of Islamic Republic of Iran Broadcasting since 2003, and is still one of the most popular children TV shows of Iran. This children TV show is one of the numerous TV shows which has been able to upgrade itself from national to international level of IRIB organization, and has achieved fame and favor between Iranian children. This show has also been awarded by the above named organization for entertainment and education. The scene of this show is therefore, expected to contain a design in respect to its award, containing the goals of entertainment and education for children and act as a teaching tool. The tool which could indirectly teach the priorities of ethical sustainability to young children as future designers and decision makers of Iranian society.

The scene of Fitile TV show has an open design with designed elements placed at the sides of the scene and the show stage in the middle. Figure 3 and Figure 4 show the hall of Fitileh scene and the position of children. This rectangular hall has dimensions of 10m width to 12m length.



Figure 3. The hall of Fitileh scene



Figure 4. Children as part of Fiyileh scene design

Reviewed document show a cost of about \$30 000 for the design and construction of the scene in Fitileh Show. The scene, in an overall look, is mainly focusing on color diversity and children scale. Scene design has finely concentrated on child's visual cognition and used variety of colors to become more interesting and attractive for the child viewer. Child has certainly been the estimated commander of this scene, because all of the parts and elements of the scene have been designed in accordance to the scale of children as shown in Figure 5. This delicate touch, apart from its appealing presentation, makes the guest children, who are personally active in the scene, feel more confident and reliant. These design strategies are very effective in shaping a supporting environment for children's relationship with each other.

Figure 6 shows the scene is surrounded by colorful benches from two sides. These benches have also been designed securely in accordance to child scale and comfort indicators. The benches are considered for the children who join the show as guest and it is through this design strategy, that children have practically become a part of the scene design in this program.

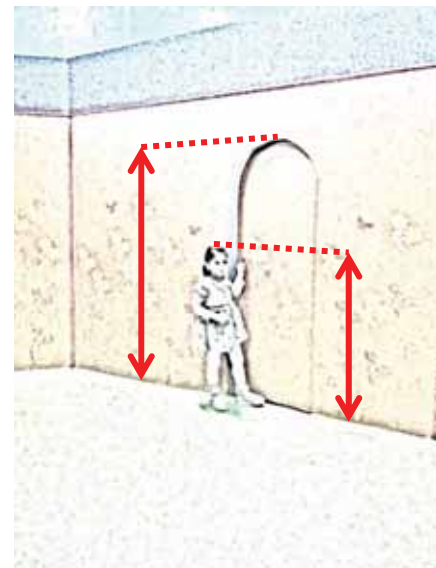


Figure 5. Considering children scale and ergonomics in Fitileh Scene Design



Figure 6. Colorful Benches of the Fitileh Scene

The seating parts of these benches include two different sections, shaped from different material. The soft, elastic part is comfortable for children to seat on, and the hard section behind the seating part, gives the child seating on the upper level of the bench enough space to ease his or her legs (Figure 7). It is obvious that the benches are designed due to child’s ergonomics and scale (Figure 8).

Designing colorful branches and including children as part of the scene will decrease material and energy consumption as a whole, and will increase the attractiveness of the program and the effect of it on a child viewer in particular. In other words, this design strategy is helps the scene to become a more efficient teaching tool.

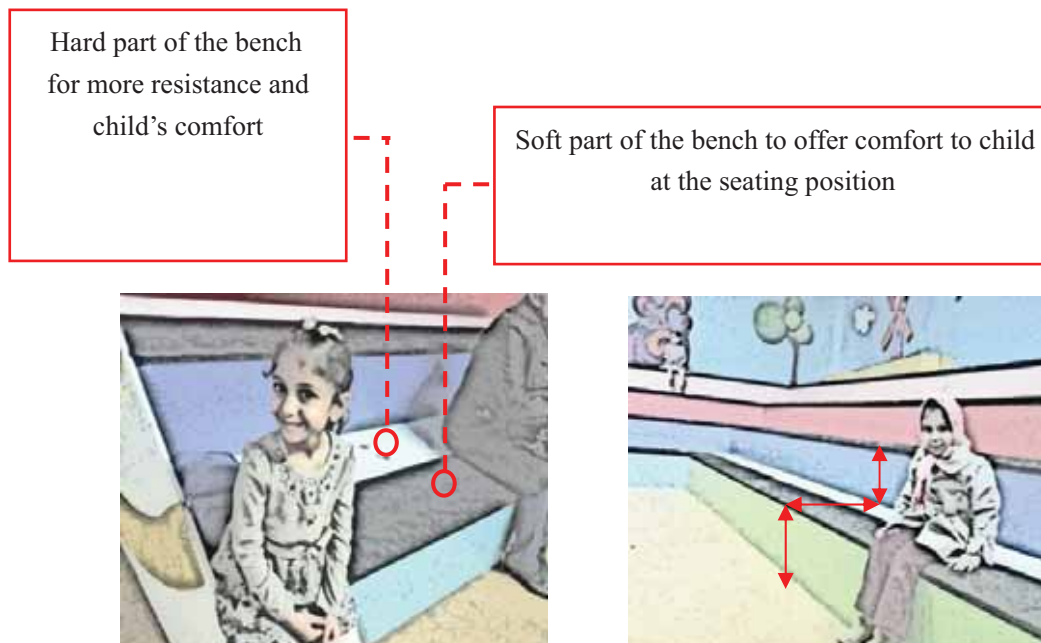


Figure 7. Designing in accordance to children comfort

Figure 8. Designing on the basis of Children Standards

Having camera men and recording facilities in the third side, the fourth side has been designed with more variable shapes and colors in the form of a joy train, which is the main idea of the design, and seems to be the longest, most attractive side of the scene. Most of the shows take place in front and in the wagons of this train.

The presenters and producers of this program see the show as a colorful train which comes, brings joy and fun, and leaves until the next episode. The wagons of this train allow divers locations for different parts of the show to take place, while all of the wagons are connected from behind and are flexible enough to serve the shows that need wider spaces.

The design strategy offers separate spaces for the presenters to present their shows, and it also enriches the design with enough flexibility and adaptability which helps to rise the efficiency of the scene and therefor, its professional life time. The composition of open and close spaces of the designed train (Figure 9) acts like a stimulator of child's exploring mind and attracts his or her sense of creativity and imagination. As mentioned, the train of joy is derived from the main idea of the program and is in shaped due to the concept of the show (Figure 10). This part of Fitileh scene design is, from this view point, in complete relate with sustainable relations.



Figure 10. Designing a train for the scene in accordance to shows concept



Figure 9. Multifunctional open and close spaces of train of joy in the Fitileh Scene

Color variation and shape diversity of Fitileh scene is suitable for child's mental health and creativity besides excitation of joy and happiness. Adjacent of guest's benches is the studios entrance and the center of the scene is the flat show stage. With the colorful train at the opposite side which cinctures the central stage show with the help of the graduated benches, a rational structure is presented through the design of this scene. This structured arrangement helps the child to seek calmness in the middle of so much diversity and variety of colors and shapes, and controls the feeling of excitement which is naturally emanated in this space.



Figure 12. Bigger scale of comic figures in accordance to their natural size and child's scale



Figure 11. Comic figures of nature's symbols at the background of the Fitileh scene

On the other hand, relationship between human and nature has been presented in a weak manner through the scene design of Fitileh show. Artificial flowers and mushrooms besides phantasy shapes of trees, clouds, sun and

sky at the background of the scene are the only symbols of nature in this scene design (Figure 11). The interesting point is the size of these elements which unlike the rest of the scene, is not due to the child's scale and in order to create visual delight for the child, they have been designed larger than their natural size in a comic manner (Figure 12).

This limited use of nature's images and symbols is visually unclear and disturbed by the settlement of the joy train and other designed elements of scene in front of them (Figure 13). It seems as if the design of the background carries no important for the whole scene design and that creating a supporting environment to note or indirectly teach the priorities of relationship between human and nature has never been one of the goals of design.



Figure 13. Limited view towards the comic features of nature at the background of the Fitileh scene

Consumed materials of this scene are fabric, metal, foam and products of plastic which as documents reveal, are 40% recycled or reused after the professional life of the scene had ended, and the 6% remaining will be wasted without an attempt. On the other hand, the resistant and safety of the used material is high and the built techniques also contain high strength which can be noted as a positive point in ethical sustainability analysis. Use of fireproof material in a scene which considers children as part of its design is a thoughtful action. Consumed energy, yet, is not from natural sources and this can be strongly observed as a weakness. Energy used in this scene is mainly electricity and due the sunny hours of Tehran, can be easily obtained through solar system, yet, no actions have been taken in order to decrease the use of energy use and consume of green powers. The current situation of the scene makes it obvious that the same unfortunate manner of energy use was engaged during the construction process which is the stage with the most energy requirement.

Ethical sustainability is an integrated dimension of sustainability which includes value systems. As a cultural value, use of national and traditional symbols in the scene design of children TV shows is the most simplest method of familiarize children with their traditional art and help the teaching tool of ethical sustainability to act more efficient through localizing this integrated dimension of sustainable design. In the case study of this research though, lack of attention to this important is noted. Using the mentioned simplest method of presenting Iranian traditional art or even color combinations, which remind this nation of their traditional design features, have been ignored in this scene design. The only spot where a sign of Iranian art can be stated is a graphical pattern of Toranj at the background of scene, behind the benches (Figure 14). This pattern belongs to early civilizations of Persia and is known to be drawn out of the sun symbol. As a famous Iranian pattern, Toranj is also used regularly in Iranian paintings, fabrics and carpet design industry and therefore, can be easily recognized by Iranian children. It could be concluded that the use of this pattern has been a correct choice due to children cognition of their land and art, yet, being sufficient to only this unit factor, will not lead to localizing sustainability and thus, cannot be considered as a useful act in regards to the indirect teachin of ethical sustainability through scene design.

3. Result of Evaluating Ethical Sustainability in the Scene Design of Fitileh TV Show

Ethical sustainability in scene of Fitileh TV show can be assessed based on Hannover design principles. This assessment will illuminate the existing shortcomings in scene design of Iranian children TV shows and consequently, in the established design principles they have been addressed to. Table 4 presents the result of this assessment on the grounds of sustainability relations.

Table 4. Similarities between Hannover design principles and the scene design of Fitileh TV show

Sustainability Relation	Hannover Design principles	Design strategies of the Case Study
The relationship between human and other contemporaries	<ol style="list-style-type: none"> 4. Respect relationships between spirit and matter. Consider all aspects of human settlement. including community, dwelling, industry and trade in terms of existing and evolving connections between spiritual and material consciousness. 5. Accept responsibility for the consequences of design decisions upon human well-being, the viability of natural systems and their right to co-exist. 6. Seek constant improvement by the sharing of knowledge. Encourage direct communication, long term sustainable considerations with ethical responsibility, re-establish the integral relationship between natural processes and human activity. 4. Create safe objects of long-term value. 5. Understand the limitations of design 	<ul style="list-style-type: none"> • Designing the scene in accordance to the concept of the show • Using children scale and designing in regards to their ergonomics • Designing the scene as a complex of multifunctional spaces • Placing the benches in adjacent to the entrance and the show stage at the centre of the hall. • Considering children as part of the scene design. • Considering high resistance, strength, safety and comfort for the used material and spaces in connect with children. • Use of traditional pattern in the design
The relationship between human and future generation	<ol style="list-style-type: none"> 1. Recognize interdependence. Expand design considerations to recognizing even distant effects. 2. Accept responsibility for the consequences of design decisions upon human well-being, the viability of natural systems and their right to co-exist. 3. Eliminate the concept of waste. Evaluate and optimize the full life-cycle of products and processes, to approach the state of natural systems, in which there is no waste. 4. Create safe objects of long-term value. 5. Rely on natural energy flows. 6. Understand the limitations of design. 7. Seek constant improvement by the sharing of knowledge. Encourage direct communication, long term sustainable considerations with ethical responsibility, re-establish the integral relationship between natural processes and human activity. 	<ul style="list-style-type: none"> • Considering high resistance, strength, safety and comfort for the used material and spaces in connect with children. • Designing the scene in respect of internationally accepted standards • Recycle or reuse of 40% of the consumed material
The relationship between human and nature	<ol style="list-style-type: none"> 1. Recognize interdependence. Expand design considerations to recognizing even distant effects. 2. Eliminate the concept of waste. 3. Insist on rights of humanity and nature to co-exist in a healthy, supportive, diverse and sustainable condition. 4. Accept responsibility for the consequences of design decisions upon human well-being, the viability of natural systems and their right to co-exist. 5. Seek constant improvement by the sharing of knowledge. Encourage direct communication, long term sustainable considerations with ethical responsibility, re-establish the integral relationship between natural processes and human activity. 6. Rely on natural energy flows. 7. Understand the limitations of design. 	<ul style="list-style-type: none"> • Recycle or reuse of 40% of the consumed material • use of local and easy to reach material • Considering comic features of nature in the scene design

Existing visual data show that the scene design of Fitileh TV show has concentrated on the safety and comfort of children as the essential part of its design. The design has been taken place in accordance to the program's concept and creating a joyful, colorful and creative environment for children's presence and the child viewer seems to be the main goal of the design.

On the other hand, inefficient use of nature's features and traditional patterns, avoiding the consumption of renewable energy sources, 60% waste of the used materials and concentrating only on the excitement aspect of child's character can be noted as the weaknesses of this scene design.

Overall, scene of Fitileh TV show can't be considered as an educational device and has not provided the possibility of indirect teaching of ethical sustainability. In fact, this scene has been designed as a suitable background of a children show which aims to conceive entertainment and direct education through the connection between its presenters and the viewers.

4. Discussion and Recommendation

4.1 Shortcomings of Design Principles in Iranian Primary School Design

This study shows that the design principles of "Islamic Republic of Iran Broadcasting organization" contain points in common with "Hannover Design Principles" and are not in conflict with them, yet, it doesn't cover all of the items of Hannover principles and therefore, it is not enough to obtain sustainability for the scene design of this organization's programs. These established design principles have not paid enough attention on the relationship between human and nature and the relationship between human and future generation. Even though IRIB principles are mostly concentrated on the relationship between human and other contemporaries, avoiding two items of Hannover principles, in relate with creating safe objects of long-term value and understanding the limitations of design, can be spotted in on the grounds of this sustainability relation.

On the other hand, visual analysis of the scene of Fitileh TV show indicates the presence of the avoided principles in the scene design. Yet, insufficient attention on the relationship between human and nature and between human and future generation can also be noted in the practiced scene design of an IRIB TV show for children. This similarity between design principle comparative analysis and visual analysis of the scene design emphasis the influence of design principles on the practiced scenes and the effect they could have in the creation of the scenes as indirect educational devices, in order to reach the priorities of ethical sustainability in the society. The following shortcomings are discovered in IRIB design principles, on the grounds of Hannover design principles:

- Insufficient attention to Seeking constant improvement by the sharing of knowledge.
- Insufficient attention to Encouraging direct communication and long term sustainable considerations with ethical responsibility.
- Insufficient attention to re-establishing the integral relationship between natural processes and human activity.
- No consideration in creating safe objects of long-term value
- No consideration in understanding the limitations of design
- No consideration in Relying on the natural energy flows

4.2 Recommendation

The revealed shortcomings in this research can act as a serious warning alarm for responsible Iranian designers and decision makers. They indicate the significance of pursuing an ethical sustainable view point in Iranian Design Principles. In addition, by discovering the existing shortcomings of IRIB design principles, the possibility of recommending new design principles based on the recognized priorities is provided which can eventually fulfill the shortcomings. As the conclusion of this study, a set of recommendations are presented in Table 5. These suggested strategies can strongly lead to the improvement of design principles for scene design of Iranian children TV shows.

Exploring the existing shortcomings in design principles requires understanding and recognition of concerns and priorities in ethical sustainability. This recognition is considered as the first effective step in achieving ethical sustainability in the design of scenes in children TV shows. Findings of this research - the shortcomings of IRIB design principle for scene design of children TV shows, in compare with Hannover principles and based on ethical sustainability - and the concluded recommendations, can lead to developing Ethical Sustainable Educational Design in Iran.

Table 5. Recommended strategies for shortcomings

Shortcomings	Recommendations
Insufficient attention to Seeking constant improvement by the sharing of knowledge.	Sharing knowledge in the process of scene design between decision makers and the professional team is important and must be obtained through open communications and procedural environment.
Insufficient attention to Encouraging direct communication and long term sustainable considerations with ethical responsibility.	Long term sustainable considerations should become an emphasis in the scene design and the process of its construction. Scenes should be designed in regards to ethical responsibility of designer, producer, presenters and the constructions team on the basis of sustainability relations.
Insufficient attention to re-establishing the integral relationship between natural processes and human activity.	Relationship between human and nature should be taken into account in all of the stages of scene design and construction.
No consideration in creating safe objects of long-term value	Safety and quality of the scene is important and the elements should be designed and produced based on long term consumption.
No consideration in understanding the limitations of design	Cognition towards limitations of design in the scene design for children TV shows should be gained and its influences on the design and construction process should be understood.
No consideration in relying on the natural energy flows	Natural energy consumption and the use of renewable energies should be encouraged in designing the scenes. Utilization of passive cooling and heating during the process of scene design and construction will also decrease energy consumption.

Acknowledgment

The authors would like to thank Islamic Republic of Iran Broadcasting Organization for providing funding of this project.

References

- Abbasi, B., Khan Mohammadi, M. A., & Mahmoudi, M. (2014). Evaluating Environmental Sustainability in Iranian Primary Schools through Design Principle Approach. *Asian Social Science*, 10(19), 206-219. <http://dx.doi.org/10.5539/ass.v10n19p206>
- Becker, C. U. (2012). *Sustainability ethics and sustainability research*. New York: Springer. <http://dx.doi.org/10.1007/978-94-007-2285-9>
- Bennetts, H. (2003). *Understanding sustainable architecture*. London: Taylor & Francis.
- Biddulph, M. (2012). Radical streets? The impact of innovative street designs on liveability and activity in residential areas. *Urban Design International*, 17(3), 178-205. <http://dx.doi.org/10.1057/udi.2012.13>
- Curlwell, S. (2005). *The frame work and protocols for environmental assessment*. London: Routledge Publication.
- Dahl, A. L. (2012). Achievements and gaps in indicators for sustainability. *Ecological Indicators*, 17, 14-19. <http://dx.doi.org/10.1016/j.ecolind.2011.04.032>.
- Della-Piana, G. (1973). *How to talk with children*. New York: John Wiley & Sons.
- Hamzenazhad, M., Mahmoudi, M., & Abbasi, B. (2014). Ethical Sustainability in Iranian New Towns: Case Study of Shushtar New Town. *Asian Social Science*, 10(13), 252-262. <http://dx.doi.org/10.5539/ass.v10n13p252>
- Khan Mohammadi, M. A. (2014). *Theoretical enhancement of sustainable architecture from Islamic points of view*. Tehran: Iran University of Science and Technology.
- Lahsayeezadeh, A. (2012). *Sociology of development* (5th ed.). Tehran: Payam Noor University.
- Lynch, K., & Hack, G. (1984). *Site planning*. New York: MIT Press.
- Marcus, C. C., & Francis, C. (1998). *People places: Design guideline for urban open spaces* (2nd ed.). New York: John Wiley & Sons, Inc.
- McDonogh, W. (1992). *The Hannover Principles: Design for sustainability*. In Prepared for EXPO 2000 the world's fair. Hannover: William McDonogh & Partners.

- Thompson, I. H. (1998). Environmental ethics and the development of landscape architectural theory. *Landscape Research*, 23(2), 175-194. <http://dx.doi.org/10.1080/01426399808706534>
- Tominga, Y. (1995). *Educational facilities, New Concept in architecture and design*. Tokyo: Mei Sei Publication.
- United Nations. (1992a). *Rio declaration on environment and development*. New York: United Nations.
- United Nations. (1992b). *Agenda 21*. New York: United Nations.
- United Nations. (2002). *Johannesburg declaration on sustainable development*. New York: United Nations.
- Warner, D. K., & DeCosse, D. (2009). *Lesson four: The ethical dimensions of sustainability*. Santa Clara University. Retrieved from http://www.scu.edu/ethics/practicing/focusareas/environmental_ethics/lesson4.html.
- Whyte, W. H. (1988). *City: Rediscovering the Center*. New York: Bantam Doubleday Dell Publishing Group, Inc.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford: oxford University Press.
- Zahedi, S. (2014). *Sustainable Development*. Tehran: Parham Publication.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Study of the Heritage of Korkyt in the Turkic World

Tynysbek A. Kongyratbay¹, Maira S. Sultanova¹, Nartai S. Bekmoldinov², Bolat Zh. Ospanov³ & Kalzhan T. Kongyratbay⁴

¹ Kazakh State Women's Teacher Training University, Almaty, Kazakhstan

² Kazakh National Academy of Arts named after T. Zhurgenov, Kazakhstan

³ The Korkyt Ata Kyzylorda State University, Kazakhstan

⁴ Kazakh National Pedagogical University named after Abai, Kazakhstan

Correspondence: Tynysbek A. Kongyratbay, Kazakh State Women's Teacher Training University, 99, Aiteke bi street, Almaty city, 050000, Kazakhstan, Tel: 7-775-523-1515. E-mail: tynysbek55@mail.ru

Received: January 19, 2015 Accepted: June 12, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p55

URL: <http://dx.doi.org/10.5539/ass.v11n21p55>

Abstract

This article studies the outstanding historical personality of Korkyt, his heritage in music and literature. Researches related to Korkyt, conducted by Turkic scientists analyzed, including popular tales and myths, "Korkyt baba's book". There were new suggestions to find out him as a zhyrau and his musical heritage. Especially a complex issue whether the real existence of Korkyt was true or he was only folklore personage and about the real period of Korkyt's life has been aroused based on ethno geographic uprising of the oghyz tribe.

Keywords: Korkyt, myth, epos, song, kui, archaeology, ethnology, folklore study, history of literature, music studies, genetic, polistaging, typological, mythical studies

1. Introduction

Nowadays there are many scientific researches about Korkyt, who was popular among Turkic culture within one century. According to those works, historical and cultural relics related to Korkyt's name have been pointed out differently. The first information about Korkyt can be found in "Genealogy of Turks" (Kononov, 1958) by the ruler of Khiva Khanate Abu al-Ghazi Bahadur, and further in works of prominent scientists such as V. Bartold, V. Gordlewskii, I. Kastanie, V. Zhirmunskii, K. Inostrantsev, A. Kononov, A. Samoilovich, P. Spiridonov, A. Yakubovskii, G. Arasly, M. Takhmasib, Kh. Koroghly, O. Gokiyai, M. Yergin, M. Kepryulyuzade, Sh. Ualikhanov, M. Auezov, A. Zhubanov, A. Marghulan, A. Konyratbayev and many other Turkish, Azerbaijani, Turkmenistani and Kazakh researches.

It is confident that one of the Kazakh prominent scientists M. Auezov considered Korkyt as a myth personage among Aldar-Kose, Kozhanasyr and Asan-Kaighy (Auezov, 1948). In addition, academician A. Zhubanov stated the content of myth about Korkyt's distinct birth (Zhubanov, 1942). Among many Kazakh researchers, A. Marghulan and A. Konyratbaev were the first who paid a lot of attention to the personality of Korkyt in history, to his art and heritage in literature. One of them left valuable heritage about continuers of kobyz custom, which first started from Korkyt (Marghulan, 1975), and another one translated one of the important work "Korkyt baba's book" into Kazakh language (Konyratbaev, 2008). Exploring deeply the myths about Korkyt, he concluded that all Korkyt's attempts to escape the death were the philosophical results of clash between shamanism (people are undying) and Muslim (the death is obliged to human) (Konyratbaev, 1991). It will not be a mistake, if we say that this period is the beginning for the further researches about Korkyt in Kazakh science.

2. The Main Part

In recent years in Kazakh folklore studies the number of superficial and biased understandings is increasing because of not paying serious regard to the theoretical axioms of the last centuries. This cause to the lack of academic degrees of thousands researches: there are new inclusions, but also there is now absence of weaknesses. Therefore, the lack of studies on the theme of Korkyt's heritage is a huge issue. The issues about Korkyt's cemetery, myth and popular tales, well-known "Korkyt baba's book", the connection of its content with Kazakh epos, the relation of onomastic names to Syrdarriya, the origin of Korkyt, the period of his life, works in music, even consideration of Korkyt as a not a real person, but as the character of folklore have been pointed out.

From the scientific aspect, general Turkic issues about Korkyt have been studied in archeology, ethnology, folklore studies, history of literature and music studies, and have been cognized from the genetic, typological and mythological aspects.

The majority of researches about Korkyt have less novelty than compilation: all of them recite the content of myth, which is known to the entire world, repeating the entire database again and again. Many myths have local characteristics because of the names of historic people and place of that region. But, consideration of myths as a whole history leads to escaping all the theoretical information of folklore studies which have been gathered in more than three century.

Myth is not a historic clew, it is artistic phenomenon, which is formed by historic cognition and has an aptitude to changes. The arrangement of several worldviews can be found only in one myth. This refers to the weakness of considering the personage of the myths as historical people (such as Karabura) and stating the myth as a historical event without noticing the philosophical feature of the content. However, the number of people who are finding history and myth as an equal phenomenon, considering the myth as a clue to the history is increasing day by day. It is not allowed to consider it as a scientific cognition.

For instance, the myths related to Korkyt's name are changing, as time passes. Many scientists added the new plot to the content of myths: Velyaminov-Zernov (1889), P. S. Spiridonov (1909), A. Divayev (1992), N. Dzhetspisbayev (1899). For more information, many researchers point out that Korkyt used to travel with his Zhelmaya as it is obvious in Kazakh myths about Asan Khaighy. It is understood as a recent artistic phenomenon- contamination, integrating the plot of one myth to the other, but not as a cyclization. In this case, the speaker of the myth who updated the content plays an important role.

If to study deep, the plot of these two myths are quite different. While Asan Khaighy was looking for heavenly place for living, Zheruiyik, Korkyt wanted to find a place where he can escape from the death. There are two different philosophical understanding in these two myths.

Most researchers on Korkyt's theme refer to the previous works, which are not relevant for modern moral, without analyzing recent scientific works. It will be useful if they have something to add to the ancient ideas, but there is no use for science of reciting well-known stories with no critical opinions.

Most of them do not consider Korkyt as a rational scientific cognition, but as a part of mystery world, not paying attention to his historic personality, origin, period of life and heritage in literature and culture. Holding on the state "Considering dead is not being dead, and alive doesn't mean being alive" is not a feature of scientific cognition. Especially it can be find out in identification of the origin of the etymology of the word "Korkyt" (Kaskabasov, 2011). It is not possible to cognize the historic people relying on only feelings. Because of this, all historical and genetic clews and scientific suggestions should have been rethought using hermeneutic methods in today's cognitive issues.

At first, there should be clearness in the issue whether Korkyt is the personage of legend or myth itself. Because V. N. Basilov (Losev et al., 1982), S. Kaskabasov and other scientists consider Korkyt as a personage of myth in world mythology, as in works of Velyaminov-Zernov, P. Spiridonov, A. Divaev and others Korkyt is a personage of legend.

According to the folklore theory, a legend is a genre related to a specific and local place. Thereby, the main contradiction is stating a charatcer of legend in the world of mythology. In Kazakh legends, Korkyt is stated as a holy character of legends. This fact leads to different opinions about the period of Korkyt's life. The scientific basis of majority of them is precarious. In addition, there is some kind of researchers, who made his period only relying on conjectures. Because of it, there is confusion in encyclopedias, some of them relate Korkyt's period to V-VI centuries, sometimes VII-VIII, and IX-X centuries (Gabitov et al., 2004).

In accordance with it, there is always a question mark about his right period of life, and about the main clues in the history that refer to his existence at real time.

Korkyt was from oghyz tribe, he was outstanding zhyrau (not a performer of kui) and a wise person. There are also many researches about oghyz tribe. Among them works of S. G. Agadjanov play an important role (Agadjanov, 1973). He deeply investigated the history of this tribe in IX-X centuries and their ethnography. The main location of oghyz tribe in ancient Turkic era is known as Altay, including Zhetisu in VII-VIII centuries, the lower reaches of Syrdariya in IX-X centuries, Amudariya (Turkmen) in X-XI centuries, at the seaside of Black sea (Azerbaijan) and Anadoly (Turkey).

Also, some researchers give information about Korkyt's period of life, saying that he lived in V-VIII centuries, not taking into consideration the uprising of oghyz tribe in above-mentioned centuries. Supporters of this theory

cannot prove it with scientific-historical information. Therefore, they did not even notice that according to them Korkyt lived in the period of “Kultegin”, “Tonukok” in ancient Turkic era.

Scientists relating Korkyt’s period of life to V-VIII centuries do not pay attention to the additional materials about oghyz tribe. One of them is “Encyclopedia of Turks” by M.Kashgari. Based on this book, there can be found different syllable words of oghyz dialect. The book included names of famous people of oghyz tribe: leaders of nation, warriors, even names of beautiful women, except Korkyt’s name. The fact Korkyt’s name cannot be found in the book proves that he did not live in V-VIII centuries. In ancient Turkic period, oghyz tribe did not inhabit in Zhetisu or at the seaside of Syrdariya, but in the area of Altay.

The conclusion is that M.Kashgari did not know Korkyt, because they lived in different period and different places. Majority of information about oghyz tribe in his book is the period of oghyz in Zhetisu. At this period Korkyt’s name was not familiar to people.

That is why we can say without any doubt that Korkyt lived in IX-X centuries in the center of oghyz tribe Zhankent, located in the lower reaches of Syrdariya. According to archeological works of K.Baipakov people started to inhabit Zhankent in about X century, which proves historical theory about Korkyt.

As mentioned above, according to Abylgazy’s works, Korkyt was real man, not a character. In memorials of Rashid-ad-Din, names of warriors of oghyz tribe are stated with the period of Korkyt’s life (Rashid al-Din, 1952). In “Korkyt baba’s book”, Korkyt was described as a poet from oghyz’s kaya tribe (sometimes bayat). The common information from above works said that Korkyt was always mentioned in the center of oghyz tribe.

Nowadays there is also another opinion about the existence of Korkyt as a real person, which claims that he was personage of myth. In previous century, the existence of Korkyt was explained as a character of legend, which is being discussed among today’s scientists. Researchers, which rely only on the folklore information, do not take into consideration genealogical clues and hesitate about historical existence of Korkyt. However, philosophers paying no regard to the legends stay on that Korkyt existed in real life. The last point appeared in XIX century, folklore researchers do not pay attention to this experience as it used to be criticized in previous centuries. In 80-ies of XX century scientist Khalyk Korugly pointed out to the ethnic history of ogyz tribe and wrote “Heroical epos of oghyz tribe”. He investigated ethnic history and uprising of west and east oghyz tribe and came to conclusion that Korkyt was just a character of folklore (Koroglu, 1984). Kazakh scientists S.Kaskabasov and E.Tursynov continued this idea.

Materials about Korkyt’s ethnical and geographic origin of mid centuries insist on the fact that he was character of folklore and prototype of history. It is just easing the scientific cognition, relied on only folklore materials. It is obvious that it will not lead to true scientific cognition, if we do not take into consideration historical and folklore information in literature, just relying on myth. Because of it the studies about Korkyt cannot be improved, reciting events that are known to the world. Scientific suggestions based on new methodological researches and work directed to discovering the connection of Kazakh, karakalpak, Turkmen, Azerbaijan and Turks of Anadol stayed at one place. It is one aspect of barrier to make close all Turkic nations.

Another question is what kind of cognitive categories and methods should be taken into consideration to study and promote heritage of Korkyt.

First of all, attention should be paid to fact that Korkyt was not just a folklore character, but he was a historical person. The history and culture of Turan (Kazakhstan, Kyzylorda region, Karmakshy), where his cemetery was found, gives a lot of information. Evidence related to the mid centuries have not been investigated completely. The most efficient way would probably be to explore the history of ethnical geographic uprising of oghyz tribe in early and mid centuries (not antique time) and historical events that appeared in “Korkyt baba’s book”.

Secondly, Korkyt is not a character to be studied just in Kazakh history. Turkey and Azerbaijan scientists also did important works. Even graves of Korkyt were found in above-mentioned countries. How the character of Korkyt can be valued in those conditions. It will not lead to scientific cognition if we consider that each country has its own Korkyt. It is characterized as a main weakness from scientific point of view. If we study information about Korkyt in Kazakh, Azerbaijan and turkey folklore relating to the ethnical uprising of oghyz tribe, we can distinguish the period of life of Korkyt.

Also, there is another opportunity to study with the usage of hermeneutic method. To achieve good results all information about Korkyt must be studied and analyzed one more time from new point of view. The personality of Korkyt should be divided from historical-cultural process and studied not in the myth or legend sphere, but as a real existed historical person. This is the main reason of appearance of Korkyt in the mid of oghyz tribe in “Korkyt baba’s book”.

There is a big discussion relating to musical heritage of Korkyt, as people of Azerbaijan claim him as a zhyrau with his gopuz, whereas Kazakh people insist on kobyz. There also people who perform Ykylas's kui naming Korkyt as an author of them.

It does not mean that we should not pay attention to the musical heritage of Korkyt in other Turkic nations. Unfortunately, this aspect is not studied in scientific way and his kuis are studied not by scientific methodological researchers of music, but by performers of kobyz.

It is explained, according to the interests towards Korkyt's name. However, it will be useful to science if we study relying on historical-cultural evidence and scientific cognition. In this case, it is appropriate to put scientific demands along studies.

According to scientists, kobyz is a string musical instrument, which has a bow. These researchers claim that if instruments played with the help and clicking by fingers are old type, whereas string instruments with bows appeared much later. Therefore, in the period of Korkyt melodies that played by kobyz were not formed as a kui. There is no evidence that oghyz tribe has instrument with bows. Moreover, from the ancient oghyz writings as "Korkyt baba's book", instrument of Azerbaijan people kobyz (gopys) did not have a bow. It is one aspect.

Secondly, there was a tradition to sing an epos with the help of kobyz, but not to perform a kui. In epos, we can find poetical content and plot. For this reason, they were understandable for all people.

Kui is a musical instrumental performance. M. Kashgari, who named percussion and string instruments, but did not mentioned about instruments with bow. In addition, musical performance as kui was not named in his work. Among inhabitants of central Asia kui genre appeared in XVI-XVII centuries, and development of it is only in XIX century. Taking into consideration these facts we can say that in the period of Korkyt's life there can be neither performance of kuis nor instruments with bows in cultural life of oghyz tribe.

People who intend Korkyt as an author of kuis are today's performers. Performers of kobyz are not researchers. They can just perform notes without change. In this case, we can compare them with the drama actors. They can only act as the character of the history as it is written by the author without any change in it. One reason of dismissive opinions related to Korkyt's heritage in music can be this point.

Musical heritage of Korkyt known to the Kazakh, Turkmen, Azerbaijan and anadoly is well spread among Kazakh people. There is absence of original kobyz melodies of Korkyt in above-mentioned nations. Even Kazakh people do not have them in origin. The art of zhyraus starts from early period oghyz tribe and continues in Kazakh culture, but they are not complete saved in Kazakh music. Because there is uncertainty about the period of his kuis, and the performers who transferred them up today. Even there is no any evidence of his kuis in mid centuries. It is well known, that fragments of korkyt's kobyz melodies were recorded from Nyshan abyz, a citizen of Kyzylorda, Kazakhstan. Therefore, they were published as Korkyt's original heritage (Korkyt, 1987). This publication leads to biased information. The themes of those musical artworks ("Bashpai", "Targhyl tana") are mostly about general life, and do not coincide with the themes of heroism and bravery as where during the oghyz tribe. It will be faithful to say that those low artistic, with simple construction and not completely finished fragments of works cannot belong to Korkyt, who lived in IX-X centuries, but to Nyshan Shamenuly from XX century. Because those performances played in kobyz will not increase the authority of Korkyt's heritage, but even will decrease. There is lack of changes of mood, which suppose to the chromatic system and intonation of tune, which is specific for kobyz melodies. It will be shameful if his works are seen in the international arena and are noticed by music researchers.

There is a huge space between Korkyt's period and Nyshan abyz's life continuing for centuries. It is known, that oghyz tribe during the period of Korkyt's life in the IX-X centuries moved to the seaside of Amudariya, and therefore what kind of events can connect the two periods with the space of thousands of years. At that time the history, culture, and even inhabitants of that area changed. It is not our task to find out new thing from nothing, and we should value what we have, investigating that aspect from different points, because scientific cognition must be relied on true historic evidence.

In Kazakh and Turkmen, music kuis on kobyz and sybyszy appeared in XIX century. Ignorance of some performers can be seen when they presented some works as "Korkyt", "Kazan", "Konyr" as the heritage of Korkyt, whereas they belong to Y. Dukenuly and have been published in "Gylym" publishing in 1964.

This fact can give nothing to scientific truth and cognition. There is no evidence that it belong not only Nyshan, but also works of Y. Dukenuly to Korkyt.

Therefore, there is a question about real musical heritage of Korkyt. Probably, when it comes to Korkyt's musical heritage his aspect as a zhyrau must be on the first place. In "Korkyt baba's book" his personality is

described as a zhyrau with his kobyz. Kobyz was used as an instrument to accompany poems when there was no instrumental music.

The tradition to sing poems was one of the main customs of Turkic people. For instance, there was popular an epic tune in low register among Khakassia and Tuva. This custom found its continuation among Kazakh people at the seaside of Syrdariya (Karmakshy) up today. This type of singing is also known in Turkmen music. In our country, it is called “anyrama”, and they name it as “zhuki-zhuki”.

This above-mentioned fact should be used as evidence in studying Korkyt’s works. In ancient time, most of epic poems were performed with accompanying of string instruments, and only then, instruments with bow were used. According to Sh. Ualikhanov the last performer in Kazakh culture, who song a poem with the help of kobyz was Zhanak zhyrau, but in karakalpak culture, it has its continuation.

So, the tradition of “anyrama” in Karmakshy, where Korkyt was buried, singing poems is phenomenon of ancient Turkic period. It must be the beginning to study Korkyt’s musical heritage. It is also important to learn the custom of singing poems on the area of Syrdariya, finding connections in the music tradition of anadoly, Turkmen and Azerbaijani people. This can be one of the methods to interconnect the culture of Turkic people in Altay.

Also, we can add that Korkyt’s works have been transformed and seen in kobyz melodies of Ykylas. The names such as “Korkyt”, “Kazan” say itself about the evidence. It is doubtful that Korkyt named his kui after his own name. And continuers of this tradition could present complex, adaptable to mood changes and high level artistic performances. Also it doesn’t coincide the origin of the kui “Kazan” with the conquest of Ivan Grozny, but can be found in “Korkyt baba’s book”. It is connected with the name of warrior and khan of oghyz tribe, Kazan. Probably, the origin of Ykylas’s performances lies in the period of oghyz tribe. But this kind information has not been saved in Kazakh culture and history.

In order to investigate the ancient Turkic characteristics of kobyz melodies in Kazakh culture there should be done comparative-typological researches. In this case we can underline the similarity of Ykylas’s works special for kobyz and melodies of Turkmen people special for “karga tuidik” (sybyzgy) such as “Kiyamet” (Uspenskij & Belyaev, 1979). And these researches demand further continuations.

It is time to analyze the period of Korkyt’s poems and consisting information about Kazakh history relying on “Korkyt baba’s book” and ethno historic uprising of oghyz tribe. Also it is important to find out the period of each fragment from the poem. Formation of scientific system of researching historical and cultural information in poems of Kazakh people about bravery is on its developing way (Kongyratbay & Kongyratbay, 2013).

Above mentioned materials were studied by Kh. Korughly and he claimed that epos of 1-4, 7-8, and 12 lines first appeared during the period when oghyz tribe inhabited the seaside of Syrdariya. But many Kazakh scientists did not pay attention to this aspect. Only A. Konyratbaev, taking into consideration that fact, connected the poem of 12 lines with the formation, development and disappearing of oghyz tribe, and named this kind of poem not poem of tribe, but poem of nation.

Also, it is important to pay regard to the names of place and people that can be found in “Korkyt baba’s book”. Before some opinions related to the names such as “Baybura bek” (Baybori), “Bamsi Beyrek” (Alpamys) and others have been appeared. Some names can be found in Kazakh epos, which has been changing as following: Banu-Barshyn-Gulbarshyn. Sometimes it was used as hydronym (Barshyndariya), sometimes as anthroponym (Barshyn) and sometimes as oikonym (Barshykent). As this example, the name of river “Tana” was used. It is found in antique Greek writings as “Tanais”, the equivalent of Syrdaryia (Kongyratbay, 1996).

This kind of analyses gives an opportunity to find the connection of Korkyt’s epos to Turkic, especially Kazakh people. And it is almost time to present academic publications of Korkyt’s epos. For it, we have enough material and specialists.

3. Conclusion

Nowadays “Korkyt baba’s book” is well known to the whole world, but Korkyt is familiar only among Turkic nations. Therefore, the main task of scientific cognition is to make Korkyt’s name become popular in the world. To achieve this aim it is necessary to organize international scientific conference relating to Korkyt and his works. The important role played the conferences taken place in Turkey “Dede Korkut ve Gegmisten Selecege Turk Destanlari” Uluslararası Sempozyumu (2011), and scientific-practical conference “Great melody of steppe and Korkyt’s music” in Kazakhstan. Reconstruction of Korkyt’s campus, which is located in Karmakshy, Kizilorda, Kazakhstan also plays an important role.

But all those organized scientific conferences do not pay regard to bringing closer all Turkic nations through Korkyt. They are not comparable with the conferences organized in 1955-1958 on the theme “Manas”, “Alpamys” during the soviet period. All published materials are still actual today. And it will be useful if all actual themes related to Korkyt can be found too. Only in this case the necessity in conferences can be defined. All international meetings must be done not because of the plans, but because of mental cognitive necessity of actual issues. Without it we are going to stay in one round reciting one and the same compilation. Because of this reason, it is almost time to widen scientific studies about Korkyt and to pay attention to the cognitive issue.

The more scientific researches have been done, the more demands to collecting are rising. One way out of this issue is to publish an encyclopedia “Korkyt”. All information and material related to Korkyt’s name should be included in this encyclopedia. It will be in a world level if we publish it in three languages- English, Kazakh and Russian. It is going to be the first scientific cognitive publication in the entire world.

Also there is a huge importance of stating piece of art about Korkyt. It is an appropriate time to perform a play, musical work and artistic movie. In Azerbaijan, a movie “Dede Gorgud” was shot during the Soviet Union, and several years before a play by Turk playwright was presented in accordance with international scientific conference in Kyzylorda.

Nowadays the character of Korkyt can be found in many musical works, as an example we can name T.Konyratbay’s symphonic poem “Korkyt baba”. This poem was written for classical and symphonic orchestra and can be found as one of piece of art to make popular Korkyt’s name to the entire world. It is almost impossible to present performances of folklore or national instrumental orchestras such as “Otyrar sazy” or “Kurmanghazy” abroad. It makes possible to listen to such kind of works, but not perform. Because, they do not have our national instruments such as dombyra, kobyz and sazsynay. Only compositions of classical symphonic orchestras can be performed abroad.

Another step must be done is to publish a journal “Korkyt” in international level. Vatican and Drezden variants of poems “Kitabi dadam Korkyt” are familiar to different nations of the worlds, and now comes the time for musical works.

In last years in international Kazakh-Turk, university after Akhmet Yassawi has been publishing a journal “Turkology” in Turkistan. The journal has a high level of international standards and is well spread among CIS nations. It is required to publish “Korkyt” journal in such level. It is discussed theme whether Academy of Turk or university named after Korkyt will do this task. It will be relevant if the organization of “Turksoy” takes responsibility.

Also all heritages common to Turkic people such as “Korkyt baba’s book” and “Koroughly” should be presented. They are the beginning of the epic works that makes close all Turkic people. All ethno historic information that mentioned works serve are not investigated completely. As an example, the antique name of Syrdaryia, which is presented in “Korkyt baba’s book”, is “Tanais”, and the name of “Shambil bel” in “Koroughly” has the connection with “shamba” trees in Antalya’s mountainous area. Completely investigating such kind of similarities, we have an opportunity to find historical and cultural connections. It will become an important work in studying mental culture of inhabitants of the seaside of Syrdariya, if we publish all above-mentioned works in academic level.

All in all, the content of the main issues that has been done and needs to be done are mentioned above. The important thing is to pay all effort in order to present Korkyt as a historic prototype, not as just a person in the history of Kazakh, Azerbaijan and Anadol Turks.

References

- Agadjanov, S. (1973). *Seljukids and Turkmenistan in the XI-XII centuries*. Ashgabat.
- Auezov, M. (1948). *Tales. History of Kazakh literature* (Vol. I). Folklore. Almaty.
- Divayev, A. (1992). *Gift*. Almaty.
- Dzhetyysbaev, N. (1899). *Korkyt Aulie: Turkestan statements*. Tashkent.
- Gabitov, T. et al. (2004). *Kazakhstan. National encyclopedia* (pp. 57-58). Almaty.
- Kaskabasov, S. (2011). Kazak folklorundaki korkut analiyisi. In *Dede Korkut ve Gegmisten Selecege Turk Destanlari Uluslararası Sempozyumu* (pp. 15-22). Ankara.
- Kononov, A. (1958). *Geneology of Turkmen essays of khan of Khiva Abul-Ghazi Khan*. Moscow-Leningrad.
- Korkyt. (1987). *Elim-ai*. Almaty: Oner.

- Koroglu, H. (1984). *Oghyz heroic epos*. Moscow.
- Konyratbaev, A. (1991). *The history of Kazakh folklore*. Almaty.
- Konyratbaev, A. (2008). *Korkyt baba's book*. Astana: Foliant.
- Kongyratbay, T. (1996). *Monuments of ancient time*. Almaty: Oner.
- Kongyratbay, T., & Kongyratbay, K. (2013). Hermeneutical Aspects of Kazakh Heroic Epic Study. *Middle-East Journal of Scientific Research (MEJSR)*, 18(9), 1330-1334. <http://dx.doi.org/10.5829/idosi.mejsr.2013.18.9.12373>
- Losev, A. et al. (1982). *Myths of the world nationa*. Moscow.
- Marghulan, A. (1975). *Poems and legends of ancient time*. Almaty
- Rashid, al-Din. (1952). *Collection of Histories*. Saint Petersburg.
- Spiridonov, P. (1909). *One of the variants of the legend about Korkyt: Protocols from meetings and reports of members of the Turkestan archeologists*. Tashkent.
- Uspenskij, V., & Belyaev, V. (1979). *Turkmen music*. Ashgabat.
- Velyaminov-Zernov, V. (1889). *Monument to the Arab-Tatar sign in Bashkortostan: Notes of the Eastern Branch of the Russian archeological society*. Saint Petersburg.
- Zhubanov, A. (1942). *Life and works of Kazakh composers*. Almaty.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Relationship of Organizational Commitment and Political Behavior Tendency among the Employees of Tehran University of Medical Sciences

Raadabadi Mehdi¹, Mojbafan Arezoo², Rajabi Vasokolaee Ghasem² & Dargahi Hossein³

¹ Health Services Management Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

² Department of Health Care Management, School of Allied Medicine, Tehran University of Medical Sciences, Tehran, Iran

³ Department of Health Care Management, School of Allied Medicine, Research Center for Health Information Management, Tehran University of Medical Sciences, Tehran, Iran

Correspondence: Dargahi Hossein, Professor in Health Care Management, School of Allied Medicine, University of Medical Sciences, Health Information Management Research Center, Enghelab AVE, Ghods ST, No 17, Tehran, Iran. Tel: 98-21-8898-2997. E-mail: hdargahi@sina.tums.ac.ir

Received: February 18, 2015 Accepted: March 16, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p62

URL: <http://dx.doi.org/10.5539/ass.v11n21p62>

Abstract

Emphasis on organizational commitment of employees and its relation with organizational commitment which due to decrease organizational performance, efficiency, and productivity is a huge influx of researchers. This study aimed to determine and measure the relationship between employees' organizational commitment and their tendency to display organizational behavior. This study was a descriptive-analytical and cross-sectional research that was conducted on the employees of Tehran University of Medical Sciences during 2013-2014. The sample size was calculated by Cochran formula as 150 employees in each of the areas. Two researcher made questionnaires were used as the research tools of political behavior, and the other one was Allen & Meyer's organizational commitment. The validity and reliability of two questionnaires were confirmed. The response rate was 85%. The collected data was inserted in Excel software. For preparing descriptive tables and results, SPSS 19 was used and for the analysis of data, K² Test, one sample T-test, and Pearson test were used. The average of employees' organizational commitment was 62.32 which indicated that it was at a moderate level. In addition, the majority of the employees did not have the tendency to show political behavior. There was a significant relationship between employees' organizational commitment and their organizational position or tenure (P=0.015). Furthermore, no significant relationship was observed between organizational commitment and its dimensions with the employees' display of political behavior. Although, the employees' organizational commitment is not high in the present study, but it is not influenced by their tendency to display political behavior either. Therefore, it seems that employees' organizational commitment is impressed by other organizational factors such as managers' ethics and temper, observance of organizational justice by supervisors and some other factors which should be studied and assessed by future studies.

Keywords: organizational commitment, political behavior, employees, Tehran University of Medical Sciences

1. Introduction

Organizations with any type of structure are considered as social systems which form the main foundation of modern societies (Haji Amini et al., 2009). Organizations have two ways communications with people of a community, that is, they make efforts to fulfill the needs of people and community groups, and people also try to direct organizations in order to attain specified and dynamic goals (Hoseinian et al., 2007). Human resources are the heart of an organization and the survival of every organization depends on their human capital (Imani et al., 2012).

The gap between performance and efficiency of organizations make managers choose employees who participate and collaborate with desired commitment for organizational efficiency (Baharlou et al., 2014). In addition, organizations have to compete with each other for employ of engaged, loyal and empower employees to attain

the goals (Yaghoobi et al., 2010). The concept of organizational commitment is to achieve the dependence between the organization and employees. In fact, strong tendency to work efficiently, maximum effort, and believe in organizational goals and values, are three important elements in the definition of the concept of organizational commitment (Yang & Chang, 2008). Organizational commitment is a kind of job attitude to identify the employees who enjoy to be a members of the organization and endeavor to present the best their performance (Saatchi et al., 2009; Poorkiani et al., 2010).

Lack of organizational commitment among employees destroys responsibility for attaining the organizational goals, culture and morality, and immorality dominated over the organization. Wu & Norman showed that there was a positive relationship between job satisfaction and organizational commitment (Hsiao et al., 2012), although Hamidi and Keshtidar suggested that organizational commitment was a new concept which was different from job satisfaction (Hindi, 2014; Hsiao et al., 2012; Hamidi & Kashti, 1996; Ooi & Arumugam, 2006). Although, there was not a significant positive relationship in all circumstances between managerial ethics and employees' organizational commitment, rather organizational commitment can be influenced by other factors such as or organizational culture and climate (Dargahi & Sadat Tehrani, 2014).

On the other hand, political behavior is a kind of organizational behaviors that is unnecessary to be performed formally, but is applied by an individual or group for gaining power in the organization. Political behaviors are narrow-minded, and illegal behaviors which are not allowed by the organization's official authority. They are included negligence, neglecting duty, work aversion, escalating of commitment, protracting works and duties, over conforming, passing the buck, shifting the blame on others, avoiding change, playing dumb, playing safe, buffing, Justifying, scapegoating, being pedantic, and distortion, filtration, misrepresenting, destroying of information and insisting on the past wrong decisions and mistakes (Dargahi, 2013). In other words, political behavior refers to a set of employees' activities influencing work environment in order to achieve personal interest and informal groups' goals in the organization (Ferris et al., 2002; Hadavinejad et al., 2009).

The results of some previous studies indicate that tendency to political behavior in organizations reduces employees' organizational commitment, lay off, work aversion, and avoiding effective communication, have negative impact on their performance (Rahman Seresht, & Fayazi, 2009; Weber et al., 2009). In addition, the direct impact of employees' perceptions from the political environment can be effective in their degree of commitment aversion (Rahimnia & Hasanzadeh, 2010). Also, Ferris et al. believe that political climate in the organization can increase work constraint, and reduce job satisfaction and organizational citizenship behavior [OCB] (Ferris et al., 2009).

Since, employees' organizational commitment is related to their performance, values, and beliefs (Dwyer et al., 2003), and individuals who are more committed, are more loyal to organizational goals and values, and play their roles more efficiently (Maurer & Lippstreu, 2008). Therefore, the present study is aimed to determine the relationship between employees' tendency to organizational behavior and their organizational commitment in Tehran University of Medical Sciences.

2. Material & Methods

This study was a descriptive- analytical, and cross-sectional research induced on the headquarters' employees in the chancellor, Deputy chancellor for education, research, student affairs, Management development and resources planning, International affairs, Health, and Clinical affairs, food and medicine and cultural affair of Tehran University of Medical Sciences in 2013. The entire employees in these sections comprised 700 individuals. The size sample was obtained by Cochran formula in proportion to the number of employees in each of the headquarter areas and determined to be 150 employees. Then, these employees were selected randomly by proper allocation in each area to receive and complete the questionnaires.

The research tools in this study were a researcher-made "political behavior" questionnaire which consisted of 28 questions, and Allen & Mayer's organizational commitment questionnaire which consisted of 14 questions, including emotional commitment, continuous commitment, and normative commitment (Noor Harun et al., 2006). Also, demographic information of the employees were also collected. In order to rank questionnaires rating, Lickert scale with 5 options very disagrees, relatively agree, agree, and very agree was used with the allocation of the scores from 1 to 5. The degree of employees' organizational commitment and tendency to display political behavior was determined using descriptive statistical measures of mean, absolute frequency, relative frequency, and valid percentage. Regarding scoring the questions of the organizational commitment questionnaire, rankings of the emotional commitment were 8-18.9, 19-29.9, and 30-40, continuous commitment were 6-13.4, 14.5-22.9, 23-30, normative commitment were 6-13.4, 14.5-22.9, and 23-30, and Finally, the

rankings of organizational commitment were obtained as 20-47, 48-74, and 75-100 which were considered as low, intermediate, and high respectively.

In order to determine the validity of organizational commitment and political behavior, questionnaires, content validity was used. To do so, the main scripts of the questionnaires were translated by two translators from English to Persian. Then, two other translators assessed the translated version regarding the quality of translation, including clarity, application of common language, and finding concept equivalents. The Persian version was translated by a translator into English, and finally the translations were compared with each other. Then questionnaires were given to 12 experts in the fields of health care management and organizational behavior management, and their suggestions were collected. By studying the scientific validity of the questionnaires using CVI or Content Validity Index, this index was 0.83 which indicates the confirmed validity of the questionnaires.

In order to study the reliability of the questionnaires, using test-retest method, the questionnaires were distributed among 20 headquarters employees of Tehran University of Medical Sciences who were not in the research sample, and then the questionnaires were collected. After an interval of two weeks, the questionnaires were completed again by them in order to avoid reminder error. After two-stage data analysis, the correlation coefficient for two types of questionnaires was obtained to be 0.80. To calculate the integrity and internal consistency of the research tools, Cronbach's alpha for organizational commitment questionnaire was 0.82, and for emotional commitment, continuous commitment, and normative commitment, was 0.75, 0.80, 0.84, respectively. Finally, for the questionnaire of tendency to political behavior, it was equal to 0.71. The researcher provided the questionnaires personally to the employees that was in the research sample and collected them again after two weeks. For observing the research ethics, prior to distributing the questionnaires, the required permission was received from the directors and managers of headquarters departments of the university and the goals and objectives of the research were explained to the employees, and in that way, the consent of the respondents to the questionnaires, was gained.

Out of 150 questionnaires, 128 were returned after completion. As a result, the response rate was 85%. The data was collected into Excel and used SPSS 19 software for preparation of descriptive tables and data. For determining the relationship between demographic factors and the variables of organizational commitment and political behavior, X2 test was applied for determining the relationship between organizational commitment and its dimensions with tendency for political behavior, one-sample T-test, and Pearson statistical technique were used.

3. Results

In this research, most of the employees were women (101 individuals, 79%), 51 (40%) were between 25 to 35 years old, 49 (38%) were officially or tenure employed, 71 (55%) had bachelor's degree, 40 (31%) had a work experience of 10-20 years, and 69 (54%) were experts in their duties.

Table 1. The mean and standard deviation of organizational commitment and its dimensions

Variables	Mean	Standard Deviation
Continuous Commitment	17.88	0.035
Emotional Commitment	26.62	0.047
Normative Commitment	17.82	0.035
Organizational Commitment	62.32	0.084

Regarding Table 1, the results showed that the degree or level of organizational commitment and each of its dimensions among the employees of Tehran University of Medical Sciences was intermediate.

Table 2. The distribution of absolute and relative frequency of the organizational commitment of headquarters employees at Tehran University of Medical Sciences

Frequency	Ranking	Absolute (Number)	Relative (Percentage)	Valid (percentage)
Very low		1	1	1
Low		42	33	33
Intermediate		72	56	56
High		12	9	9
Very high		1	1	1
Total		128	100	100

The results of Table 2 showed that 72(56%) of employees had intermediate, 43(34%) of individuals had low and very low organizational commitment. Therefore, more than half of the employees had intermediate, and about one third of them had low and very low organizational commitment.

Table 3. The distribution of absolute and relative frequency of display political behavior tendency in headquarters employees of Tehran University of Medical Sciences

Frequency	Ranking	Absolute (Number)	Relative (Percentage)	Valid (percentage)
Very low		2	2	2
Low		110	86	86
Intermediate		6	12	12
High		0	0	0
Very high		0	0	0
Total		128	100	100

Table 3 indicated that majority (88%), of headquarters employees of the university had a very low and low tendency to political behavior in the organization.

Table 4. The relationship between employees' demographic information and organizational commitment and tendency to display political behavior in headquarters employees of Tehran University of Medical Sciences

Demographic information	Elements	P	df	X ²
Gender	Organizational commitment	0.647	4	2.48
	Political behavior	0.184	2	3.38
Age	Organizational commitment	0.817	12	7.58
	Political behavior	0.179	6	8.90
Kind of employment	Organizational commitment	0.273	16	18.91
	Political behavior	0.20	8	10.98
Educational degree	Organizational commitment	0.128	16	22.50
	Political behavior	0.55	8	16.87
Work experience	Organizational commitment	0.339	16	17.74
	Political behavior	0.157	8	11.86
Experts in duties	Organizational commitment	0.015	4	12.34
	Political behavior	0.51	2	1.36

As it can be seen in Table 4, only a significant relationship was found between the employees who were experts in duties with organizational commitment (P=0.15). In other words, employees who had the organizational levels as experts, had more organizational commitment than those without such tenures. In addition, there was no significant relationship between organizational commitment and tendency to display organizational behavior and other demographic information of employees.

Table 5. The relationship between tendency to display political behavior and organizational commitment dimensions in headquarters employees of Tehran University of Medical Sciences

Dimensions of organizational commitment	Emotional commitment				Continuous commitment				Normative commitment				Organizational commitment			
	r	x ²	df	p	r	x ²	df	p	r	x ²	df	p	r	x ²	df	P
Political behavior	0.082	4.152	7.32	0.75	0.078	3.950	6.25	0.70	0.062	3.315	6	0.79	0.88	4.257	8	0.83

Regarding Table 5, no significant relationship was found between organizational commitment dimensions and tendency to display political behavior in the headquarters employees of Tehran University of Medical Sciences.

4. Discussion

In the present century, with the remarkable growth of displaying political behavior in managing organizations, most of the researchers' efforts in the field of organizational behavior management, are focused on studying employees' perceptions from political behavior. Most of the previous studies in this field, have tried to determine

the relationship between political behavior and political ethics, organizational commitment, power, organizational efficiency, and employees' satisfaction (Gadot, 2007). The present study for the first time in Iranian healthcare system, addresses the relationship between tendency to display organizational behavior and organizational commitment in headquarters employees of Tehran University of Medical Sciences as the greatest and oldest medical university in Iran, which has the first scientific ranking in Iran and Middle East.

The results of the current study indicated that the employees in Tehran University of Medical Sciences are at an intermediate level of organizational commitment, and all its three dimension. These findings are compatible with the results of other researches (Eskandari, 2010; Koochi Rostam Kalaei, 2012) which were conducted in Iran. However, they are in contradiction with the results of the study in Thailand (Liou & Cheng, 2010).

Furthermore, "Delgoshaei" and "Kermani" stated that emotional commitment was the dominant commitment in the teaching hospitals in Hamedan city, in Iran (Delgoshaei&Kermani, 2008). Also, Yaghoobi et al. confirmed, this result in the employees of the hospitals under the supervision of Tehran University of Medical Sciences hospitals (Yaghoobi et al., 2007), although this was compatible with Hen et al. findings among the nurses in Korea (Han et al., 2009). This similarity can be due to identical leadership and management style of human resources and the kind of relationship between employees and managers in the related organizations.

Also, it was revealed that demographic information such as age, gender, kind of employment, educational degree, and work experience had no significant correlation with organizational commitment of the employees, except the employees who were experts in duties ($p=0.015$). Porter & Steers and Nehrir et al stated that the degree of organizational commitment had significant reverse relationship with age and work experience (Steers & Porter, 1983; Nehrir et al., 2010) which was not similar in contradiction with the results of the present study. Although, Allen & Meyer reported that there was an indirect relationship between employees' demographic features and organizational commitment (Allen & Meyer, 1996). Moreover, Peter & Steers, Allen & Meyer, and Ensher & Grant-Vallone declared that employees' job features in an organization, such as kind of employment, job enrichment, and task dependence could have significant positive relationship with organizational commitment (Steers & Porter, 1983; Nehrir et al., 2010; Allen & Meyer, 1996; Grant – Vallone & Ensher, 2001) which was not similar in line with the results of the present study. Although, in a lot of studies, there is a relationship between employees' organizational commitment and their age and work experience (Steers & Porter, 1983; Nehrir et al., 2010; Allen & Meyer, 1996; Grant – Vallone & Ensher, 2001; Allahdadi, 2012), that is not compatible with the results of the present study. This may be related to employees' organizational commitment that is influenced by the rate of organizational justice and fairness which observed by the managers and supervisors. For the same reason, organizational commitment can further be influenced by rightful processes perceived by employees (Yaghoobi et al., 2012; Naami, 2011; Till & Karren, 2011). "Hasan Poor" could confirm this relationship in the headquarters employees of Tehran University of Medical Sciences in 2012 (Hassanpour, 2014).

On the other hand, display of political behavior in organizations is considered as the source of stress, conflict, poor performance, physical and mental intention to leave the work, burnout, ineffective communication with manager or supervisor, and finally it reduces organizational commitment (Weber et al., 2009). The results of current research indicated that majority of headquarters employees in Tehran University of Medical Sciences had low tendency to display political behavior in their organization. This confirms the results obtained by another similar research at this university in 2012 (Dargahi, 2012). It seems that employees of Tehran University of Medical Sciences believe that improvement of individual and organizational performance depends on non-political environments in their organizations. Although, other researchers reported that effective use of political behavior in organizations promotes organizational performance, affects logical decision-makings, and attaining organizational goals (Fritsch, 2010; Comer, 2010).

Furthermore, the present study revealed that there was no significant relationship between employees' display of political behavior and their demographic information. Although, other researchers reported, this was correlated with age (Ferris & Kacmar, 1992), gender (Larimer & Hannagan, 2010; Steel, 2004), work experience (Conner, 2006), and organizational ranking or status (Muhammad, 2007). Also, Dubrin believed that it was not significant related with employees' gender (Dubrin, 1989).

Regarding the main aim of the present research, the relationship between display of political behavior tendency and organizational commitment and its dimensions among headquarters employees of Tehran University of Medical Sciences was not significant ($P=0.83$). But, Witt et al. and Cropanzano et al., and the other studies did not confirm this result (Witt et al., 2001; Cropanzano et al., 1997; Vigoda, 2000). Although, Xia & Elangovan stated that employees' perception from power and politics in the organization as a predictive factor, can

influence their organizational commitment (Elangovan & Xie, 2000), which is in contradiction with the result of present study.

The reason for contradiction between the results of current study with other researchers' results due to low tendency to show political behavior among Tehran university of Medical sciences employees and having effect on their organizational commitment is not obvious. But, there is a huge influx of researches on employees' and managers' political behavior in organizations, and its relationship with several variables, such as organizational commitment, job satisfaction, organizational justice, and directors' and managers' ethics which all influence the organizational efficiency and employees' satisfaction (Dargahi, 2013).

5. Conclusion

Regarding the development of organizations in new century, concentrating on qualified, proficient, and efficient human resources which is loyal, adaptable, committed and ambitious to organizational goals, is an important factor in organization productivity. On the other hand, organizations' managers are trying hard to provide an environment away from political stresses and behaviors in order to promote organizational commitment.

Although, organizational commitment of employees in Tehran University of Medical Sciences is not high based on the result of this research, low organizational commitment does not depend on employees' display tendency of organizational behavior. Therefore, the low organizational commitment of employees can be related to other organizational factors such as managers' ethics, observance of organizational justice by supervisors, and some other factors which should be studied in future research and analyzed truly, so that it would be possible to provide necessary solutions and suggestions to increase organizational commitment.

Ethical considerations

Ethical considerations including plagiarism, informed consent, misconduct, data fabrication or falsification, double publication, redundancy, etc. have been completely observed by the authors.

Acknowledgements

The present study was supported in part by a research grant with code of 16854-31-01-91 from the Deputy for Research and Technology of Tehran University of Medical Sciences. The authors would like to thank Golsa Shaham for her aid in general research program, Zahra varcheh for typing the manuscript, the employees who honestly cooperated with the authors, and honorable managers of this university, and anonymous reviewers for helpful suggestions.

References

- Allahdadi, E. (2002). *The relationship of organizational culture with organizational commitment among Mehrabad Airport Custom* (MSc. Thesis in management). Shahid Beheshti University, Tehran, Iran.
- Allen, N. J., & Meyer, J. P. (1996). *Affective, continuance, and normative commitment to the organization: an examination of construct validity*, 49(3), 252-276.
- Baharlou, M., Beshlideh, K., Sheykhshabani Hashemi, S. E., & Naami, A. (2014). Investigation Relationship between leader – member exchange and organizational citizenship behavior: mediating role of psychological empowerment and organizational commitment. *Management of Organizational Culture*, 12(1), 1-19.
- Comer, D. R. (2010). *Preparing students to determine personally appropriate political behavior*. Retrieved from <http://www.jme.sagepub.com>
- Conner, D. S. (2006). Human resource professionals' perceptions of organizational politics as a function of experience, organizational size, and perceived independence. *Journal of Social Psychology*, 146(6), 717-732. <http://dx.doi.org/10.3200/SOCP.146.6.717-732>
- Cropanzano, R., Howes, J. C., Grandey, A. A., & Toth, P. (1997). The relationship of organizational politics and support to work behaviors, attitudes and stress. *Journal of Organizational Behavior*, 18(2), 159-180. [http://dx.doi.org/10.1002/\(SICI\)1099-1379\(199703\)18:2<159::AID-JOB795>3.0.CO;2-D](http://dx.doi.org/10.1002/(SICI)1099-1379(199703)18:2<159::AID-JOB795>3.0.CO;2-D)
- Dargahi, H. (2012). Organizational behavior of employees of Tehran University of Medical Sciences. *Journal of Medical Ethics and History of Medicine*, 5, 1-7.
- Dargahi, H. (2013a). Organizational behavior: ethical or unethical. *Iranian Journal of Medical Ethics and History of Medicine*, 5(7), 1-14.
- Dargahi, H. (2013b). Organizational political behavior management. *Iranian journal of Medical Ethics and*

- History of Medicine*, 5(supplement), 68.
- Dargahi, H., & Sadat Tehrani, G. (2014). The relationship between management ethics and organizational commitment among employees of Tehran University of Medical Sciences. *Iranian Journal of Medical Ethics and History of Medicine*, 7(1), 43-52.
- Delgoshaie, B., & Kermani, B. (2008). The relationship between organizational climate with organizational commitment among employees and managers of Hamedan University of Medical Sciences. *Journal of Gonabad University of Medical Sciences*, 4(14), 60-69.
- Dubrin, A. J. (1989). Sex differences in endorsement of influence tactics and political behavior tendencies. *Journal of Business and Psychology*, 4(1), 3-14. <http://dx.doi.org/10.1007/BF01023035>
- Dwyer, S., Richard, O. C., & Chadwick, K. (2003). Gender diversity in management and firm performance: the influence of growth orientation and organizational culture. *Journal of Business Research*, 56(12), 1009-1019. [http://dx.doi.org/10.1016/S0148-2963\(01\)00329-0](http://dx.doi.org/10.1016/S0148-2963(01)00329-0)
- Elangovan, A. R., & Xie, J. L. (2000). Effects of perceived power of supervisor on subordinate work attitudes. *Leadership & Organization Development journal*, 21(6), 319-328. <http://dx.doi.org/10.1108/01437730010343095>
- Eskandari, F. (2010). *Study of relationship between nurses' structural and psychological empowerment with their organizational commitment in Zanjan's hospitals*. Thesis in nursing MSc. School of Nursing & Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
- Ferris, G. R., & Kacmar, K. M. (1992). Perceptions of organizational politics. *Journal of Management*, 18(4), 93-116. <http://dx.doi.org/10.1177/014920639201800107>
- Ferris, G. R., Adams, G., Kolodinsky, R. W., Hochwarter, W. A., & Ammeter, A. P. (2002). Perceptions of organizational politics: theory and research directions. *Journal of Managerial Issues*, 1(1), 179-254. [http://dx.doi.org/10.1016/s1475-9144\(02\)01034-2](http://dx.doi.org/10.1016/s1475-9144(02)01034-2)
- Ferris, G. R., Rogers, L. M., Blass, F. R., & Hochwarter, W. A. (2009). Interaction of job limiting pain and political skill on job satisfaction and organizational citizenship behavior. *Journal of Managerial Psychology*, 24, 504-608. <http://dx.doi.org/10.1108/02683940910989002>
- Fritsch, J. (2010). Toward theory of personal politics. *Human Resource Development Review*, 9(3), 236-248.
- Gadot, E. V. (2007). Citizens' perceptions of politics and ethics in public administration: a five year national study of their relationship to satisfaction with services, trust in governance and voice orientations. *Journal of Public Administration Research Theory*, 17(2), 285-305. <http://dx.doi.org/10.1093/jopart/muj018>
- Grant-Vallone, E. J., & Ensher, E. A. (2001). An examination of work and personal life conflict, organizational support, and employee health among international expatriates. *International Journal of Intercultural Relations*, 25, 261-278. [http://dx.doi.org/10.1016/S0147-1767\(01\)00003-7](http://dx.doi.org/10.1016/S0147-1767(01)00003-7)
- Hadavinejad, M., Alizade Sani, M., & Khaefi Elahi, A. A. (2009). Manager's political professions, employee's organizational politics perceptions and resistance to change. *Iranian Journal of Management Sciences*, 16(4), 119-137.
- Haji Amini, Z., Vafadar, Z., Rahmani, R., Khaghanizade, M., & Daneshmandi, M. (2009). Effect of implementation of suggestion's system on the extend of organizational commitment of the personnel working in ICU. *Iranian Journal of Critical Care Nursing*, 2(1), 21-26.
- Hamidi, M., & Kashti Dar, M. (1996). The review of organizational commitment in colleges of physical education in Iran. *Harekat*, 54, 43-54.
- Han, S. S., Moon, S. J., & Yun, E. K. (2009). Empowerment, Job satisfaction, and organizational commitment: comparison of permanent and temporary nurses in Korea. *Applied Nursing Research*, 87, 874-887. <http://dx.doi.org/10.1016/j.apnr.2009.06.004>
- Hassanpour, F. (2014). *The study of relationship between organizational Justice with organizational commitment among headquarters employees of Tehran University of Medical Sciences* (MSc. Thesis in Health Care Management). School of Allied Medicine, Tehran University of Medical Sciences, Tehran, Iran.
- Hindi, J. (2014). *The Hungry Ghosts*. Translated by Rezaei Nejad A. R. Tehran: Fara.
- Hoseineian, S., Majidi, A., & Habibi, A. (2007). Effective factors on organizational commitment to increase human resource effectiveness. *Faslname-ye Danesh-e-Entezami*, (2), 9-25.

- Hsiao, H. C., Chang, J. C., & Tu, Y. L. (2012). The influence of hospital organizational culture on organizational commitment among nursing executives. *African Journal of Business Management*, 6(44), 10889-10895,
- Imani, R., Asefzadeh, S., & Mamikhani, J. (2012). Comparative study on health human resources composition in the Eastern Mediterranean Countries (2007-2008). *The Journal of Qazvin University of Medical Sciences*, 1514, 5-12.
- Kouhi, R. Z. (2012). *Study of organizational commitment and its dimensions in Tehran University of Medical Sciences hospitals*. Thesis in Nursing MSc. School of Nursing & Midwifery, Tehran University of Medical Sciences, Tehran, Iran.
- Larimer, C. W., & Hannagan, R. J. (2010). Gender differences in follower behavior: an experimental study of reaction to ambitious makers. *Political Life Sciences*, 29(2), 40-54. http://dx.doi.org/10.2990/29_2_40
- Liou, S. R., & Cheng, C. Y. (2010). Organizational climate, organizational commitment and intention to leave amongst hospital nurses in Taiwan. *Journal of Clinical Nursing*, 139(11-12), 1635-1644. <http://dx.doi.org/10.1111/j.1365-2702.2009.03080.x>
- Maurer, T. J., & Lippstreu, M. (2008). Who will be committed to an organization that provides support for employee development? *Journal of Management Development*, 27(3), 328-347. <http://dx.doi.org/10.1108/02621710810858632>
- Muhammad, A. H. (2007). Antecedents of organizational politics perceptions in Kuwait business organizations. *An International Business Journal*, 17(4), 234-247. <http://dx.doi.org/10.1108/10595420710844325>
- Naami, A. (2011). A study between organizational justice and organizational citizenship behavior in industrial organization in Ahvaz. *Psychology Journal*, 3, 79-92.
- Nehrir, B., Ebadi, A., Tofighi, S. h., KarimiZarchi, A. A., & Honarvar, H. (2010). Relationship of job satisfaction and organizational commitment in hospital nurses. *Journal of Military Medicine*, 2(1), 23-26.
- Noor Harun, A. K., & Noor HasralNizan, M. N. (2006). Evaluating the psychometric properties of Allen and Meyer's organizational commitment scale: a cross – cultural application among Malaysian academic librarians. *Malaysian Journal of Library & Information Science*, 11(1), 89-101.
- Ooi, K. B., & Arumugam, V. (2006). The influence of corporate culture on organizational commitment: case study of semiconductor organizations in Malaysia. *Sunway Academic Journal*, 3, 99-115.
- Poorkinani, M., & ZamaniFard, M. H. (2010). Organizational commitment in light of organizational Justice. *Misaqe Modiran*, 68, 63-68.
- Rahimnia, F., & Hasanzadeh, J. F. (2010). The moderating role of organizational justice on perception of organization politics and communication apprehension. *Change Management Bulletin*, 1(2), 22-39.
- Rahman Seresht, J., & Fayazi, M. (2000). The relationship between conception of employees from power and organizational politics with their commitment and performance. *Human and Social Sciences Bulletin*, 8(29), 73-96.
- Saatchi, M., Ghasemi, N., & Namazi, S. (2009). An investigation into the relationship between principals' Job motivation and Job satisfaction and organizational commitment of Marvdasht high school teachers. *Quarterly Journal of New Approaches in Educational Administration*, 1(2), 153-175.
- Steel, G. (2004). Gender and political behavior in Japan. *The Social Science Journal*, 7(2), 223-244.
- Steers, R. M., & Porter, L. W. (1983). *Motivation and work behavior* (4th ed., pp. 12-44). London: McGrawhill.
- Till, R. E., & Karren, R. (2011). Organizational Justice perceptions and pay level satisfaction. *Journal of Managerial Psychology*, 26(1), 35-45. <http://dx.doi.org/10.1108/02683941111099619>
- Vigoda, E. (2000). Organizational politics, job attitudes, and work outcomes: exploration and implications for the public sector. *Journal of Vocational Behavior*, 57(3), 326-347. <http://dx.doi.org/10.1006/jvbe.1999.1742>
- Weber, M. R., Doun Finley, D. A., Crawford, A., & Rivera, D. (2009). An explanatory study identifying soft skill competencies in entry – level managers. *Tourism Hospital Research*, 9(4), 353-361. <http://dx.doi.org/10.1057/thr.2009.22>
- Witt, L. A., Hilton, T. F., & Hochwarter, W. A. (2001). Addressing politics in matrix team. *Group & Organization Management*, 26(2), 230-247. <http://dx.doi.org/10.1177/1059601101262006>
- Yaghoobi, M., Esfahani, S., & Gorgi, H. (2007). The relationship between organizational justice with job

- satisfaction and organizational commitment amongst Isfahan University of Medical Sciences hospitals' employees. *Journal of Health Management*, 12(25), 25-32.
- Yaghoubi, M., Afshar, M., & Javadi, M. (2012). A study of relationship between the organizational justice and organizational citizenship behavior among nurses in selected hospitals of Isfahan University of Medical Sciences. *Iranian Journal of Nursing and Midwifery Research*, 17(6), 456-460.
- Yaghoubi, M., Karimi, S., Raeisi, A. R., Javadi, M., & Sharbafchi, N. (2010). A study of relationship between the learning organization and organizational commitment among managers in educational hospitals of Isfahan University of Medical Sciences. *Health Information Management*, 7(2).
- Yang, F. H., & Chang, C. C. (2008). Emotional labor, Job satisfaction and organizational commitment amongst clinical nurses: a questionnaire survey. *International Journal of Nursing Studies*, 45(6), 879-887. <http://dx.doi.org/0.1016/j.ijnurstu.2007.02.001>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Tradition for Spiritual Learning (Tariqat) through a Sequence of Holy Phrases (Tijaniyah): The Case of Darussalam Boarding School

Aceng Kosasih¹

¹ Program of Study in Islamic Religious Education, Department of General Education (DPU), Faculty of Social Sciences Education (FPIPS), Universitas Pendidikan Indonesia (UPI), Indonesia

Correspondence: Aceng Kosasih, Faculty of Social Sciences Education, Universitas Pendidikan Indonesia, Jalan. Dr. Setiabudhi No. 229 Bandung, Indonesia. E-mail: cengsih15@gmail.com

Received: February 18, 2015 Accepted: April 13, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p71

URL: <http://dx.doi.org/10.5539/ass.v11n21p71>

Abstract

Indonesia has several courses for *tasawwuf*. These courses focus on the teaching of the inwardness of Islam. Each course has its own specifications. Against this background, the present study describes some of the *tasawwuf* courses in Indonesia which are considered to promote spiritual learning through the teaching of holy phrases (*Tariqat-Tijaniyah*), and it is these courses that are provided by most Islamic boarding schools in Indonesia, including the Darussalam Boarding School in Brebes. The study focuses on the social situation at this boarding school, especially the male section of *Tijaniyah* in Brebes. The study employs a qualitative approach with the help of an analytical method. Different types of dzikir and their contents are described, and the duties of male scholars as part of the *Tijaniyah* community are explored.

Keywords: tradition, *thariqat tijaniyah*, darussalam boarding school

1. Introduction

Tasawwuf is a dimension of Islam that developed around the second century of Hijriyah. Its development was a reaction to the luxurious life style of the elites from the Umayyad and Abbasid dynasties. Its followers alienated themselves and focused on worshipping Allah and prioritizing soul purity. Since, its emergence, Sufism has become an interesting phenomenon (Al-Haramain, 2011). This Sufi as the first civilized intellectuals in worshipping God and developed advanced architect (Yassin & NangkulaUtaberta, 2012) first existed in Kufah and Bashrah. Sufyan Ats-Sauri, Abu Hasyim and Jabir ibn Hayyan were popular Sufi figures in Kufah. Meanwhile, a more extreme *tasawwuf* developed in Bashrah with Hasan Al-Bashri and Rabiah Al-Adawiyah as its figures.

The core of the *tasawwuf* principle is worshipping God, removing oneself from mortal steadiness and comfort and alienating oneself from human civilization like the forefathers did (Istabad, 1988). According to Khanam (2006) *Tasawwuf* is one constituent of present-day sufism which may appeal to the modern mind. Followers believe that this was Prophet Muhammad (s.a.w.)'s way of life. Before becoming a prophet, he used to contemplate in the Cave of Hira by means of dzikir and ritual service to approach Allah.

Formerly, *tasawwuf* was part of *zuhud* (Note 1) in Islam (Zani, 2011). It teaches Muslims to concern themselves with and focus on worshipping God. An increasing variety of *tasawwuf* courses have been developed with the passage of time from the Muhammad era. *Tasawwuf* separated from *zuhud* because of its specified meaning and specific ritual activities.

In Indonesia, there are a variety of *tasawwuf* courses. Each course has been developed in a certain area. One course is *Tariqat Tijaniyah*, which was developed at the Darussalam Boarding School in Brebes. Like other *tasawwuf* courses, *Tariqat Tijaniyah* focuses its activities on approaching Allah by means of dzikir. Dzikir is a significant effort for someone to get closer to Allah. A consistency of dzikir is essential to recalling Allah and avoiding sinful acts.

Darussalam Boarding School conducts Islamic mission activities to disseminate *Tariqat Tijaniyah* principles besides its routine activities as an Islamic education institution is providing community services. This paper describes the traditions and rules of *Tariqat Tijaniyah* and how they are applied in people's daily lives. These are based on the principles of teaching. According to Asyafah (2014) the underlying problem facing the teaching of Islamic education across Indonesia is the inadequacy and ineffective teaching and learning methods. However,

since teaching depends on the method of teaching and learning theory and or practice, the syllabus should be developed (Asyafah, 2014b), this is the reason for the discussion of Tasawwuf in Indonesia.

2. Literature Review

The teachings of Islam are known to have a very broad scope (al-Haramain, 2011). The term “tasawwuf” has several contradicting definitions. Through an examination of Al-Kalabadzi’s (1993) writing on Tasawwuf, it has been found that experts have different understandings about the origin and definition of this word. The first understanding is that tasawwuf comes from “shuf”, meaning rough wool because Sufi used to wear rough wool. This outfit was the symbol of modesty and moderate wellbeing. The second understanding is that tasawwuf is taken from “shafa” meaning “pure”. This reflects the Sufi’s habit that they keep themselves from sins and evil. The exact Sufi principle is to purify the soul by means of exercise or riyadhah. The third understanding is that tasawwuf is taken from the terminology associated with Ahl al-Suffah, who live in rooms around the Nabawiyah mosque in Madinah. They are poor people who have given their property and lives to follow Muhammad’s pilgrimage from Mecca to Madinah. They sleep on stones with a *suffah* (horse saddle) as their pillow. Without spiritual power, it is impossible for them to sacrifice everything they have to receive Allah’s love and follow their prophet’s pilgrimage. The fourth understanding is that tasawwuf is derived from the word “shopos”, which is a Greek word meaning “hikmah”. Hikmah is benefit. Sufi have beneficial relations with benefits and wisdom because their souls tend toward benefit and wisdom. The fifth understanding is that tasawwuf is derived from the word “shaf”. This word relates to people who are first in line to perform good deeds. From these definitions, tasawwuf can be explained as a mental state that consistently maintains soul purity and modesty, gives everything to charity and in the interest of good deeds, and maintains wisdom and dignity. This mental state is a reflection of the Sufi principle.

There are three different points of view on the terminology tasawwuf. The first point of view is that human beings are a limited source, meaning that people are dependent creatures. The second point of view is that human beings are creatures who live to survive; and the third view is that human beings are creatures who have God to worship.

According to the point of view that human beings are a limited source, tasawwuf can be defined as an effort to purify the soul and to avoid mortal life by focusing on worshipping Allah. Meanwhile, according to the second view, human beings must beautify themselves with good behavior taking their principles from the Quran and Hadith. The third point of view promotes the necessity of being conscious of the originality of the human soul in performing ritual activities related to God (Nata, 2003, p. 180).

If we combine the above three definitions of tasawwuf, it can be concluded that tasawwuf is an exercise of the soul by means of activities that free the soul from the effects of the mortal world, finally allowing Muslims to exhibit good behavior based on the Quran and Hadith. In other words, tasawwuf is an activity that is related to spiritual exercise with the aim of always being close to Allah or God (Nata, 2003, p. 181). The terminological definition of Tassawuf aligns with the view of Nasution (1992, p. 58), who states that tasawwuf is a science that provides Muslims with methods of getting as close to Allah as possible. Allah allows Muslims to become the flows of rivers that bring divine knowledge from God. Al-Ghazali frankly says that tasawwuf is a fardhu ain (Note 2) for every male and female Muslim who has mukallap status (Note 3). There is no Muslim who is free from sins and spiritual sickness; only prophets are free from sins and spiritual sickness because Allah has guaranteed their souls are immune from evils and purified of sins.

According to Al-Ghazali, there are two kinds of nafs (passion); first, nafs means anger and sexual desire of the human being, which leads to the term that is commonly used by Sufi to define every bad deed conducted by a human being as bad behavior. Therefore, Sufi usually say: “People must defeat their ego and destroy it”. As Muhammad’s Hadith says, “The worst enemy is the ego between the two sides of your body (where the two sides are the thighs). Secondly, the word nafs means the soul or the core of the human being himself and his personality. Nafs can also be categorized in several different categories according to the situation. A soul that is calm and can be controlled and is clean from every bad desire - is called al-nafs al-muthmainnah (calm soul). The first definition of nafs does not consider the final return of mankind to God after death; this kind of nafs comes from Satan.

Meanwhile, there is nafs that has not reached the calmness level, but encourages its owner to defeat a bad desire and to destroy it. This kind of nafs is called al-nafs al-lawwamah (the soul that always criticizes its owner). It criticizes the owner who is lazy in fulfilling his duty to worship God. If a soul stops the critic and fully follows a bad desire, it is called al-nafs al-amarah bi al-su’i (the soul that leads to a bad deed). This kind of nafs belongs to the first category in the same definition. According to these considerations, a soul purification exercise should be

performed in the manner of tasawwuf. Imam al-Junaid al-Baghdadi as quoted by Kabbani (2007: 86) defines Sufi as people who wear wool and stand at the peak of soul purity, according to Muhammad's life principle stated in Hadith. A sufi endures bodily suffering and leaves behind any mortal happiness and wellbeing. Tasawwuf in Islam developed around the second century of Hijriyah. There are two types of factors that affect tasawwuf.

2.1 External Factors

There are several external factors that affect tasawwuf.

- Tasawwuf is based on the Christian way of life. Priests and nuns must alienate themselves in a church or dormitory. They must set themselves apart from human civilization. This is clearly seen in the Sufi's behavior in terms of the *zuhud* principle.
- Tasawwuf is based on the philosophy of Pythagoras that states that human souls are immortal and live in the world as strangers. The body or physical presence is only a prison for the soul. To attain real happiness in heaven, a person needs to purify his soul by leaving behind his material life and by contemplating. The Pythagoras philosophy is assumed to have triggered the *zuhud* way of life in tasawwuf.
- Tasawwuf in Islam is based on the emanation of Plotinus, explaining that manifestation comes from the sublime substance of God. The soul comes from God and will return to Him in the end. That the soul enters the material body makes it filthy, and thus, once it returns to God, it needs to be purified. Approaching God as closely as possible by contemplating and leaving the material world is a way of purifying the soul from the effects of the filthy body.

2.2 Internal Factors

There are also internal views in Islam that affect tasawwuf. These factors are recitation of the Quran and Hadith; in the Quran, for example, there are several verses describing how mankind is very close to Allah. An example is as follows. And when My servants ask thee about Me, say: 'I am near. I answer the prayer of the supplicant when he prays to Me. So they should hearken to Me and believe in Me, that they may follow the right way.' (Quran, al-Baqarah, verse: 186)

The conclusion from this verse is that Allah is very near to mankind. He will listen and realize every pray presented to Him, but indeed with several conditions. The description about God's intimation to mankind is also recited in the following verse. And assuredly, We have created man and We know what his *physical* self-whispers *to him*, and We are nearer to him than *even his* jugular vein. (al-Quran, Qaf: 16)

Another trigger of tasawwuf in Islam is that Islam has three dimensions, namely Iman or faith, Islam and Ihsan. The Iman dimension consists of faith or belief in Allah, belief in His angels, His holy books, His messengers, belief in the of judgement and finally belief in His fate (Allah's predestination of mankind). The last belief generates Kalam or Islamic theology. The Islam dimension consists of syahadat (a Muslim's confession of his belief in God), shalat (praying five times per day), zakat (charity tax), and going to hajj. This dimension leads to Fiqih science. Meanwhile, the Ihsan dimension clearly generates tasawwuf because tasawwuf is the implementation of this dimension. Ihsan demands a Muslim to be always at the peak of the Iman's dimension and to realize all his responsibilities and to perform good deeds. Thus, tasawwuf is actually affected by internal factors, namely the Hadith and Quran, even without the external factors. The term tasawwuf was not used in the Muhammad era.

Tariqat is derived from the Arabic word *tariqah*, and the plural from is *tara'iq*, meaning way, method, course or state. The term *tariqat* is commonly used by tasawwuf experts to describe the ways chosen by Sufi to approach God. *Thariqat* for Sufi means a system used to exercise the soul and to purify oneself from evil characteristics and to replace them with good behaviors through *dzikir* and spiritually internalizing God. One method is to be ever conscious of evil and good behaviors and to continue to recall Allah by means of *dzikir* to avoid anything but Allah. The following are the benefits of following *tariqat* stated by Aziz (2009:1).

2.2.1 Consistency

People who do not follow the *tariqat* method will find it difficult to maintain consistency in recalling Allah by means of *dzikir*. Meanwhile, those who follow *tariqat*, and particular those who are expert, will continue to uphold their responsibilities as Muslims in any situations. Thus, they will gain twice the merit from Allah because of their consistency in serving Him.

2.2.2 The Forgiving of Sins

Every human being has sin, and there is the proverb saying that to err is human. The *tariqat* principle teaches the follower to perform good deeds as much as possible to replace sins. All routine activities of *Thariqat Tijaniyah*,

such as *istighfar* (Note 4) and *shalawat* (Note 5) relate to the performing of good deeds that can replace and minimize human sins.

3. Methodology

The present study employs an analytical descriptive method and grounded research. Grounded research is a scientific research method commonly used to comprehensively comprehend or determine activities carried out by research objects in the field. As mentioned by Basri (2004, p. 10), grounded research is oriented toward formulating theory that is to be further used to research the individual, group or community. This research differs from other approaches. It has no hypothesis or rigid theoretical framework. Sugiono (2008, p. 96) stated that there is no need for a hypothesis at the beginning of such descriptive research.

The purpose of the grounded research model is to develop substantive or even general theory. The data obtained can thus advance theory. Qualitative research, especially grounded research, builds a concept or proposition without initial preconceptions (Basri, 2004, p. 10). In the present study, the grounded research approach is used to evaluate kinds of *dzikir* practiced at the Darussalam Boarding School in Brebes and to determine how the male scholars internalize *dzikir* values.

The present research was conducted at the Darussalam Boarding School, Jati Barang, Brebes in Central Java. The qualitative research does not use the term "population". Instead, the "social situation", as used by Spradley and quoted by Sugiono (2008, p. 297), consisting of a place, actor and activity that interact in synergy, will be used. The social situation at the boarding school includes male scholars and their activities. These are later considered objects of research.

4. Results

As previously mentioned, the term *tariqat* is derived from the Arabic word *tariqah*, and the plural from *tara'iq*, meaning way, method, course or state. The term *tariqat* is commonly used by the *tasawwuf* expert to describe the ways chosen by Sufi to approach God. *Thariqat* for Sufi means a system used to exercise the soul and to purify oneself from evil characteristics and to replace them with good behaviors with *dzikir* and the spiritually internalization of God. One method is to be ever conscious of evil and good behaviors and to continue to recall Allah by means of *dzikir* to avoid anything but Allah (Nata, 2003, p. 270).

The purposes of implementing *Thariqat Tijaniyah* are (a) getting closer to Allah, (b) the possibility of compunction, (c) to be consistent in *dzikir*, and (d) to live happily in the world and thereafter. *Thariqat* is a method used by the male scholars to get near to Allah as much as possible. The closer they are, the more they *dzikir* or recall Allah. This means they will be protected from any material business that may take them far from God. and turn into their destiny. The main aim of this *thariqat* is to be consistent in *dzikir* or to be in a state of remembering Allah. The *talqin* or expert in *tariqat* (1) maintains *dzikir* and (2) does not break Allah's commands and rules. *Tariqat* also provides male scholars with compunction, by reminding them that every human being must have sins. Therefore, they must always be in the right way to beg forgiveness by means of *dzikir* through continual praying every morning and evening.

When a scholar repeats *istighfar* or begs forgiveness from Allah, it means he is in a conscious state that allows him to perform *dzikir* consistently and leads him to the level of *mahabbah* or loving his God. The first indicator that he loves his God is that he always remembers Him; second, he often calls His name over and over; third, he always wants to meet Him. The highest level of this love is that there will be no other but Him in his mind and life. Whenever this happens, true happiness in life and thereafter is achieved.

This study focuses on *Tariqat-Tijaniyah* at the Darussalam Boarding School. The main activity of *tariqat* is *dzikir*. In this *tariqat*, *dzikir* is divided into three categories: *dzikir bil jinan*, *dzikir bil lisan* and *dzikir by action*.

4.1 *Dzikir Bil Jinan (Praising by Heart)*

Dzikir by heart is commonly called *dzikir khafi*. It is spoken in the heart or without spoken words. This *dzikir* only fulfills somebody with a consciousness of God's existence. They can feel Him as their heart beats. In other words, a person's heart that is not fulfilled with *dzikir* is a dead heart because there is no spiritual communication with The Sublime Life or God in their heart. In the Quran, the sublime Life is described with sky light and earth. When there is no connection with the source of light, the heart will not receive light and dies. To achieve this *dzikir*, a continual discipline exercise and guidance from a teacher called a *muqaddam* is necessary.

The basic foundation of this *dzikir* is the Quran verse *Adapun yang dijadikan landasan berdzikir dengan hati adalah firman Allah yang berbunyi*, which translates as "And remember thy Lord in thy mind with humility and

fear, and without loudness of speech, in the mornings and evenings; and be not of the neglectful". (QS. Al-A'raf: 205).

According to a hadith of the Prophet (p.b.u.h) from Abu Hurayrah, the Prophet said:

There is also Hadith from Muhammad narrated by Abu Hurairah stating that the Prophet said that Allah always acts as His humankind assumes or wishes even if the wish is only whispered in their heart. Allah will also always remember those who remember Him in front of other creatures and elevates their position among them all.

4.2 Dzikir by Saying the Words Loud

Dzikir is performed with spoken words by uttering the words of a certain dzikir with a *thayyibat* (Note 6) sentence using both a loud voice and a soft voice that can only be heard by the speaker. The spoken dzikir implemented by the male scholars at the boarding school consists of the following.

- Wirid lazimah. This dzikir is written twice per day, once in the morning and once in the afternoon, personally or munfarid. The words of this dzikir must not be spoken.
- Wirid Wadzifah is written once per day.
- Wirid Hailallah is written once per week.

There are eight rules that should be obeyed in writing the spoken dzikir. (1) The words of dzikir must normally be able to be heard by the reader of the words. (2) The ikhwan or male scholar must be pure from all filth that may be attached to the body, clothes, possessions, or location. (3) He must be chaste from all hadats, both little hadats (urination) and big hadats (defecation). (4) He should cover his genitalia perfectly. (5) He is not allowed to talk. (6) He must face qibla (west) or Kabah. (7) He must sit. (8) The wadzifah and hailalah should be conducted collectively if there is a Tijani scholar. The lazimah must be conducted twice per day.

- The first time is after ashar prayer (afternoon prayer), but if there is obstacle when the time of shubuh or dawn comes and later it continues to the time after the dawn, and he cannot practice the dzikir yet, he must make it up in the next dzikir.
- The second time is after shubuh prayer (dawn prayer) until the time of dhuha (a prayer that is not compulsory or sunnah done before afternoon during working hours). If there is an obstacle that prevents him from fulfilling the requirement lasting until maghrib pray (a prayer that is made when the sun is fading), it is better to conduct this lazimah earlier during *taqdim*, which proceeds shubuh prayer. However, if the requirement has not been fulfilled by the time of maghrib prayer, the dzikir must be made up. If he cannot finish the dzikir by the shubuh time, he must continue it after shubuh. The duration of *taqdim* practice before shubuh is around 90 minutes after isya prayer.

The lazimah practice sequence at the boarding school is described in greater detail below.

First, the intention to practice lazimah both in the morning and afternoon is stated. The wording of the intention is given below.

نويت التعبد تقربا الى الله باداء وردنا اللازم في طريقتنا التجانية
طريقة حمد وشكر ايماننا واحساسنا لله تعالى

The istighfar is written 100 times; the shigat or wording is written here.

استغفر الله

These words function to clean the soul from bad deeds. The basic purpose of attending this tariqat is taqarrub or approaching God. Therefore, the scholar must previously beg forgiveness using istighfar words to clean away sins and to become pure. Briefly, istighfar is a process of cleaning spiritual dirt and replacing it with saintly values. This is based on His commandment in Quran, Surah An-Nisa: "And whoever does a wrong or wrongs himself but then seeks forgiveness of Allah will find Allah Forgiving and Merciful". (QS. An-Nisa: 110).

In a Hadith narrated by Anas, Muhammad referred to Allah's forgiveness of great sins and how Merciful He is.

Allah promises that every prayer and wish will be responded to. Whenever humankind begs for forgiveness even if for the great sins as high as the sky but they keep begging for it by means of istighfar, He will forgive them. If those human beings also come to Allah with great mistakes as big as the earth with one condition that they never associate Allah to anyone and anything, Allah forgive such mistakes, however, big they may be (trans: Hadith narrated by Turmudhi)

Next, the shalawat or praise to Muhammad is read 100 times using any text of shalawatt, such as the following.

اللهم صل على سيدنا محمد وعلى اله

Note that it is much better to read the *faith shalawat* first before reading the above *shalawat* 100 times. The words of the *faith shalawat* are as follows.

اللهم صل على سيدنا محمد نا لفاتح لما اعلق والحا تم لما سبق ناصر الحق بالحق والهادي
الى صراطك المستقيم وعلى اله حق قدره ومقداره العظيم

Reading shalawat in this way or repeating the dzikir functions to bring man closer to the Creator (to get God's mercy) and mediatory to make istighfar prayers accepted by Allah.and therefore to ask forgiveness, pray for Muhammad (S.A.W). This conviction is based on Muhammad's companion or apostle Umar bin Kahttab who mentions that: A servant's prayer will be delayed from sky to earth until shalawat is uttered and presented to Muhammad. (QS. An-Nisa: 110)

4.3 Dzikir with Action

The dzikir with action practiced at Darussalam Boarding School consists of rituals and social implementations. The ritual worship includes Five Pillars consisting of *salah* and fasting. It is better to practice *salah* collectively; even those male tariqat scholars who stay at the school receive punishment if they do not practice prayer in a congregation. Meanwhile, dzikir implementation in social life is related to daily-life activities such as occupational activities. For example, traders implement dzikir at the principle of trading or business, and workers implement dzikir when at work. Thus, a male Tijani scholar is assumed to have completed the social dzikir if the rules of the daily professional activities are not broken. There are conditions for being part of Tijaniyah.

4.3.1 Preparedness Level of a Male Scholar Required to Be Talqin (Training or Education) Tariqat-Tijaniyah

There are five preconditions that need to be fulfilled. (a) A person must be a member of Tariqat-Tijaniyah and intend to feel compunction. (b) They must not be enrolled in any tariqat community. If they are, they must leave the tariqat group. In other words, the tariqat membership cannot be affiliated with other memberships. (c) They have to obey and maintain Muhammad's regulations and principles, namely Sunnah. (d) Membership is for their entire life. (e) They must not visit any religious leader but the tariqat group leader both in life and afterward (Fathullah, 2007:191). If a person can fulfill these five conditions, they can enroll to be members of the tariqat. Next, the teacher will educate and train them.

4.3.2 Tariqat-Tijaniyah Talqin (Education)

Talqin is a procession that includes teaching and guidance given by the teacher to male scholars to implement Tijaniyah principles. A student must state his loyalty and allow him-self to be guided and trained to receive Allah's mercy and affection.

4.3.3 Responsibilities of the Tijaniyah Male Scholars

A male scholar is trained so that all tariqat responsibilities may be applied to him. He must consistently practice all dzikir without excuse. The dzikir mainly consist of the following.

- *Wirid lazimah*- which is practiced twice per day, once in the morning and once in the afternoon.
- *Wirid Wadzifah*- which is practiced once per day at any time.
- *Wirid Hailallah*- which is practiced once per week in the afternoon after *ashar* prayer by *maghrib* prayer and around Friday prayer.

4.3.4 Tarbiyah or Education

Tarbiyah is a guidance or training activity that internalizes dzikir values. This activity relates to Quran recitation conducted only for male scholars every Monday morning. Generally, there will be other activities inserted in this main activity, such as hailallah wirid, khotmi, Syekh Ahmad al-Tijani's memorial or a great memorial event.

The main purpose of this tarbiyah is to guide and motivate scholars in dzikir to Allah. Therefore, all the thariqat rules and principles must be upheld so that the students will continue on the path to receive Allah's mercy and affection.

5. Conclusion

There are three types of dzikir practiced in the tariqat, namely dzikir *bil jinan*, dzikir *bil lisan* and dzikir with action. However, the male scholars or muslims are mainly required to practice dzikir by means of *wirid* (dzikir repeated a certain number of times). The *wirids* are *lazimah*, *wadzifah* and *hailallah*. There are no absolute rules in implementing dzikir with heart and action. These two forms of dzikir are usually practiced by common Muslims in general. Dzikir practices of Tariqat-Tijaniyah include *istighfar*, *shalawat* and *tahlil* sentences included in *lazimah*, *wadzifah* and *hailallah* has a strong religious base in the Quran and Hadith.

The method of dzikir practiced by the tariqat has several phases: (1) preparation of a male scholar to be educated or talqin in the tariqat, (2) training according to the Tariqat-Tijaniyah principle, (3) fulfilling the responsibilities of the *Ikhwan Tijani* or Tijaniyah scholar, (4) education and (5) performance of the traditions and activities of the tariqat. The traditions include a) the tradition of the ritual Dzikir *Wajibah*, b) Tradition: *Ijtima' Hailallah*", c) the tradition of Dzikir *Ikhtiyari*, d) the tradition of *Manaqiban*, e) Tradition Haul Akbar, f) *Idul Khotmi*, and g) the tradition of Syekh Ahmad *al-Tijani* memorial. These traditions promote consistent in dzikir and finally, the internalization of the required values.

References

- Al-Haramain, E. (2011). Shifting Orientation in Sufism: Its Development and Doctrine in History, *Indonesian Journal of Islam and Muslim Societies*, 1(2), 273-296.
- Al-Kalabadzi. (1993). *Al Ta'arruf li madzhab ahl al-tasawwuf*. Beirut: Dar al-Kutub al-Ilmiyyah
- Al-Qur'an dan terjemahannya. (2006). *Departemen Agama Republik Indonesia*. Pustaka Agung Harapan.
- Asyafah, A. (2014a). The Method of Tadabur Qur'an: What Are the Student Views? *International Education Studies*, 7(6), 98-105.
- Asyafah A. (2014b). Research based instruction in the teaching of islamic education. *Springerplus*, 3, 755, Published online 2014 Dec 19. <http://dx.doi.org/10.1186/2193-1801-3-755>.
- Aziz, A. (2009). *Istiqamah, Kunci sukses Dunia Akhirat*. Surabaya. Alfalalah.
- Basri, H. (2004). *Minuman Cinta Menyelami Esensi Ajaran Tasawuf*. Jakarta: Paramarta.
- Fathullah, A., & Adhiman, F. (2007). *Thariqat Tijaniyah Mengemban Amanat Rahmatan lil Alamin*. Kalimantan Selatan: Yayasan Al-Anshari.
- HR. Bukhari, Muslim, Tirmizi, Nasai dan Ibnu Majah.
- Istrabad, Z. S. (1988). *"The Principles of Sufism" (Qawa'id al-Tasawwuf): An annotated Translation with Introduction*. Indiana University.
- Khanam, F. (2006). *Sufism an Introduction*. India: Good Wordbooks.
- Kabbani, S. M. H. (2007). *Tasawuf dan Ihsan*. Jakarta: Serambi Ilmu Semesta.
- Nasution, S. (1992). *Metode Research*. Jakarta: Bumi Aksara.
- Nata, A. (2003). *Akhlaq Tasawuf*. Jakarta. Raja Grafindo Persada.
- Sugiyono. (2008). *Metode Penelitian Pendidikan*. Bandung. Alfabeta.
- Yassin, A. A., & Utaberta, N. (2012). Architecture in the Islamic Civilization: Muslim Building or Islamic. Architecture. *Journal of Islamic Architecture*, 2(2), 52-100.
- Zani, a. a. (2011). *The attitude of zuhud according to hamka in tafsir al-azhar*. Thesis Submitted to Faculty of Ushuluddin to fulfill a requirement for undergraduate degree in Islamic Theology (Tafsir Hadist). Semarang: State Institute of Islamic Studies Semarang.

Notes

Note 1. Zuhud is one of the Islamic ways of life that reflects modesty and moderate material steadiness or generosity.

Note 2. Personal duty that must be performed by every Muslim but can be performed by other Muslims having a family relation.

Note 3. The category of Muslim who is biologically mature and mentally healthy.

Note 4. A kind of prayer with wording that especially begs forgiveness from Him.

Note 5. Prayer especially referring to oneself as a follower of Muhammad to get his help thereafter.

Note 6. The value and judgment of goodness and benefits based on Islam principles.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Financial Leading Indicators of Banking Distress: A Micro Prudential Approach - Evidence from Europe

Ahlem Selma Messai¹ & Mohamed Imen Gallali¹

¹ High Business School of Tunis, Manouba University, Tunisia

Correspondence: Ahlem Selma Messai, High business School of Tunis, Manouba University, 2010 Manouba, Tunisia. Tel: 216-25-16-0565. E-mail: asm_j@hotmail.fr

Received: February 20, 2015 Accepted: April 14, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p78

URL: <http://dx.doi.org/10.5539/ass.v11n21p78>

Abstract

Sovereign and Subprime crises have corrosive effects on European banking system. In this study, we aim to explain and predict the state of distress for 618 European banks for a five year period (2007-2011). For this purpose, we applied early warning systems using traditional and developed methods: discriminant analysis, logistic regression and the artificial intelligence. Those methods aim to predict bank distress up to a year (two years) before it actually happened. Our study seeks to compare between these three methods and to choose the most appropriate for prediction. The key finding of this study demonstrates that the neural network method outperforms the other models. This result is too much useful for banks and help policy makers to do a better job in terms of regulatory reforms.

Keywords: a microprudential approach, bank distress, non performing loans, financial soundness indicators

1. Introduction

Given the importance of predicting bank distress, this topic has been gaining a greater interest in the two last decades. In fact, the main objective of an early warning model is forecasting difficulties in financial institutions. These early warning systems have recently experienced a very rapid evolution, particularly in view of banking regulators who continually develop such models in order to identify the financial distress in banks and provide an advance alarm to distressed institutions, allowing them the sufficient time to avoid the emergence of potential crises. Then, banks could react and take the necessary corrective measures. Moreover, early warning models identify three types of crises: currency crises, debt crises, and also banking crises. The authorities implement macroprudential supervision standards that attempt to assess the soundness of the financial system and its vulnerability to potential shocks. The quantitative analysis used in macroprudential supervision complements the use of financial soundness indicators (FSIs) and also the implementation of stress tests. Financial soundness indicators (FSI) were established by the FMI in order to gauge the financial vulnerability in banks. The FSI were grouped into two main cores: the core set indicators and the encouraged indicators. The macroprudential supervision approach that uses a combination of qualitative and quantitative methods. The qualitative methods focus on the quality of the legal, regulatory framework and the governance mechanism in the financial sector.

An important part of the qualitative information is often collected and used by internationally recognized standards and codes of good practice. However, the quantitative methods include a combination of indicators and statistical techniques able to summarize the strength and the resilience of the financial system to vulnerabilities.

Thus, these various tools are mapping all the possible financial vulnerabilities that could appear in different economic industries. Mager and Shmeider (2009) argue that these financial soundness indicators are indeed used in order to test the soundness of the banks and the financial system as a whole using a micro stress testing framework (Qualiariello, 2009; Lelyveld, 2009). In this case, several techniques have been used to predict the distress of a credit institution and also to help regulators in taking the right preventive actions. Among these techniques, we could mention linear regression or discriminant analysis and logistic regression (logit or probit). Moreover, we should notice that in recent years, several studies have focused on techniques that use artificial intelligence such as the neural network method.

In fact, these studies have also demonstrated the effectiveness of the new artificial neural methods compared to other techniques. These new techniques are used in several areas. However, they are recently used in order to predict the failure of a financial system.

Our study aims to predict the difficulties faced by 618 European banks and also to determine the most relevant indicators of a bank distress. This paper is also based on three methods in order to compare the effectiveness of different methods. The purpose of our work is to find the best method to forecast bank distress in a microprudential framework. In addition, our study tries to decompose the relevant determinants of internal failure affecting especially the solvency of banks that could lead the regulator to act before a bank's distress.

First, the introduction has to be seen within the wider context of existing frameworks in this field. The remainder of this paper is organized as follows. Section two develops a brief review of different methods of forecasting difficulties faced by banks and methods integrating financial soundness indicators. Section three describes the research design. Section four analyzes and summarizes the empirical findings. Finally, section five presents the conclusion, limitations and future researches.

2. Related Studies

This study is related to a growing body of literature that analyses the banking distress. Financial soundness indicators were established by the International Monetary Fund to ensure the soundness of financial institutions and markets as well as companies (Kulthunga & Rehman 2012). Financial soundness indicators are summarized by CAMELS criteria (C: capital adequacy; A: asset quality; M: management quality; E: earnings ability; L: liquidity; S: Sensitivity to market..). In addition, according to some authors, other accounting measures do not contain additional information to those provided by CAMELS indicators (Akhter & Dali, 2009). In addition, according to the World Bank (2005), these indicators (CAMELS) are a complement to the existing macro-prudential tools. These tools used by international organizations (FMI, ECB, WB...) in order to assess the risk management. In other words, they are complementary to the early warning systems in predicting distress. The most important difference between these two methods: early warning systems detect distress for individual institutions when the macro stress tests seek distress for a banking system.

In this study, we try to show that financial soundness indicators (FSI) assess and predict the financial sector vulnerability. Cihak (2007) argues that financial ratios are able enough to provide a summary Table of the soundness in a financial sector and in its different components. Cardarelli, Elekdag and Lall, (2011) discuss the reasons of the severe financial turbulence which could lead effectively to an economic slowdown. In addition to that, Authors identified the different phases of the financial turmoil in advanced economies using a financial stress index (FSI), and proposed an analytical framework able to assess the impact of financial stress on the real economy. They conclude that the financial turmoil characterized by bank distress is more likely to undergo a deep downturn. Several models have been developed in order to detect distress and weaknesses in financial institutions. As a matter of fact, these models are widely used to ensure financial system stability. In particular, developed models are respectively the early warning systems (EWS), the resilience tests (stress tests) and finally artificial intelligence models which were recently implemented. Indeed, some authors have emphasized the complementarity between stress tests and early warning systems.

Early warning systems include different ratios derived from financial statements which include variables related to the regulatory and institutional environment, they even use different macroeconomic variables with the aim to predict system's failures.

In addition to that, those monitoring systems are also used to provide useful indicators of the bank situation. These systems are used primarily to get prevented from bank problems. Banking system problems are often presented by a weak level of capitalization, liquidity and solvency... For this reason, often studies used several indicators relating to solvency, performance and liquidity to assess the risk profile of a banking group (Anderson, 2008; Giovanis, 2010; Wong, Wong, & Leung, 2010).

Based on the estimation of the default risk, in this case we can do a separation between banks seen as riskier and toward those seen as less risky. Researchers have tried then to ameliorate models able to predict the potential financial distress in different sectors and in different countries. They actually used several statistical methods to accomplish this objective. Among these methods we can notice:

Discriminant analysis (Sinkey, 1975; Altman, 1968; Lin, 2009; Giovanis, 2010; Kouki & Elkhaldi, 2011), logistic regression (Thomson, 1991; Gonzalez-Hermosillo, 1999; Godlewski, 2004; Montgomery, Hanh, Santos, & Besar, 2005; Lin, 2009; Giovanis, 2010; Messai & Jouini, 2013a). We could also notice that the Probit regression is a multivariate statistical method that was used to predict bankruptcies for some ailing banks (Barr & Siems, 1994; Doganay, Ceylan, & Aktas, 2006; Lin, 2009; Wong et al., 2010).

2.1 Traditional Methods

Several researchers have tried also to expand their studies by using multiple methods, to choose the most appropriate and to show that one of them is most effective. Among the authors who used several prediction methods, we could mention Donganay et al. (2006) and Wong et al. (2010) studies.

Doganay et al. (2006) have developed an early warning system for predicting at least three years before the banking failure using three methods: Logit, Probit and discriminant analyses. These authors incorporated multivariate statistical regressions and used 27 ratios to predict the failure. The sample included distressed banks during the period 1997-2002. This sample is composed of 42 banks and 19 of them failed. The authors found that the most appropriate model for predicting bank distress is logit.

Similarly, Konstandina (2006) used logit analysis to predict the failure of Russian banks. She used 6 macroeconomic factors and 13 factors specific to banks as independent variables. She also used another proportional hazard model that identifies the factors influencing the time resistance of a bank during a financial crisis. She found that the increase in bad debts and also that holding treasury bills enhance the risk of the bank distress. On the other hand, Andersen (2008) used the logit method in order to identify the most relevant variables in detecting distress in Norwegian banks. He distinguished 23 of explanatory variables of bank distress. He determined six relevant variables inherent to the CAEL rating system presented as follows: capital adequacy, asset quality, earnings ability and liquidity. Mayes and Stremmel (2012) used also logit method and survival time analysis in order to predict banking failure. The models incorporate CAMELS indicators. These authors explain that the risk weighted capital adequacy and the adjusted leverage ratio are the most relevant indicators of a bank distress.

2.2 The Methods of Artificial Intelligence

The artificial neural networks have made their entry in management science as a quantitative prediction method since 1990 (Paquet, 1997).

This method has been improved after the emergence of new and sophisticated techniques. These models have been recently applied to finance and they are called Adaptive Neuro-Fuzzy inference system (ANFIS). Moreover, ANFIS model is considered very effective in predicting an event or a failure (Kiran & Rajput, 2011).

Boyacioglu, Kara, & Baykan (2009) consider that bank failure threaten the resilience of a system as a whole. Therefore, they categorize banks as distressed and non distressed ones. They try to test classification performances for various neural network techniques. They used 20 financial ratios based on CAMELS acronym. Four techniques are employed: multi-layer perceptron, learning vector quantization, competitive learning and self organizing map. The findings of this research show that learning vector quantization and the multi-layer perceptron are the most effective models for predicting failure. Fioramanti, (2009) highlights the flexibility of neural networks and their ability to approximate nonlinear relationships. The operation of the ANN method is similar to the human brain logic by using highly non-linear approximation functions.

Yildiz and Akkoc (2010) have developed neural networks based on a Neuro Fuzzy technique. The authors define it as a method that combines two approaches, namely neural networks and fuzzy logic. It looks like a hybrid artificial intelligence technique. This new method was also adopted to predict bankruptcies in the Turkish banking sector. In fact, they chose a sample of 55 Turkish banks: 19 fundamentally robust banks and 36 failed banks. The success of prediction was made after the use of Neuro Fuzzy model is 90.91%. The application of neural networks and multivariate discriminant analysis was done primarily to compare it with the Neuro-Fuzzy model. The performance of the first two methods is respectively 86.36% and 81.82%. Although there is no big difference between the performances of models, the authors concluded that this new Neuro-Fuzzy method was slightly more successful. Giovanis (2010) presents a suiTable model of early warning distress using logistic regression and ANFIS model panel (Adaptive Neuro-Fuzzy Inference System). To check if a company is distressed, Giovanis (2010) follows the logic applied by Gentry et al. (1985).

A firm that reduces the dividend is in a financial distress. With random effects logit model, the author has performed better forecasts than those found using a simple binary logistic regression. Using Neuro-fuzzy system (ANFIS), the author concluded that it is a more appropriate tool for financial risk managers and decision making in Central Banks. The sample is composed of 179 financial institutions in Taiwan Security Exchange (TSE) during 2002-2008. The author finally concluded that the neural model is useful in predicting bankruptcies (global and also national economic crises). He also noted that this model outperforms significantly the logit regression, indicating that it is actually the most appropriate tool for financial risk managers and economic policy makers in central banks and national statistical offices.

The author concluded also that the use of this technique is much better than previous methods. Furthermore, using data related to developing countries during periods of sovereign debt crises can lead to a progress by applying a less developed non-parametric method based on artificial neural networks (ANN) (Fioramanti, 2009; Boyacioglu, Kara, & Baykan, 2009).

Similarly, Sevim, Oztekim, Bali, Gumus, & Gursen (2014) develop an early warning system to predict currency crisis. These authors used three methods: logit regression, decision tree and artificial neural networks. The main finding consists that the Turkish economy is not expected to face a currency crisis. It resists until the end of 2012.

3. Sample, Variables and Methodology

The sample for this study encompasses 618 banks in 18 countries in Europe during 2007 to 2011. Financial data were retrieved from Bankscope database. Our work is based on financial variables representing financial soundness indicators.

Table 1. Presentation of sample

Countries	Code	Banks		Countries	Code	Banks	
		Number	Percent			Number	Percent
Austria	AT	10	1.62%	United kingdom	GB	60	9.71%
Belgium	BE	9	1.46%	Greece	GR	13	2.1%
Switzerland	CH	94	15.21%	Ireland	IE	9	1.46%
Germany	DE	12	1.94%	Italy	IT	89	14.4%
Denmark	DK	22	3.56%	Netherland	NL	14	2.26%
Spain	ES	33	5.34%	Norway	NO	75	12.14%
Finland	FI	5	0.81%	Portugal	PT	19	3.1%
France	FR	96	15.53%	Sweden	SE	58	9.38%

The distress of a bank is determined based on the non performing loans to gross Loans ratio (NPLGL). Several studies opted for this choice as Reinhart and Rogoff (2010) who consider non performing loans as a proxy for financial crises and state that the presence of these non performing loans is a signal of potential financial crisis. Similarly, Messai and Jouini (2013b) and Vogiazas and Nikolaidou (2011) confirm that the high percentage of non performing loans, both in developed and in emerging countries is often associated with bank distress and financial crises.

In addition to this variable, the empirical literature review demonstrates the existence of other proxies of distress such as provisions for loan losses and solvency ratio (equity to total assets). Sorge and Virolainen (2006) focus on credit risk and liquidity risk. The authors present a model for the relationship between the provisions for loan losses and relevant macroeconomic factors.

Banks with low non performing loans ratio compared to those with higher one would be classified as highly distressed. In fact, according to Lin (2010), the sample should be decomposed in quartile.

Also, a bank is considered in a serious trouble when the non performing loans ratio is greater than the third quartile ($Q3 = 4.851\%$) for two successive years. Otherwise, the bank hasn't been distressed.

Our dependent variable will be presented by a binary variable: It is equal to 1 bank is in distress i.e. when non performing loans ratio is greater than 4.851% for two successive years. It is equal to 0 otherwise.

To explain the financial distress of banks, we choose 10 ratios that belong to the acronym CAMEL.

Table 2. Overview and definition of variables

Variables	Definition	CAMEL	Expected sign
EQTA	Equity / total assets	Capital Adequacy	-
EQNL	Equity /net loans	Capital Adequacy	-
LLPGL	LLP/gross loans	Asset quality	+
LLRNPL	LLR/NPL	Asset quality	-
CIR	Cost to income ratio	Management quality	+
ROEA	Return on equity average	Equity	+/-
ROAA	Return on assets average	Equity	+/-
LIQTA	Liquidity /total assets	Liquidity	-
LIQDEP	Liquidity /Customer & S. T. Funding	Liquidity	-
NLDEP	net loans/ deposit	Liquidity	+/-

Predicting difficulties faced by a bank can be carried out before one or two years, if a bank has a ratio higher than the third quartile (Q3) for two successive years (2009 and 2010), it is considered in distress for 2011. Our paper is based on three methods: discriminant analysis, logit, and neural network (ANN).

4. Analysis and Results Interpretation

Using the Pearson correlation matrix, we measured the correlation between the independent variables. We can then observe a strong correlation between certain variables such as equity to total assets ratio (EQTA) and equity to net loans ratio (EQNL). We reached the same conclusion for Return on equity average (ROEA) and Return on assets average (ROAA) and also for liquidity to total assets (LIQTA), liquidity to deposits (LIQDEP).

In fact, among 10 ratios, we only used 7 ratios whose correlation coefficient was less than 0.5. These variables will be the object of our analysis using these methods: discriminant analysis, logistic analysis and the artificial neural network.

In fuzzy logic we will consider only significant variables and the results obtained by other methods mentioned above. We follow also Giovanis's approach (2010).

4.1 Discriminant Analysis

The Discriminant analysis model was presented to predict business failure. In this model different information from multiple variables was combined with a single weighted score for each one (Ray, 2011). This score was calculated using the following general discriminant function:

$$Z_i = \alpha_0 + \alpha_1 x_1 + \alpha_2 x_2 + \dots + \alpha_n x_n \quad (1)$$

Where Z is the score, x_i is the independent variables, and α_i , α_0 are the estimated coefficients.

The application of the discriminant analysis model using the method "step by step", allow us to select three ratios respectively loan loss provisions to gross loans (LLPGL), loan loss reserves to nonperforming loans ratio (LLRNPL) and equity to net loans ratio (EQNL).

The equation is designed as follows:

$$Z_i = -0.021 + 0.62LLPGL - 0.673LLRNPL \quad (\text{one year})$$

The percentage classification model for discriminant analysis is equal to 77.7%. The Table below (Table2) shows the obtained results by the discriminant analysis model.

Table 3. Prevision results one year before the distress

		Distress	Expected classification		Total
			0	1	
Original	Effective	0	375	58	433
		1	80	105	185
	%	0	86.6	13.4	100.0
		1	43.2	56.8	100.0

The percentage of correct classification is equal to 77.7%

The application of the method of discriminant analysis for two years provides the following Table:

$$Z_i = -0.019 + 0.467LLPGL - 0.649LLRNPL$$

The percentage in the discriminant analysis gives an overall ranking of 77.3%. The Table below (Table3) shows the results expected by the discriminant analysis model.

Table 4. Result of a Ranking two years before the distress

		Distress	Expected classification		Total
			0	1	
Original	Effective	0	384	49	433
		1	91	94	185
	%	0	88.7	11.3	100.0
		1	49.2	50.8	100.0

The percentage of correct classification was equal to 77.3%

In this Table, we can notice that the model is able to correctly classify 375 robust banks of a total of 433. The precision model was equal to 86.6 %. This model can also classify correctly 105 distressed banks of a total of 185. Then, it can provide 56.8% precision for the group of distressed banks. Then the global percentage of a good ranking is equal to 77.7%. In the second case, we seek to predict distress before two years. This model was able to classify correctly, 384 of a total of 433 robust banks. The good ranking of healthy banks reaches 88.7%. In the case of the distressed banks, this model reached to classify correctly, 94 for a total of 185 distressed banks. The good ranking reached 50.81%. Then the global percentage of a good classification is equal to 77.3%.

4.2 Logit Method

The logistic regression method is characterized by a binary dependent variable.

For the bank (i) we have:

$$Y_i = \begin{cases} 0, & \alpha_0 + \sum_{i=1}^n \beta_i x_i + \varepsilon_i \leq 0 \\ 1, & \alpha_0 + \sum_{i=1}^n \beta_i x_i + \varepsilon_i > 0 \end{cases} \tag{2}$$

$$p_i = P(Y_i = 1) = P(\alpha_0 + \sum_{i=1}^n \beta_i x_i + \varepsilon_i > 0) = \frac{1}{1+e^{-\alpha_i - \sum \beta_i x_i}} \tag{3}$$

$$\log \frac{p_i}{1-p_i} = \alpha_i + \sum \beta_i x_i \tag{4}$$

With $\frac{p_i}{1-p_i}$ is the relative probability of $Y_i = 1$

The use of logistic method one year before the distress shows that loan loss provision to gross loans (LLPGL) and loan loss reserves to non performing loans (LLRNPL) ratios are significant at a level of 1% while the ROEA ratio is significant at a level of 10%.

Table 5. Estimation result using logistic regression during a year of distress

Variables	Coefficients	t student
EQNL	2.092025	2.16**
LLPGL	0.9897102	6.18***
LLRNPL	-1.398115	-4.70***
CIR	-0.7391725	-1.17
ROEA	-0.2284727	-0.22
LIQTA	-0.1538859	-0.19
NLDEP	-0.0208422	-0.15
Cte	-0.485183	-0.90
LR chi2(7)	105.61	
R ²	0.14	

The percentage of correct classification was equal to 76.05%.

The use of the logit method two years before financial distress indicates that three ratios are significant. Those ratios are EQNL, LLPGL and LLRNPL. Equity to Net Loans ratio is considered as a buffer to absorb potential losses that can be faced by banks. A high percentage of capital implies lower risk of distress and helps to absorb potential losses (Mayes & Stremmel, 2012). This ratio is significant at a level of 5%. The other ratios are significant at a level of 1%. Our results improve the idea that a better profitability encourages banks to take excessive risks and increases the likelihood of distress. Equity to Net Loans ratio (EQNL) measures the efficiency with which institutions use their own funds. It can also provide information about the viability of their own funds. A high ratio could indicate high profitability and / or low capitalization. Loan loss reserves to Non performing loans (LLRNPL) is considered as a coverage ratio of non performing loans. As a consequence, there is a negative relationship between this ratio and bank distress.

Table 6. Estimation result using logistic regression for two years of distress

Variables	Coefficients	t student
EQNL	0.8917947	0.86
LLPGL	0.8427689	6.62***
LLRNPL	-1.465278	-4.21***
CIR	0.1465523	0.38
ROEA	-0.1563443	-0.20
LIQTA	-0.2673611	-0.32
NLDEP	0.1411453	0.97
Cte	-1.105471	-2.59***
LR chi2(7)	114.33	
R ²	0.1516	

Note. (***) significant at level 1%.

The percentage of correct classification was equal 77.02%.

The predicting process using the logit regression shows that only two ratios were significant at a level of 1% namely: loan losses provisions to gross loans (LLPGL) and loan losses reserves to non performing loans ratio (LLRNPL). That improves the idea that prevision can be more efficient one year before the distress.

Confusion matrix in Table 7 indicates that percentages of classifications one year before the distress are as follows: in fact, that matrix indicates good ranking of distressed banks equal to 31.81 % and a good ranking of solid banks equal to 95,38%. Two years before the distress, this matrix indicates a good ranking of healthy banks which is equal to 97.4% then a good ranking of distressed banks equal to 29.19%.

Table 7. The Confusion matrix

Classified	Before one year			Before two years		
	True		Total	True		Total
	1	0		1	0	
1	57	20	77	54	11	65
0	128	413	541	131	422	553
Total	185	433	618	185	433	618

This matrix indicates the percentages of classification one and two years before the distress. In fact, the better ranking of solid banks was equal to 95.38% and the good ranking for distressed banks was equal to 30.81%. In The case of two years, confusion matrix indicates that good ranking of solid and distressed banks was respectively equal to 97.46 and 29.19 %.

4.3 Artificial Intelligence Method

The application of neural techniques to the same data allows us to take into account the non-linearity of variables. We refer to Boyacioglu, et al. (2009) research' and we used the Multi-Layer Perceptron (MLP) and we should also note that this network includes one or more hidden layers neurons. The connections between these layers are direct and total.

Our overall sample is divided into three sub-samples: the construction sample (70%), the test sample (15%) and the validation sample (15%).

The neural network has the following features:

- An input layer consists of 7 neurons corresponding to independent variables xi.
- A hidden layer consists of N neurons, only after several tests on the sample, the number which represents an optimum value of learning and generalization will be achieved.

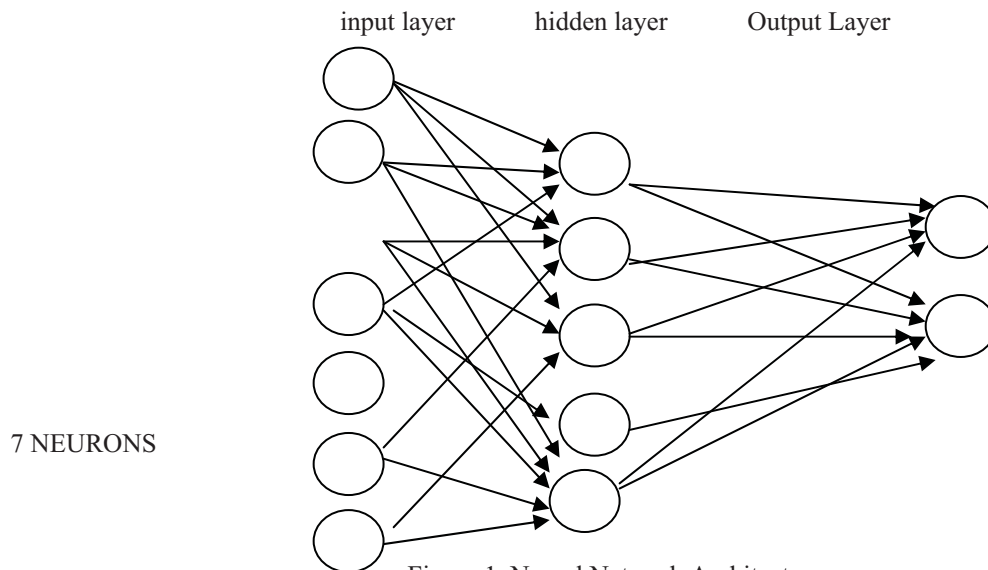


Figure 1. Neural Network Architecture

Two activation functions were used as below:

-The sigmoid function for the output layer

$$f(x) = \frac{1}{e^x + e^{-x}} \tag{5}$$

- The hyperbolic tangent function for the hidden layer

$$g(x) = \frac{e^x - e^{-x}}{e^x + e^{-x}} \tag{6}$$

The neurons of the hidden layer are determined based on the transfer function or activation of g (x):

$$y_i = g(x) = \sum_{i=1}^n w_{ij}x_i + w_{oj} \tag{7}$$

The activation function f (k, x) determines the output layers:

$$O_k = f(k, x) = \sum_{j=1}^p w_{jk} \cdot g(\sum_{i=1}^n w_{ij}x_i + w_{oj}) + w_{ok} \tag{8}$$

With i: the number of input variables i = 1.....n

x_i : neurons of the hidden layer

y_j : neurons of the hidden layer

j : number of hidden layer j=1.....p

O_k : The neurons of the output layer

The learning of such a network is monitored and the algorithm uses the back propagation of the error. This algorithm is used in the feed forward type networks. Each network of neurons has an input layer, an output layer, and at least one hidden layer.

The retro-propagation is based on presenting to the network an input vector, then, it calculates the output. It starts from the input layer, and it goes through the other layers until the output layer. This output is compared to the desired output, an error is then obtained. This error, is calculated from the output layer towards the input layer (retro propagation). This allows modification of the network weights and the learning process. It is essential to perform a normalization of all input data. Otherwise the quality of results is negatively affected. In other words, if the inputs have very different sizes, small ones will have no influence on the learning process (Boyacioglu, Kara, & Baykan, 2009).

Rescaling is the most commonly used normalization method. It is based on subtracting the minimum and dividing the result by the interval (x-min) / (max-min). The normalized values are between 0 and 1.

The number of neurons is selected by the lowest RMSE (Root Mean Square Error) coefficient.

$$RMSE = \sqrt{\frac{\sum_{i=1}^n (y_i - \hat{y}_i)^2}{n}} \quad (9)$$

The RMSE application offered a “check out” system by which the number of neurons could be verified. As a criterion for determining the number of neurons, RMSE allowed us to have five hidden layers neurons (see Table 8).

Table 8. Determination of the number of neurons in the hidden layer

Layer	Iteration	2010		Iteration	2009	
		RMSE			RMSE	
		Training	Testing		training	testing
1	12	0.44537625	0.38310573	22	0.458692708	0.444330958
2	29	0.43528382	0.45536798	11	0.434833301	0.459964129
3	27	0.4168345	0.41148147	18	0.44964208	0.465382638
4	51	0.40807107	0.40895232	18	0.425323406	0.447752164
5	65	0.39410785	0.38097769	56	0.4035889	0.401105971
6	23	0.42228071	0.39107928	3	0.542200148	0.528742849
7	21	0.40161922	0.43032081	9	0.451464284	0.462893076
8	48	0.39817458	0.39244235	17	0.450967848	0.471924782
9	19	0.4315449	0.42194549	28	0.416659333	0.4181758
10	19	0.44705257	0.4253716	30	0.453688219	0.458991285
11	24	0.39761288	0.39829637	14	0.441430629	0.476223687
12	13	0.4756238	0.4494619	10	0.469316524	0.449780391
13	28	0.39597348	0.39647194	3	0.537913562	0.497297698
14	12	0.40634468	0.43537915	23	0.416661733	0.414518998
15	12	0.45415856	0.42618541	30	0.456678224	0.434164715

The application of ANN method demonstrates that the most important variables in predicting distress (one year before the distress) are loan loss provisions to gross loans ratio (LLPGL), loan loss reserves to non performing loans (LLRNPL) and return on equity average (ROEA), respectively, with importance rate 100%, 57% and 27%. Regarding two years before the distress, the most important ratios for predicting bank distress are loan loss provisions to gross loans ratio (LLPGL), loan loss reserves to non performing loans (LLRNPL) and cost to income ratio (CIR), respectively, with importance rate 100%, 61.4% and 45.1%.

The Table 9 reveals the percentage of the most appropriate ratio to prevent bank distress. The result demonstrates the significant role given to loan loss provisions to gross loans ratio (LLPGL). This variable would be able to predict distress at the right moment. Indeed, banks must make provisions for loan losses in case of emergence of non-performing loans (Messai & Jouini, 2013b).

Table 9. Importance of independent variables

	Before one year		Before two years	
	Importance	Percent	Importance	Percent
EQ/TL	0.060	14.5%	0.067	21.4%
LLP/GL	0.413	100.0%	0.312	100.0%
LLR/NPL	0.235	57.0%	0.192	61.4%
CIR	0.068	16.5%	0.141	45.1%
ROEA	0.111	27.0%	0.102	32.6%
LIQ/TA	0.039	9.4%	0.081	25.9%
NL/DEP	0.074	18.0%	0.106	34.0%

Table 10 shows that the method of neural network is the best to predict distress. This method has a global performance equal to 80.6 % and 79.8 %, respectively one year and two years before the distress.

The prediction has been made a couple of times: one and two years before the distress. The prediction before one year indicates that prevision performance in the discriminant analysis, logic method and neural networks are respectively 77.7%, 76.02%, and 80.6%. Then, the prevision before two years indicates that the prevision's performance in the discriminant analysis, logistic method and neural networks are respectively 77.3%, 77.02% and 79.6%. This improves another time that the neural network method outperforms the two others (logit and discriminant analysis). These results confirm those obtained by Giovanis, (2010) and would be contrary to the result reached by Doganay, (2006) according to which logit is the best model to predict bank distress.

This study allowed us to conclude that the positive predictive value have correctly presaged a classification percentage of distressed banks. This percentage is greater than 50% for two models, namely discriminant analysis and neural networks.

Table 10. Classification one and two years before the distress

Sample	Previsions						
	Before one year			Before two years			
	0	1	Correct percentage	0	1	Correct percentage	
Training	0	277	21	93.0%	276	23	92.3%
	1	64	65	50.4%	62	64	50.8%
	Global percentage	79.9%	20.1%	80.1%	79.5%	20.5%	80.0%
Testing	0	124	11	91.9%	126	8	94.0%
	1	26	30	53.6%	31	28	47.5%
	Global percentage	78.5%	21.5%	80.6%	81.3%	18.7%	79.8%

An error type I corresponds to a classification of a failed bank as robust and an error Type II is a classification of a healthy bank as distressed. Concerning error percentages, we notice that the lowest error is obtained after using the neural network model. As for the most important error, it was observed after using the logit model (23.96%). The error type II was largely observed after the use of the discriminant analysis method (35.58%). For the purpose, this confirms the results we have achieved (see Table 11).

Table 11. Summary table

Method	Discriminant analysis		Logit		Neural networks (training)		Neural networks (testing)	
	1	2	1	2	1	2	1	2
1 or 2 years before distress								
Positive predictive value (%)	56.75	50.81	30.81	29.19	53.57	47.46	50.39	50.79
Negative predictive value (%)	86.6	88.68	95.38	97.46	91.85	94.03	92.95	92.31
Error type I (%)	17.58	19.16	23.66	23.69	17.33	19.74	18.76	18.34
Error type II (%)	35.58	34.27	25.97	16.923	28.21	21.05	24.42	26.44
Global performance (%)	77.7	77.3	76.05	77.02	80.1	80	80.6	79.8

Note. Errors type I and type II: provide false alarm.

Finally, we consider that neural network is the best method to predict distress. On the one hand it has the best percentage of prediction. On the other hand it appears that the percentage of the error type I (false positive) is equal to 17.33% and is the lowest compared with percentage provided by the two other methods.

5. Conclusion

During the two last decades, several authors have focused on methods of forecasting the bank distress. The aim of this study is to determine the most relevant indicators of financial distress in European countries in order to avoid potential crises. The prevision was carried out one and two years before that distress would occur. In this study, we have opted for the ratio non performing loans to gross loans as predictor of bank distress. We have also opted for three methods in order to choose the most appropriate one. This comparison aims to highlight the usefulness of these different methods and to decide about the effectiveness of each method in a microprudential framework. We observe that influence of internal factors on the non performing loans to gross loans ratio (NPLGL) was very significant. Therefore, we concluded that distress could be explained by a high percentage of non-performing loans by banks in expansion periods, because during these periods banks undertake more risks such as excessive lending activities without considering the quality of each loan. We recall the example, in the

Japanese crisis in the 1980s, when banks continued heavily the granting of loans without checking if there are legal certainties over ownership building lands. The same thing happened during the subprime crisis. So, in this study, we want to determine the best distress indicators. Our results suggest also that CAMEL indicators remain the only rating system to put the most relevant and important ratios to predict distress. The dependent variable, then, can be expressed by internal factors inherent to banks, which are presented by CAMEL criteria. The best percentage of prediction is obtained when we use the method of neural networks. The performance achieved by this model before one and two years was respectively equal to 80.6% and 79.8%. As a consequence, using internal financial soundness indicators is too important to predict distress in individual banks. However, our study has a number of limitations. The distress prediction need to be used in both macro and micro prudential approaches. These two approaches are very complementary and related. Future research on distress prediction may be extended as follows: First, variables relating to a macroeconomic environment should be encompassed in order to define relevant factors which could explain distress in a macroeconomic approach (stress testing framework). Second, extending the methods of prediction and add survive analysis in order to predict difficulties. Finally, using several financial variables as well as macroeconomic variables in order to choose the most relevant leading indicators of distress and in order to enhance the robustness of the results in a stress testing framework (Anderson, 2008; Lelyveld, 2009; Quagliariello, 2009).

References

- Akhter, S., & Daly, K. (2010). Macroeconomic determinants of credit risk: Recent evidence from a cross country study. *International Review of Financial Analysis*, 19(3), 165-171. <http://dx.doi.org/10.1016/j.irfa.2010.03.001>
- Altman, E. I. (1968). Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. *The Journal of Finance*, 23, 589-609. Retrieved from <http://BARRdx.doi.org/10.2307/2978933>
- Andersen, H. (2008). Stress testing of bank's profit and capital adequacy. *Norges Bank Economic Bulletin*, 79, 47-57. Retrieved from http://www.norges-bank.no/Upload/71739/EN/Stress_testing.pdf
- Barr, R. S., & Siems, T. F. (1996). Bank Failure Prediction using DEA to Measure Management Quality. *Interfaces in Computer Science and Operations Research*, 341-365, http://dx.doi.org/10.1007/978-1-4615-4102-8_15
- Boyacioglu, M. A., Kara, Y., & Baykan, O. K. (2009). Predicting bank financial failures using neural networks, support vector machines and multivariate statistical methods: A comparative analysis in the sample of savings deposit insurance fund (SDIF) transferred banks in Turkey. *Expert Systems with Applications*, 36, 3355- 3366. <http://dx.doi.org/10.1016/j.eswa.2008.01.003>
- Cardarelli, R., Elekdag, S., & Lall, S. (2011). Financial stress and economic contractions. *Journal of financial Stability*, 7(2), 78-97. <http://dx.doi.org/10.1016/j.jfs.2010.01.005>
- Cihak, M. (2007). Introduction to applied stress testing. *International Monetary Fund*. Working paper No. 07/59, pp. 1-74. <http://dx.doi.org/10.5089/9781451866230.001>
- Demyanyk, Y., & Hasan, I. (2010). Financial crises and bank failures: A review of prediction methods. *Omega*, 38(5), 315-324. <http://dx.doi.org/10.2139/ssrn.1518368>
- Doganay, M., Ceylan, N., & Aktas, R. (2006). Predicting Financial Failure of the Turkish Banks. *Annals of Financial Economics*, 2(1), 97-117. <http://dx.doi.org/10.1142/S2010495206500059>
- Fioramanti, M. (2009). Predicting sovereign debt crises using artificial neural networks: A comparative approach. *Journal of Financial Stability*, 4, 149-164. <http://dx.doi.org/10.2139/ssrn.1518368>
- Gentry, J. A., Newbold, P., & Whitford, W. (1985). Classifying bankrupt firms with funds flow components. *Journal of Accounting Research*, 46-160. <http://dx.doi.org/10.2307/2490911>
- Giovanis, E. (2010). A Study of Panel Logit Model and Adaptive Neuro-Fuzzy Inference System in the Prediction of Financial Distress Periods. *World Academy of Science, Engineering and Technology*, 4(4), 540-546. <http://waset.org/publications/7348>
- Godlewski, C. J. (2004). Le Rôle de l'Environnement Réglementaire, Légal et Institutionnel dans la Défaillance des Banques Le Cas des Pays Emergents. *Banque et marchés*, 73, 20-31. Retrieved from <http://www.revue-banque.fr/article/role-environnement-reglementaire-legal-institution>
- Gonzalez-Hermosillo, B. (1999). Determinants of Ex-Ante Banking System Distress: A Macro-Micro Empirical Exploration of Some Recent Episodes. *International Monetary Fund*. Working Paper No. 33. Retrieved

- from <http://www.imf.org/external/pubs/ft/wp/1999/wp9933.pdf>
- Kiran, T. R., & Rajput, S. (2011). An effectiveness model for an indirect evaporative cooling (IEC) system: Comparison of artificial neural networks (ANN), adaptive neuro-fuzzy inference system (ANFIS) and fuzzy inference system (FIS) approach. *Applied Soft Computing*, 11(4), 3525-3533. <http://dx.doi.org/10.1016/j.asoc.2011.01.025>
- Konstandina, N. (2006). Probability of Bank Failure: The Russian Case. *Economic Education and Research Consortium*. Working Paper, No. 06/01. Retrieved from http://eercnetwork.com/default/download/creator/working_papers/file/c251e775ae93dd556f0a09cad148701af7c25f37.pdf
- Kouki, M., & Elkhaldi, A. (2011). Toward a Predicting Model of Firm Bankruptcy: Evidence from the Tunisian Context. *Middle Eastern Finance and Economics*, 14, 26-43. Retrieved from http://www.middleeasterneconomicsandfinance.com/issues/MEFE_14.html
- Kulthunga, A., & Rehman, S. (2012). Banking Sector Soundness, Innovation, and Development: Emerging Europe and South Asia. *Archive of European Integration, ACES Working Papers*, 1-26. Retrieved from http://aei.pitt.edu/59197/1/ACESWP_Chp_3_Kulathunga_2012.pdf
- Lelyveld, I. (2009). Stress testing: The link between Macro and Micro. *The international Journal of Central Banking*, 5(3). Retrieved from <http://www.ijcb.org/journal/ijcb09q3intro.pdf>
- Lin, S. L. (2010). A two-stage logistic regression-ANN model for the prediction of distress banks: Evidence from 11 emerging countries. *African Journal of Business Management*, 14(4), 3149-3168. Retrieved from http://www.academicjournals.org/article/article1380731107_Lin.pdf
- Lin, T. (2009). A cross model study of corporate financial distress prediction in Taiwan: Multiple discriminant analysis, logit, probit and neural networks models. *Neurocomputing*, 72, 3507-3516. <http://dx.doi.org/10.1016/j.neucom.2009.02.018>
- Mager, F., & Shmeider, C. (2009). Stress-testing German credit portfolios. *Journal of Risk Model Validation*, 3(3), 27-45. Retrieved from http://m.risk.net/digital_assets/5005/jrm_v3n3a2.pdf
- Mayes, D. G., & Stremmel, H. (2012). The Effectiveness of Capital Adequacy Measures in Predicting Bank Distress. *The European Money and Finance Forum*, 1, 1-53. Retrieved from <http://www.suerf.org/download/studies/study20141.pdf>
- Messai, A. S., & Jouini, F. (2013a). Predicting banking distress in European countries. *Journal of economic and social studies*, 3(1), 61-82. <http://dx.doi.org/10.14706/JECOSS11312>
- Messai, A. S., & Jouini, F. (2013b). Micro and macro determinants of non performing loans. *International Journal of Economics and Financial Issues*, 3(4), 852-860. Retrieved from <http://www.econjournals.com/index.php/ijefi/article/viewFile/517/pdf>
- Montgomery, H., Hanh, T. B., Santoso, W., & Besar, D. S. (2005). Coordinated Failure? A Cross-Country Bank Failure Prediction Model. *Institute Discussion Paper No. 32*. <http://dx.doi.org/10.2139/ssrn.1905857>
- Paquet, P. (1997). L'utilisation des réseaux de neurones artificiels en finance. *Laboratoire de orléanais de gestion, IAE*, wp1997-01, 1-25. Retrieved from <http://www.univ-orleans.fr/log/Doc-Rech/Textes-PDF/1997-1.pdf>
- Poghosyan, T., & Cihak, M. (2011). Distress in European banks: An analysis based on a new dataset. *Journal of Financial Services Research*, 40(3), 163-184. <http://dx.doi.org/10.1007/s10693-011-0103-1>
- Quagliariello, M. (2009). *Stress-testing the Banking System: Methodologies and Applications* (pp. 1-336). Cambridge University Press. Retrieved from <http://www.cambridge.org/us/academic/subjects/economics/finance/stress-testing-banking-system-methodologies-and-applications?format=HB#>
- Ray, S. (2011). Assessing Corporate Financial Distress in Automobile Industry of India: An Application of Altman's Model. *Research Journal of Finance and Accounting*, 2(3), 26-43. Retrieved from <http://www.iiste.org/Journals/index.php/RJFA/article/view/335>
- Reinhart, C. M., & Rogoff, K. S. (2010). Growth in a Time of Debt. *American Economic Review*, 100(2), 573-578. <http://dx.doi.org/10.1257/aer.100.2.573>
- Sevim, C., Oztekim, A., Bali, O., Gumus, S., & Gursen, E. (2014). Developing an early warning system to predict currency crises. *European Journal of Operational Research*, 237(3), 1095-1104. <http://dx.doi.org/10.1016/j.ejor.2014.02.047>

- Sinkey, J. F. (1975). A Multivariate Statistical Analysis of the Characteristics of Problem Banks. *Journal of Finance*, 30, 21-36. <http://dx.doi.org/10.2307/2978429>
- Sorge, M., & Virolainen, K. (2006). A comparative analysis of macro stress testing methodologies with application to Finland. *Journal of Financial Stability*, 2(2), 113-151. <http://dx.doi.org/10.1016/j.jfs.2005.07.002>
- Thomson, J. B. (1991). Predicting Bank Failures in the 1980s. *Federal Reserve Bank of Cleveland Economic Review*, 27(1), 9-20. Retrieved from <http://www.clevelandfed.org/Research/Review/1991/91-q1-thomson.pdf>
- Vogiazas, S. D., & Nikolaidou, E. (2011). Investigating the determinants of non performing loans in the Romanian Banking System: An empirical study with reference to the Greek crisis. *Economics Research International*, 1-13. <http://dx.doi.org/10.1155/2011/214689>
- Wong, J., Choi, K. F., & Fong, T. (2008). A framework for stress testing bank's credit risk. *Journal of Risk Model Validation*, 2(1), 3-23. Retrieved from <http://www.risk.net/journal-of-risk-model-validation/technical-paper/2161266>
- Wong, J., Wong, T. C., & Leung, P. (2010). Predicting banking distress in the EMEAP Economies. *Journal of Financial Stability*, 6, 169-179. <http://dx.doi.org/10.1016/j.jfs.2010.01.001>
- Yildiz, B., & Akkoc, S. (2010). Bankruptcy Prediction Using Neuro Fuzzy: An Application in Turkish Banks. *International Research Journal of Finance and Economics*, 60, 114-126. Retrieved from http://nysea.bizland.com/nysea/publications/proceed/2010/Proceed_2010_p143.pdf

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

An Overview of Foodpreneur Awareness among Small and Medium-Sized Enterprises (SME) of Halal Certification

Norngainy Mohd Tawil^{1,2}, Shamshubaridah Ramlee^{1,3}, Jauhari Jaafar¹ & Firdaus Mohd Saat¹

¹ Centre for Entrepreneurship and SMEs Development, Universiti Kebangsaan Malaysia

² Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia, Selangor, Malaysia

³ Faculty of Economics and Management, University Kebangsaan Malaysia, Malaysia

Correspondence: Norngainy Mohd Tawil, Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia, 43650 Bandar Baru Bangi, Selangor, Malaysia. E-mail: nmtawil@gmail.com

Received: April 17, 2015 Accepted: May 11, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p91

URL: <http://dx.doi.org/10.5539/ass.v11n21p91>

Abstract

The objective of this study is to measure the awareness of Halal Certification among the Small and Medium-sized Enterprises (SME) especially those who are involved in the food industry. The study reveals that the awareness toward Halal Certification among Small-Medium Enterprise (SME) is at low level. But that raises a question mark when the study also indicates that the perceptions of the Muslim entrepreneur on halal food are very good.

Keywords: Halal certification, small medium enterprise, Muslim entrepreneur

1. Introduction

Food innovation remains a growth platform of a company. The innovation creates and provides opportunities for the company to remain relevant to survive in an atmosphere of intense business competition. Malaysia as a halal product manufacturer with Halal logo by JAKIM gained world recognition can provide product differentiation advantages to SMEs to explore international markets. Although various incentives have been provided, it is only utilized by companies that have established themselves in the business for a long time. Therefore, the SMEs also should not let themselves left behind. Furthermore, the government has given a lot of effort to make Malaysia as a halal food hub of the world, so the SMEs need to utilize this opportunity to upgrade their business (Arif, 2009).

According to Zulkifli Hasan (2008), halal products now have a very high demand due to population growth increasing among the Muslim population of 57 countries. It is estimated that by 2010 the Muslim population increased to three billion people by 2025 while the number rise to 30 percent of the total world population. Therefore, halal hub has attracted many countries such as Thailand, Singapore, and Philippines who are aware of the development of halal products. Other countries like the United States and Australia are also scrambling to take this opportunity to become producers of halal products (Nur Razuani Razali, 2010).

2. Halal in Muslim Perspective

Malaysia is a nation with Muslim are the majority, so the concept of *halal* is a big factor of consumption. Muslim consumers need to consume products and service from various, which somehow doubtful (Ambali & Bakar, 2012). When we talk about halal, it is not referring to food only, but also all matters of daily life.

This covers all aspects of human life and the dietary system without an exception. A Muslim is expected to ensure the legal status of any food before eating it. The “halal” food is the food that is permitted by Syariah for consumption while the forbidden one is “haram”.

The standards developed by Department of Standards Malaysia have been recognized world wide (Talib et al., 2008). Whereas Bornne and Weber (2008) mentioned that the mechanism of halal quality must depends on the condition need to be followed as required for Muslim consumers.

3. What Is Halal Food?

According to Asyraf (2011) and Ahmad Nizam (2006), Syariah (Islamic law) has set a certain condition to be fulfill as halal food and most of food manufacturers need to appoint halal food committee to avoid misused of halal logo.

4. The Important of Halal Certification

Halal Certification is the first step to expand the market for halal products to help consumers get products which is halal, safe and quality. (Ahmad Hidayat Buang et al., 2012). For micro and small enterprise that wants to penetrate the local market, effort to get Halal Certification status is something that is extremely difficult to achieve. The most common problem encountered is not to understand the demands of certification, which has resulted in this enterprise discontinue their desire to grow. They found that a claim or procedure is too complicated and requires high expenditure. Given that at least 80% of the food industry SMEs comprise Bumiputera enterprise where food is produced necessarily lawful, it is not fair if they are not motivated to get Halal Certification to expand their business.

Deputy Director of the Department of Islamic Affairs, Negeri Sembilan (JHEAINS), Ustaz Amran Awaluddin said, at present, more than half of the Halal Certificate holder consists of non-Bumiputera businessmen. According to him, this scenario shows the non-Muslim traders began to care for the needs of Muslim consumers of halal food and thus seize the opportunity to market their products more widely (Sinar Harian, 2013).

Fortunately, Ambali A. R. & Bakar A. N. (2012) indicate that the introduction of *halal* logo and certification by (JAKIM) has generated more awareness among the Muslims on the importance of consuming manufactured products or engaging in services that follow Islamic guidelines and principles. JAKIM also would ensure all requirements stipulated under the MS 1500:2004 halal standards to be fulfilled before any halal product awarded a Halal Certificate (Quantaniah et al., 2013). Any product that awarded a Halal Certification is permitted to use Halal Logo in their label. Figure 1 show the Halal Logo which authorized by JAKIM.



Figure 1
(Halal Malaysia, 2014)

5. Halal Statistic in Malaysia

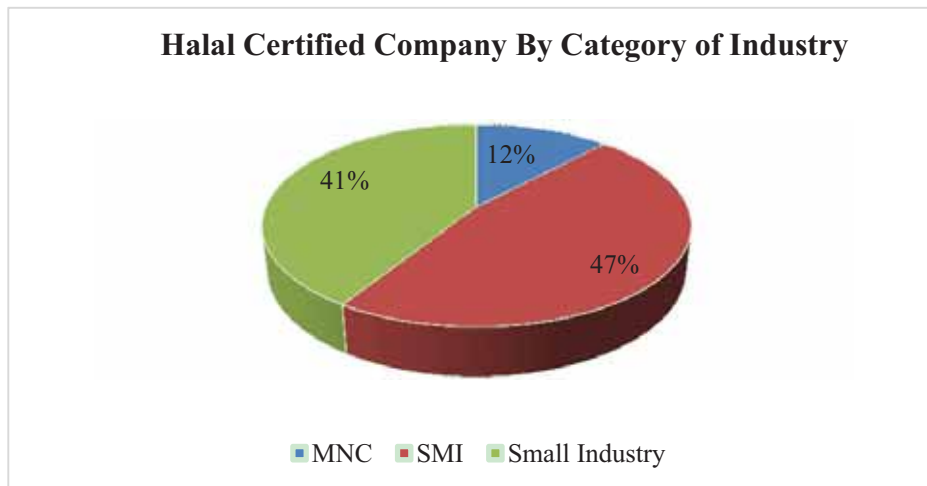


Chart 1

Chart 1 above indicate that Small Medium Industry (SMI) have largest portion with 47% of the companies has been certified. Small Industry is the second with 41% and followed by Multinational corporations (MNC) with only 12%.

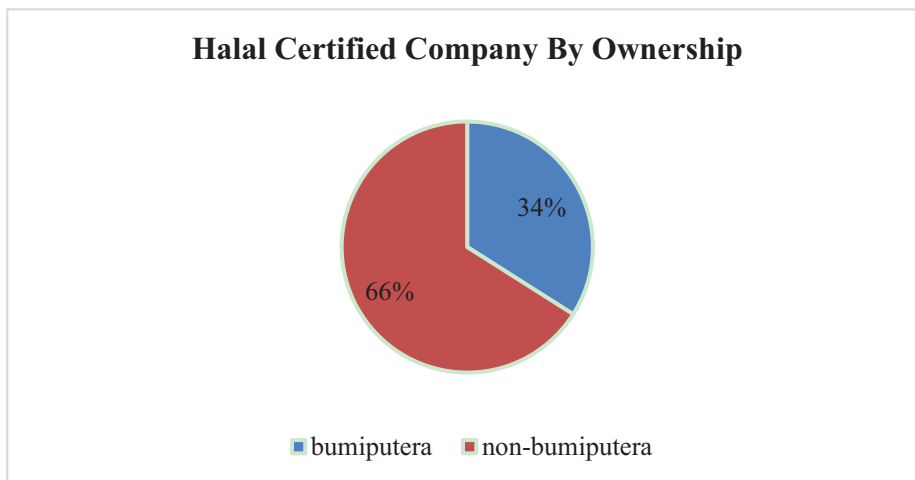


Chart 2

Chart 2 above indicates by all company which being certified by JAKIM, only 34% own by Bumiputera. Whereas another 66% of the companies are own by non-bumiputera (Halal Industry Development Cooperation, 2014).

6. Conclusion and Recommendation

The finding shows that awareness of small-medium enterprise (SME) toward Halal Certification is at low level. But the perceptions of the entrepreneur on halal food are very good .This is very disappointing because by understanding the important of Halal Certification in food industry will give SMEs a lucrative revenue. The potential of halal food industry was so big and will grow bigger by time. So, SMEs must take this opportunity to compete with others.

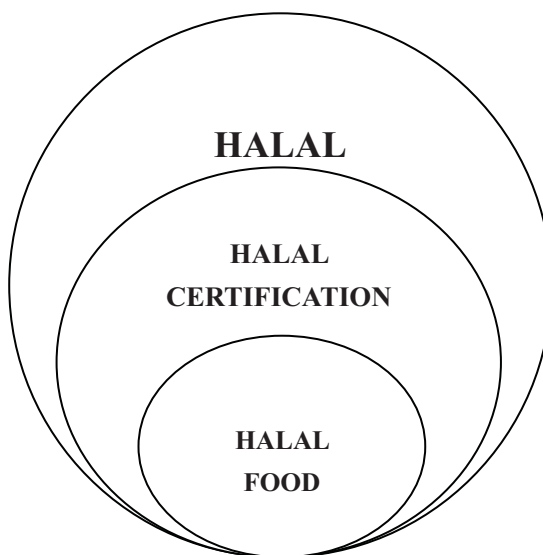


Figure 2.

The Figure 2 shows that the concept of halal. Halal food is only part of Halal Certification. Where we can find that Halal Certification also apply for another products and services. For example like toothpaste, cosmetics and many more. Whereas, Halal Certification is only a tools to recognize the Halal products that comply with syariah.

This is being supported by Ismail F. R. & Nasiruddin K. (2014) by saying that Malaysia consists of a multiracial ethnic which if the food producer and supplier knows how to tackle the market creatively, it will help to boost company sales and brand positioning and future time and thus also promoting halal products widely.

Therefore, it is recommended that the government should take responsibility to organize a series of campaigns to give the SMEs knowledge and encourage them to get the Halal Certification. If the halal food industries in Malaysia are very serious to compete in the global market and to position Malaysia as a Global Halal Food Hub, it must increase the numbers of Halal Certification holders.

Reference

- Abdullah, A. N. B. (2006). *Perception And Awareness Among Food Manufacturers and Marketers On Halal Food In The Klang Valley*.
- Ambali, A. R., & Bakar, A. N. (2012). *People's Awareness On Halal Foods And Products: Potential Issues For Policy-Makers*. Universiti Teknologi MARA. <http://dx.doi.org/10.1016/j.sbspro.2014.01.1104>
- Arif, S. (2009). *Keupayaan Pemasaran dalam Kalangan Pengusaha Kecil Makanan Halal di Melaka Tengah: Satu Kajian Awal*. Universiti Kebangsaan Malaysia.
- Azeez, W. (2013). The Halal Dietary System as a Recipe for Good Health. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 7(4), 28-34. <http://dx.doi.org/10.9790/0837-0742834>
- Bonne, K., & Verbeke, W. (2008). Religious Values Informing Halal Meat Production and the Control and Delivery of Halal Credence Quality. *Agriculture and Human Values*, 25(1), 35-47. <http://dx.doi.org/10.1007/s10460-007-9076-y>
- Buang, A. H., & Mahmud, Z. (2012). Isu Dan Cabaran Badan Pensijilan Halal Di Malaysia. *Shariah Journal*, 20(3), 271-288.
- Halal Industry Development Cooperation*. (2014). Retrieved from http://www.hdcglobal.com/publisher/gwm_industry_statistics
- Halal Malaysia*. (2014). Retrieved from <http://www.halal.gov.my/v3/index.php/en/about-halal-certification/halal-definition>
- Harian, S. (2013). *Halal Awareness of Muslim Entrepreneurs*.
- Hasan, Z. (2008). *Undang-Undang Produk Halal Di Malaysia: Isu Penguatkuasaan Dan Pendakwaan*. Universiti Sains Islam Malaysia.
- Ismail, F. R., & Nasiruddin, K. (2014). *Perception of Non-Muslim Consumers towards Halal Products in Malaysia FTMS College, Technology Park Malaysia*. Bukit Jalil, Kuala Lumpur, Malaysia.
- Quantaniah, N. A., Noreina, & Syakinah, N. (2013). *Selecting Halal Food: A Comparative Study of the Muslim and Non Muslim Malaysian Student Consumer*. Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Malaysia.
- Rahman, A. H. A. (2011). *Knowledge on Halal Food amongst Food Industry Entrepreneurs in Malaysia*. Universiti Malaysia Terengganu. <http://dx.doi.org/10.5539/ass.v7n12p216>
- Razali, N. R. (2010). *Kajian Ke Atas Potensi Sabah Sebagai Hab Halal*. Universiti Malaysia Sabah.
- Talib, A., Ali, M., Anuar, K., & Jamaludin, K. R. (2008). *Quality Assurance in Halal Food Manufacturing in Malaysia: A Preliminary Study*.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Structure and Main Issues of “al-Tasdid” of Husam al-Din al-Syghnaqi

Daniyar B. Shalkarov¹, Anar A. Mustafayeva¹ & Dariga M. Kokeyeva¹

¹ Al-Farabi Kazakh National University, Almaty, Kazakhstan

Correspondence: Anar Mustafayeva, Al-Farabi Kazakh National University, Al-Farabi st. 71, 050000, Almaty, Kazakhstan. E-mail: academic.uni@mail.ru

Received: March 27, 2015 Accepted: April 15, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p95

URL: <http://dx.doi.org/10.5539/ass.v11n21p95>

Abstract

The study of the theological maturidia in the Central Asia was developed by the majority of outstanding scientists in the Turkic area and was known from generation to generation with manuscripts. One of these famous scientists was Abu al-Mu‘in al-Nasafi. In Central Asia, in the branch of the Islamic kalam theology there were the works “Tabsira al-Adilla”, “Bahr al-Kalam”, “al-Tamheed li qawa‘id al-Tawheed”, which considered the issues of maturidia theological study. In the XIV century the great scientist from Syghanaq Husam al-din al-Syghnaqi made a detailed research of the work “al-Tamheed li qawa‘id al-Tawheed” of Abu al-Mu‘in al-Nasafi and wrote the work “al-Tasdeed fi sharh al-Tamheed” by giving a full explanation of all questions relating to the issue. This article considers the content and the kept versions in the World libraries and the importance of this work for today. There is a different information about the original version of the manuscript. The first, the manuscript is by Amca Zade Huseyn 309 number, written by Husam al-din al-Syghnaqi personally and kept in the turkic library. This information is written in the work “Syghanaq Sanlagi/ The star of the Syghanaq” of Shamshaddin Kerim, the second manuscript is kept in the Egypt Arabic Republic, in the library “Dar al-Kutub Misrya”. It is written in this manuscript, that the manuscript was published in 1125 according hizhra calendar. Therefore the article gives an explanation of the main maturidia kalam principles, which cover five chapters of the work.

Keywords: the Central Asia, dictionary, hanafia-maturidia, historical-biographical, al-Nasafi, al-Syghnaqi

1. Introduction

Nowadays the Islamic religion has an influence on the society of the country. In Central Asia the maturidia direction became the main direction, which was kept from the X century and it was one of the main directions of Islam. Maturidia had a great importance in Mawerennahr area. It is obvious, that the cultural elements of the Central Asia and social environment of Abu Mansur al-Maturidi had a direct influence on the personal development of the scientist. His teachers and social surrounding Samarqand aqida directions of Abu Hanifa and fiqh views, philosophy and theology bases were developed in Dar al-Dzhuzdhanian school. His teacher Abu Nasr Ahmad ibn ‘Abbas ibn Husain al-Iazy and after him Abu Mansur al-Maturidi were the leads of this school.

Also, his teachers Abu Bakr Ahmad ibn Ishaq ibn Salih al-Dzhuzdzhani, Nusair ibn Yahya al-Balhi, Muhammad ibn Muqatil al-Razi gave lectures in this school. Also, it is clear that Samarqand scientists worked together with the scientists from Balh, Rey, Nishapur areas. The scientific direction of Abu Mansur al-Maturidi covered a wide list of issues, and it was clear, that the scientist used some theoretical materials from the work “Logika” of Aristotel. The followers of Abu Mansur al-Maturidi Abu al-Qasim Ishaq ibn Muhammad ibn Isma‘il al-Hakim al-Samarqandi (340/951y.), Abu al-Hasan ‘Ali ibn Sayyid al-Rustughfani (345/956y.), Abu Ahmad ibn ‘Abbas al-Yazy, Abu Muhammad ‘Abd al-Karim ibn Musa al-Bazdawi (390/1000y.) are influenced to develop of Turkic spiritual lifestyle (Muminov, 2006).

Lots of scholars as al-Bazdawi and al-Sabuni, al-Oshi and Abu al-Mu‘in al-Nasafi, ‘Umar al-Nasafi and Abu Barakat al-Nasafi put an effort in the development of the maturidia theological study and the spiritual culture of this area. Abu Mansur al-Maturidi had lots of work about kalam, fiqh usul al-fiqh and the history of madhabs. One of these works is “Kitab al-Tawheed” and this work is the object of the research of some famous scientists (Yazici, 1987). We can see that the work considers the theological principles of the hanafia direction. Husam al-din al-Syghnaqi wrote comments on the work “al-Tamheed li qawa‘id al-Tawheed” of Abu al-Mu‘in al-Nasafi.

We can notice, that the name of this scientist is very famous in the Islamic World. The full name of Husam al-din al-Syghnaqi is Husein ibn 'Ali ibn al-Hadzhadh ibn 'Ali and his nickname is Husam al-din al-Syghnaqi (because of his place of birth Syghanaq).

According to hidzhra calendar he is the scientist of VII-VIII century, muta'ahhirin scientists (the name of the scientists, who lived in the second period in the Islamic World). He studied in Abu Hanifa school in Baghdad, then went to Damask, Aleppo and according to hidzhra calendar passed away in 711 or 714 (according to miladi calendar 1310/1314). One of his works "al-Tasdeed fi sharh al-Tamheed" attracted our attention. The manuscript contains 232 pages, with 20-21 lines on one page and 12-13 words in each line. The scientist used 81328 or 82000 words in this work. This fact proves his knowledge of the Arabic language, the highest level of language. Also the numbers of pages are given above.

The work covers the basis of the maturidia study and the issues of 'aqida (belief). If we look through the content of the manuscripts, we will see the main positions and views of some Islamic groups. The work "Kitab al-Tasdeed fi sharh al-Tamheed" of Husam al-din al-Syghnaqi is began with the praising of Allah. Also there is an information about the anthropological origin of the humanity, organs of senses, wisdom, and other qualities given by Allah. The fact of the creating of the humanity by Allah was discussed a lot. For instance, world hadith, the meaning of the word hadith is knew, created, absolute. In the work of Husam al-din al-Syghnaqi there is a word qadim. The meaning of this work as without beginning no need in something. So, this is the concept, that all these words are related to Allah. The meaning of the word "world" coincide with the word the word "'alam" of the Arabic language. The word "'alam" is given to all except Allah. For instance, the sky and earth, created by Allah space, it is clear that all four elements show us, that everything what was called is the peace of the World (Brockelmann, 1938).

2. Material Studies and Methods

The article considers the religious concepts of the work "Kitab al-Tasdid fi sharh al-Tamhid" of the Central Asian scientist Husam al-din al-Syghnaqi. The works "Kitab al-Tawheed" and "Tabsira al-Adilla" of Abu Mansur al-Maturidi and Abu al-Mu'in al-Nasafi (Yazici, 1987) and the content of the work "al-Tasdeed" of Husam al-din al-Syghnaqi (al-Syghnaqi & al-Qanit, 2001). The information of manuscript is taken from the libraries of the Arabic countries and Turkic scientific centers. The work "Kitab al-Tasdeed fi sharh al-Tamheed" which was written in the Arabic language "Kitab al-Tamheed" and "Tabsira al-Adilla" of Abu al-Mu'in al-Nasafi, "Kitab al-Tawheed" of Abu Mansur al-Maturidi were used as the basic source of information. There was some information from the work "Geschichte der arabischen Litteratur" of C.Brockelmann. Also turkic literature "Maturidi ve Nesefiye göre insan hürriyeti kavramı" of Yazici oghlu (Yazici, 1987), "Maturidiyye Akaidi" of Nur al-din al-Sabuni, "Tabsira al-Adilla fi usul al-din" of Husayn Atay, "Ebu Hanife" of Abu Zahra gave an information about the history of maturidia (Ebu Zehra, 1999). There are some works about the manuscript of the scientist. So we consider that it will be better to study the translation of the work from the original version by comparing the values of the work with the Islamic principles and maturidia direction.

3. Results

The work "Kitab al-Tasdeed fi sharh al-Tamheed" of Husam al-din al-Husain ibn 'Ali ibn Hadzhadh ibn 'Ali al-Syghnaqi is the comment of the work "al-Tamheed li qawa'id al-Tawheed" of Abu al-Mu'in Maimun ibn Muhammad al-Nasafi al-Makhuuli al-Hanafi. We can see this work in the works of the following scientists. They are:

A. The work "Kitab al-Tasdeed fi sharh al-Tamheed" of the scientist can be seen in the work "Kashf al-Zunuun 'an asami' al-kutub wa al-funuun" of Hadzhi Halifa in the 1st chapter by the numbers №484, №403 as the work "Kitab al-Tasdeed fi sharh al-Tamheed".

B. In the work "al-Dzhawahir al-mudi'a fi tabaqaat al-hanafia" of Muhi al-din Abi Muhammad 'Abd al-Qadir ibn Muhammad ibn Muhammad ibn Nasrullah ibn Salim ibn Abu al-Wafa al-Qurashi al-Hanafi in the first chapter by the 338th number, in the second chapter, by the 114th number in the IV chapter by the 73rd number, there is an information about al-Syghnaqi. It is said, Husam al-din al-Syghnaqi wrote comments for the work "al-Tamheed" of al-Makhuuli (al-Qurashi, 1962).

C. The name of the scientist is given as Husam al-din 'Ali Husam al-din al-Syghnaqi in the comments of the work "al-Dzhawahir al-mudi'a fi tabaqaat al-hanafia" of 'Abd al-Fattah Muhammad al-Huluwwi in the II chapter by the number 507 on the 114th page. It is written that Husam al-din al-Syghnaqi wrote comments on the work "al-Tamheed" of al-Makhuuli.

D. In the work “al-Muhtasar” of ‘Ala al-din ‘Ali Chelebi Imrullah Qinali Zada there is a fact, that Husam al-Milla al-Syghnaqi wrote about his works in the work “Kitab al-Tamheed” of al-Makhuuli and the information we can find in the works of al-Kardari and Hafiz al-din. In the work “al-Muhtasar” it was written about teaching abilities of Husam al-din al-Syghnaqi.

E. In the work “Kata’ib al-Kafawi” of Mahmud ibn Sulaiman on the page 296 it was written about Husam al-din al-Syghnaqi that he wrote comments on the works “Kitab al-Tamheed” of al-Imam al-Makhuuli, “Kitab al-Kafi fi sharh usul al-fiqh” of Abu al-Yusr al-Bazdawi. Husam al-din al-Syghnaqi taught fiqh study, one of his followers was Qiwam al-din al-Ka’ki.

F. In the work “al-Tabaqat al-saniya” of Taqi al-din ibn ‘Abd al-Qadir al-Tamimi al-Dari al-Yazi al-Mysri in the III chapter it was written that the scientist learned fiqh concept from al-Imam Hafiz al-din Muhammad ibn Muhammad ibn Nasr and al-Imam Fahr al-din Muhammad ibn Muhammad al-Maimarghi and wrote comments on the work “al-Tamheed ‘an usul al-din” of Abu al-Mu’in al-Nasafi. The work of the scientist is called “Kitab al-Tasdeed fi sharh al-Tamheed” in this research. The work “Kitab al-Tasdeed fi sharh al-Tamheed” of Husam al-din al-Syghnaqi contains 232 pages, approximately 23-24 lines in each page, each line has 12-13 words. The scientist used 81328 or 82000 words. The numbers of pages are written above. This fact shows that the scientist had a very high level of knowledge of Arabic language. The origin of this manuscript is kept in the Egypt Arabic Republic in the library “Dar al-Kutub Mysria” in the section “Kitab al-Tawheed” by number 8674 (Ibn Kutlubugha, 1987). It is written in manuscript, that it was printed and published in 1125 according to Hidzra calendar.

The manuscript considers the basis of maturidia theological study and the issues of aqida (belief). Husam al-Milla wrote thirty three chapters (fasls). The work is started with praising of Allah and Bismillah. The work “Kitab al-Tasdeed fi sharh al-Tamheed” of Husam al-din al-Syghnaqi is began with proving the fact, that Allah is the only one and great. Husam al-din covered the anthropological origin of the humanity issues of senses and wisdom in his research. Also, he gave an explanation of principles ‘aqida of maturidia schools in the area Mawerennahr. But considering the issues of ‘aqida he did not talk about becoming alive after death and others. In this research he wrote about ‘aqida groups and the conversation between ‘aqida and fiqh groups and the main believing issues, which took an important place at that time. In his work Husam al-din al-Syghnaqi called the Abu Mansur al-Maturidi as a “al-Shaih”. The scientist wrote about science and conscience first, then he gave an explanation of the issues of ‘aqida. Husam al-Milla wrote about positions of mu’tazila, karramia, dzhabria, qadaria ‘aqida groups and as the answers he gave lots of ayats of Quran. The values of our past generation, ancestries we can see in all manuscripts of the scientist. In the library Dzharullah Efendi in Turkey it was written on the cover of the manuscript. “Kitab al-Tasdeed fi sharh al-Tamheed min ‘ilm al-kalam ‘ala usul al-ash’aria min ahl al-sunna wa al-dzhama’a” in the 5th section by the number 1207. Also it was written, that before Dzharullah Efendi library this book was by Ummu Kulsum, As’adbek. And the first page had the content. The book considers following issues. We give only the 5 chapters of the manuscript “Kitab al-Tasdeed fi sharh al-Tamheed”. The manuscript of Husam al-din al-Syghnaqi is divided in 33 chapters by giving theological principles of the kalam philosophy of the Islamic religion. They are:

1. “Fasl fi isbat al-haqa’iq wa al-‘Uluum/The chapter “Proving the truth and science””.
2. “Fasl fi isbat huduus al-‘Alam/The chapter “Proving the creation of the World””.
3. “Fasl fi anna al-‘alama lahu muhdith/ The chapter “Creation of the World is hadith””.
4. “Fasl fi isbat al-Wahdania al-Soni’/The chapter “Proving the existence of Allah, Allah is the only one””.
5. “Fasl fi isbat qadim al-Soni’/The chapter “Proving the existence of the creator from the past””.

The introduction and the main part of the work are started with the word “bismillah”. The style of this work is similar to the style of other Eastern scientists. The scientists of that time started their works with praising Allah and Prophets. So, it is the basis of the Muslims traditional methods and structural part of the research. As Abu Mansur al-Maturidi said, the basis of the Islamic science is in tawheed study (Allah is only one). Also, there is an information about works “Kitab al-Hidaya” and “Kitab al-Tamheed” tawheed study is the core of shari’a science (tafseer and ta’weel). Noticing the history of the Islamic-scientific tradition from the Prophet’s time, Husam al-din al-Syghnaqi chose the work of his teacher Abu al-Mu’in al-Nasafi and wrote comments and explanation for “Kitab al-Tamheed” and showed the excellence of the traditional Islam in the hanafia direction in the society of that time. He emphasized, that the work “al-Tamheed” was one of the main researches in Central Asia and in the Islamic World, with clear words, it was the classical research of that time. The author called the names of

great scientists of the ahl al-sunna wa al-dzhama'a direction on the second page of the research (al-Syghnaqi, 708).

4. Discussion

It was obvious that the work was written by paying attention to the opinions of shari'a, kalam, tafseer, hadith scientists. Calling the names of the great scientist in manuscript, also the author of the work "al-Tamheed" Abu al-Mu'in al-Nasafi was called "al-Musannif al-Tamheed" Husam al-din al-Syghnaqi underlined, that he wrote his research by the influence of the work "al-Tamheed". Husam al-din al-Syghnaqi in the beginning of the work called the names of the following scientists. They are: 1) Sayf al-din Abu al-Mu'in Maimuun ibn Muhammad ibn Muhammad al-Makhuuli al-Nasafi; 2) al-Imam al-Rabbani al-'Amil al-Samdani; 3) Mawlana Hafiz al-din Muhammad ibn Muhammad ibn Nasr al-Buhari; 4) al-'Allamatu al-'Alim Ustad Bani Adam al-Ustaz al-Kabir Shams al-din Muhammad ibn 'Abd al-Sattar ibn Muhammad al-'Imadi al-Kerdari; 5) Shaih al-Islam Sahib al-Hidaya Burhan al-din Abu al-Hasan 'Ali ibn Abi Bakr ibn 'Abd al-Dzhalil ibn al-Halil al-Rishdani al-Marghinani; 6) Al-Shaih al-Imam al-Zahid Zia al-din Muhammad ibn al-Husein ibn Nasir ibn 'Abd al-'Aziz al-Nusuhi; 7) Al-Shaih al-Imam 'Ala al-din Abu Bakr Muhammad ibn Ahmad Abi Muhammad al-Samarqandi; 8) Al-Shaih al-Imam Sayf al-Haq Abu al-Mu'in al-Nasafi etc.

Also, on the second page the scientist wrote about the introduction of the work of his teacher Abu al-Mu'in al-Nasafi. The author tried to show that the words and style of his teacher is *unic* and special by the text example "Qauluh", and he concluded the work by writing thankful words to Allah for the abilities, the humanity has. On the third page he wrote about humans values, which are given by Allah, and people will understand and realize it if they choose the right way of life, all these vies of point were written in the works "al-Tamheed" and "Tabsira al-Adilla". The person has opportunity to choose the right or wrong way.

Husam al-din al-Syghnaqi called all these values al-istita'a. As the evidence and proving he gives the ayat from Quran as "La yukallifu Allahu nafsan illa wusa'ha". On the 4th page the scientific wrote about the creation of the World and people, nature and gives the ayat from Quran "Inna fi halq al-Samawaat". On the 5th page the scientist explains the differences between the words been thankful and praising (hamd), responsibilities and abilities. Antonym of the word being thankful being mean praising-giving bad characteristics. The ability is the value from Allah and the responsibility is the serving of the people to Allah. Responsibility is using the things for needs. The people are sensible and all these responsibilities take an important place in peoples in peoples life. On the 6-7th pages there is an explanation of all these issues.

On the 9-10-11th pages the author gives an explanation and his opinion about shari'a and kalam issues of the work of his teacher Abu al-Mu'in al-Nasafi, he compared all the previous opinions of the scientists and called it "Kitab al-Tamheed fi qawa'id al-Tawheed" the word "tamheed" has the meaning easy and introduction, pointing. So, "Kitab al-Tamheed" means the core and basis of shari'a science and kalam study.

In manuscript Husam al-din al-Syghnaqi gave lots of facts, evidences to prove his opinion and on the 8th page of his research he tied to explain the first chapter "Fasl fi isbat al-haqa'iq wa al-'Uluum/The chapter "Proving the truth and science". This chapter considers the creation of the world and knowledge, the functions and qualities of things and the ways of perception surrounding the words muhdith and qadim. He gave a characteristic of the sophism groups and wrote about principles of all religious groups of the society of that time. He called these groups the group, which don't see the difference between good and bad. The author tried to explain the grammatical structure of the names of the chapters in manuscript by showing the subject and verbs in it. Also, we can notice, that in order to avoid difficulties in understanding he gave the instructions in the work. Imam A'zam Abu Hanifa and Imam al-Auza'i discussed the violence in the region. The scientist Nur al-din al-Sabuni wrote about 5 senses of people, by means of which people can get knowledge and it is "iktisab function". His teacher Abu al-Mu'in al-Nasafi and the author of "al-Lubab wa al-Miizaan" and Imam al-Lamishi agreed with his opinion. The scientist criticized the points of view of some groups, which didn't accept the sophistical groups (has doubts in the Prophet's words).

In conclusion the author wrote that the main sources of knowledge give the necessary information (al-sadiq information) and the factual information (mutawatir). He wrote ayat from Quran "Li yuhiqqa al-haqa wa yubtil al-batila", "Balligh ma unzila ilaika" and says that we develop knowledge by getting knowledge, basing all senses and getting factual information. The ability of the person to prove the things, which don't need an explanation is called "istidlali function/quality". On the 15, 16, 17th pages it was written about wisdom and gave factual information to be clear. He gave a definition of a word wisdom, which was written by al-Lamishi, and said that wisdom is the main reason of knowledge and we can know more about senses, organs of perception information, knowledge.

There were al-Mulahida, al-Rafida, al-Mushabbiha groups, which didn't consider the wisdom as the part of knowledge. Wisdom, information, al-sadiq, 5 organs of senses are the main sources of knowledge and all are connected with each other. They can't be in harmony without one of them. The author wrote more about wisdom and said, that people can analyze the information, which they get every day. In the work "al-Lubab" said that the world changes all the time, and all these changes are called hadith (the past creation), Husam al-din al-Syghnaqi gave examples and tried to prove his opinion. Each changed thing is hadith, the core of science and knowledge is based on the right theory.

On the 18th page of manuscript there is an introduction of the second chapter "Fasl fi isbat huduus al-'Alam/The chapter "Proving the creation of the World"". The chapter considers the reasons of discussing of the basis of science and knowledge, also the fact, that it plays an important in discovering the World. So, the study of the World creation is the basis of the shari'a science and the beginning of the Islamic worldview. To know the basis of the world creation and Allah is the main principle of iman. There are lots of features of the existence of Allah the author compares this fact with the stamp and the stamp maker. All things can show us that everything has it's maker. Therefore all things in the World (the word "alam" means "sign") are called world sign. We can't characterize Allah by showing such facts. Husam al-din al-Syghnaqi basing on his teacher Abu al-Mu'in al-Nasafi's opinion, wrote about 5 features of the world. They are: 1. Dzhawhar; 2. Jism; 3. 'Araz; 4. Qadim; 5. Muhdith (al-Syghnaqi, 708).

The author says that the world consists of peaces (muhdath). Some groups, which had philosophic opposite views expressed their opinions "the world is muhdath, its substance is qadim, we call it hayula. The opinion of the mu'tazila groups is the same. The scientist wrote about the opinions of the previous scientists. He called Abu Mansur al-Maturidi "Imam Abu Mansur", it was said that, he had a theory that the world consists of two parts. According to Abu Mansur al-Maturidi's opinion, the world is dshawhar, which consists of dzhism peaces. The world has two parts: 'araz and a'yan. A'yan two parts: mutarakkab and ghair mutarakkab and the rest is dzhawhar. Husam al-din al-Syghnaqi wrote about the comments of Abu al-Mu'in al-Nasafi and stated, that his teacher had lots in common with the opinion of Abu Mansur al-Maturidi. Both said, that it's not acceptable to characterize Allah by dzhawhar or dzhisms. We can't talk about Allah by using dzhism, dzhawhar, 'araz. For instance, 'araz giving the qualities of the created by Allah things (color, form, appearance) white, blue, black, green, yellow, sweet, tasty, spicy, strong, wide, etc. all these characteristics give us 'araz. The author talked about qadim in the research and he wrote about the information of Imam Mawlana Hamid al-din al-Dariri in Persian about qadim and hadith, wadzhib al-wudzhuud issues.

On the 29th page of the work there was the third chapter "Fasl fi anna al-'alama lahu muhdith/ The chapter "Creation of the World is hadith"" This chapter was written after the chapter "Fasl fi isbat huduus al-'Alam" of Husam al-din al-Syghnaqi. We have to know preceding processes of namaz/salaat and also to know about Allah, the creator of the world, we have to know about the creation of the World first as it was written in the research.

The World, hadith and its development need the power. And the source and creator of this power is Allah. The World is the new created thing, if we can percept it, it is new created thing. There was the opinion of Abu Sulaiman in the work, it was said: "If we can see the thing, it was created before you have seen it all things have its color, time of creation". It is similar to the process of the birth of the child. The creation of things its cooperation with other things need a special process. Allah gives the power to make this process. The author gives an example by comparing it with the structuring of the building, the builder is the responsible person for the building and Allah is creator of the world. He criticized the opinions of the scientists of the mu'tazila direction. Samama ibn Ashras, Abu al-Huzayl al-Allaf, Bishr ibn al-Mu'tamar, Ibn al-Rawandi and the representatives of karramia, mulahida groups.

On the 31th page of the manuscript there was the fourth chapter of the work, which is called "Fasl fi isbat al-Wahdania al-Soni'/The chapter "Proving the existence of Allah, Allah is the only one"". He started, that Allah is the only one and considered the opinions, which stated that there were more than one. They are:

The first - the principles of madzhusi/Zoroaster's about the existence of two creators. He wrote about Mazda/Yazdan and stated that the pain features are good willingness and he is ever. And the second god is Ahura/Ahar, who is associated with bad intentions and actions, but the origin is from the god Mazda/Yazdan. It is said, that Mazda/Yazdan is the main and Ahura is the second.

The second - 3 Gods theory, Christian principles. The father, child and spirituality is considered. By Christian direction and according to this theory dzhawhar is one, and it has characterizes as thing, science and life. Thing is the father, science is a child and life is the spirituality or female, these are three parts of the world. So,

dzhawhar is the thing, the father is the god and the god is Prophet Isa as a child and gods wife. Prophets mother Maryam. Father and child have qadim characteristics.

The third - the nature group stated that the creator of the world consists of 4 elements. They are: cold, hot, wet and dry.

The fourth - the group of astronomies. According to their opinion the world consists of 7 planets. They are: 1) Zuhal; 2) Mushtari; 3) Myrrih; 4) Shams; 5) Zuhra; 6) Utarid; 7) Qamar.

The author added to the opinion of the scientists that all planets go around all the time. And Allah gives power to conduct this process. After that the author gives the heart of Quran, ayat al-Kursi ayat as an example and tried to state that the creator of the world is Allah. Stating that Allah is the only one, he wrote about the opinion of his teacher Abu al-Mu'in al-Nasafi. According to the opinion of Abu al-Mu'in al-Nasafi: "It there were two creators, in the world, there would be mess, everything would go against each other and one god would depend on another one. Because there is a principle that the powerful wins". Here we see that the opinions of groups which stated that there are two creators, are wrong Husam al-din al-Syghnaqi agreed with the opinions of his teacher Abu al-Mu'in al-Nasafi about this point of view and used his works. To give evidences for proving the existence of Allah, Husam al-din al-Syghnaqi gives the ayat from Quran "Law kana fiha alihatun illa Allah lafasadataa".

On the 34-th page of the manuscript there was the fifth chapter of the work "Fasl fi isbat qadim al-Soni'/the chapter "Proving the existence of the creator from the past"". Allah is qadim (meaning ever), qadim is only for Allah, it is clear that other things in the world has its time of existence. And being ever is the characteristic of Allah. The characteristics of things, animals, humans and others is not used for Allah. The creator, director is Allah, he can punish and praise. So, we can't give zoomorphic and anthropomorphic characteristics to Allah.

The author tried to prove and show by giving examples that only Allah is qadim. The scientist gave not only his own opinion about that, he wrote the opinion of his teacher Abu al-Mu'in al-Nasafi and gave an ayat from Quran "Hatta 'aadaka al-'urdjun al-qadim". Also he gave an explanation of the word "qadim" as a term and its lingo philosophical meaning. Different groups call Allah by using different names but it is important to know that he is the only one. On the 35th page Arabic people call the god "Ilah\ God" and use article alif-lam. Persians called "Hudai or Huzai" (al-Syghnaqi, 708).

Husam al-din al-Syghnaqi gave the name of the god in his native language. He wrote that Turcic people call the god "Tanir, Taniri - creator". Different languages, different names of Allah. In spite of the fact, that there are different opinions we must not use the characteristics and attributes of Allah with animals and others. If Allah is not qadim, he would be hadith. Hadith is characteristic for created things. All things have their time of existence as we said before. So, it would be a great mistake if we used this word for Allah. Hadith is only for things, animals and others. Qadim is only for Allah as said Husam al-din al-Syghnaqi.

5. Conclusion

To conclude the great scientist considered the cosmogonist origin of the world creation and he stated that the characteristics of Allah are the main principles and values of the schools of maturidia direction in the Central Asia. According to Islamic kalam study in the Islamic World it is right to know a lot about characteristics of Allah before knowing the creator Allah. The scientist tried to explain the main principles of kalam study in details. Nowadays, the main principles of those Islamic schools are the issues of the society. The main values of the work of the scientist can be the way of solving of this problem as the issue. Covered religious opinions coincide with the traditional religious principles of our society. Lots of issues of the work Husam al-din al-Syghnaqi and some philosophic points of view of the manuscript of Abu Mansur al-Maturidi and Abu al-Mu'in al-Nasafi were considered widely. In the manuscript the scientist wrote about the religion of the society and the Prophet's issue and tried to explain it by using the opinions of other previous scientists. Also, the Prophet should know a lot about justice and strategy, the native land, religion and so on. The work of Husam al-Milla is ended with these words and with praising of Allah. The work of Husam al-Milla covers main three factors. They are: the cosmogonist origin of the world creation, iman and 'amal issues and the manager of the social processes. So, Husam al-din al-Syghnaqi tried to consider the important issues of that time and nowadays and his work was systematic and clear. Shari'a values in this work cover serious issues of the Islamic World and developed main elements of the religious tradition. This manuscript was the developer of the opinion of the maturidia direction in the Central Asia.

References

- Al-Syghnaqi, H. (708). *The manuscript "al-Tasdid fi sharh al-Tamhid"*. Istanbul.
- Al-Syghnaqi, H., & Al-Qanit, F. (2001). *Al-Kafi fi sharh al-Bazdawi*. El-Ryad: Maktaba al-Rushd.

- Brockelmann, C. (1938). *Geschichte der arabischen literarur*. Leiden: GAL.
- Ebu Zehra, M. (1999). *The history of islam directions*. Istanbul: Kitap evi.
- Ibn Kutlubugha. (1978). *Taj al-Taradzhim*. Cairo: Dar al-Kutub al-Misriya.
- Muminov, A. K. (2006). *Istoriya Kazahstana v arabskih istochnikah*. Almaty: Daik-Press.
- Wafa al-Qurashi, al-H. (1962). *Al-Dzhawahir al-mudi'a fi tabaqaat al-hanafia*. Haydarabad: Dar us-Salam
- Yazıcı oğlu, M. S. (1987). *Two great scientists of the Maturidia kalam schools*. Istanbul: Kitap evi.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Influence of Organizational Leadership on Knowledge Transfer in Construction

Katun M. Idris¹, Kherun N. Ali¹ & Aliagha U. Godwin²

¹ Faculty of Built Environment, Universiti Teknologi Malaysia, Johor, Malaysia

² Faculty of Geoinformation & Real Estate, Universiti Teknologi Malaysia, Johor, Malaysia

Correspondence: Katun M. Idris, Faculty of Built Environment, Universiti Teknologi Malaysia, Johor, Malaysia.
E-mail: idriskt@gmail.com

Received: March 29, 2015 Accepted: April 24, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p102

URL: <http://dx.doi.org/10.5539/ass.v11n21p102>

Abstract

Organizations are becoming more cognizant that transferring the supremacy of knowledge in business is precarious to attaining reasonable modifications. This research investigates the significant role of organizational leadership on knowledge transfer in the multinational construction organization in Nigeria. Thus, this research was based on the multinational construction organization as a result of their technological advancement on knowledge management, knowledge transfer and development process. The research study adopted empirically validated measures' variables and established a hypothetical framework that links organizational leadership with knowledge transfer variables. 220 survey questionnaires were distributed to knowledge workers of 35 multinational construction organization, and the research validated the framework with structural equation modeling (SEM). The factor's loadings for the variables measures were significant and Cronbach Alpha factors of 0.903 and 0.747 for organizational leadership and knowledge transfer respectively was achieved. The research finding display that organizational leadership demonstrated significant influence on knowledge transfer.

Keywords: knowledge transfer, construction, organization, leadership and theoretical framework

1. Introduction

In global economy, knowledge is predictable as an essential benefit to the construction organization. Transfer of knowledge has become one process to the knowledge management (Albino et al., 2004). Numerous researchers have to argue that for organizational goal to be achieved, organizational leadership must involve a knowledge management process (Cohen & Olsen, 2015; Nonaka, 2005; O'Dell & Grayson Jr., 1998). Organizational leadership can comprise different interpretations, especially ability to inspire confidence, support transfer of knowledge and motivate the staffs to achieve organization goals. Mostly, project leaderships within organizations are created to encourage innovation and engender more ideas, skills. It is affirmed that organizational teams work are more creative than personal or distinctive works (Grint, 2007). Organization leadership should identify an individual strengths, encourage teamwork and provide a better enabling environment that brings distinctive differences to work together. Mostly, successful organizations depend highly on competencies of their leadership and general management skill of their knowledge. Sometime organization leadership and organization management are used interchangeably (Toor & Ofori, 2008). Thus, the approaches are different; organizational managements are referred to as a progression that employs a scheme of tools with consecutive measures to track how project knowledge are manage efficiently. Organization leadership, on the other hand, is more treasured as it focused on the personal involvement of, knowledge workers from the organization with their intangible values, ideas, skill and experiences aimed for organization success (Hoch and Kozlowski, 2014). Organizational leadership, needs to be multidisciplinary in their attitudes, activities, method of transferring and managing knowledge in their respective domain. Organizational leadership, should engender required hallucination, persuasively build up trust for the workers and have high respect for workers to encourage transfer of knowledge and provide sustenance and direction for it staffs.

Knowledge transfer can be referred to as procedure in which some units of organization are transformed by the skill of other units or people (Nousala et al., 2007). Transfer of knowledge hinges on personal views and individualities such as know-how, ethics, inspiration, theories and experience. O'Dell and Grayson Jr. (1998) on

the other hand, argues that knowledge transfer is the ability of groups or workers with an organization to integrate and smear current knowledge by linking it to be passed existed knowledge. Thus, transfer of knowledge is always pretentious by the association between the springs and beneficiary. Knowledge transfer is said to occur when experiences and skills existing in individuals or groups affect the way experiences of individual and skill are erudite and achieved (Pollack, 2012). Knowledge transfer at the organizational level is a system where organizations prefabricates and upholds a multifarious practice in a novel surroundings (Von Krogh et al., 2012). Transfer of knowledge is said to be positive if attainment or recitals of the latest information, skill and experience are facilitated, while transfer is negative if attainment or recital of information is impeded. Davenport et al. (1997) argue that transfer is said to occur when both the communication of knowledge to a receiver and fascination is said to have taken place either at individual level or group level. Nonaka (2005) classified knowledge as tacit and explicit. Tacit is that ideas, skills and experiences that can be arrayed and unglued effortlessly from individual minds while explicit is that ideas, skill and experience that can be detached from decision making activities (books, journals, seminars, etc.). Organization leadership can encumber creativity and modernization between groups or distinctive without enormous latent of knowledge and communication technologies. Organization knowledge can be apprehended, arranged and deposited in repositories, which can be easily transfer, retrieved by other organization coworkers (Voon, 2007). Thus, for effective transfer of knowledge from repositories, contribution of knowledge is inevitable and adoption is necessary for reused. Therefore, knowledge transfer through social solidity and technology is proficient in creating good ideas and information. Knowledge transfer is easily obtainable when emotional intelligent of the leader, leadership traits and team transformation with cohesion is strengthened.

1.1 Knowledge Transfer

Some researchers have accentuated on the domineering of knowledge transfer and modernization in organization development. Knowledge transfer is an imperative proclaim for construction business to accomplish maintainable and global complete improvement (Widén-Wulff & Ginman, 2004). In the construction organization transfer of knowledge can be regarded as human common promise and connections that involve an interchange of skill, information, ideas and experiences for operational development of the organization (Von Krogh et al., 2012). Knowledge transfer in an organization is a method where the know-how and skill of the individual or group has being reused and new knowledge form to the organization with the intention of creating innovative policy and solving problems. Knowledge transfer is said to occur in organization when people or employers choose to transfer it store talents, skills and experience with others within the organization (Turner & Makhija, 2006). Szulanski (2000) considered organizational members, organization mission and their technical tools for possible collaborations and how it affects the efficiency, of knowledge transfer and creation. The author argues that transfer between beneficiary and source is facilitated by technological tools within organization. Transfer of knowledge can be viewed as an object or as a process. Transfer as an object can be perceived, deposited, recycled while transfer as a process is a movement of cooperating changes in individuals who absorb (Singh et al., 2006). Thus, in achieving a necessary knowledge transfer among individuals or group within organization, knowledge transfer institution ought to be in ground to serve as helpful possessions that encourage organizational leadership to motivate workers in transferring knowledge among his workers. Transfer of knowledge comprises of altercation of both employees and employers' tangible, codified, unmodified knowledge for the organizational benefit (Rowley, 2008). Transfer can happens either at individual levels or at group level for the up liftmen of organization to avoid repetitive occurrences of mistakes. At organizational level transfer of knowledge involves establishing, transmission and reprocessing skills, experience based knowledge (Pemsal & Müller, 2012). Ajzen (1991) and Barnes (2001) argues in their philosophies that knowledge transfer can be anticipated by humane approach and their eccentric customs where humane approach toward transfer is described as incorporates transfer of knowledge and experiences arising from groups, people within the organization that have the desire to transfer; eccentric custom to transfer represents organizational group and staff ready to transfer their ideas; readiness to transfer is described as humane confidence to be involve in transfer. Thus, the potentiality of organizational leadership to provide an enabling environment for societal happening and interactions as a societal solidity in their respective organization put it to somebody a supposition that organization leadership is capable of prompting the transfer of knowledge.

2. Research Methodology

Transfer of knowledge was accessed using three constructs: transferring using social networking, approaches towards transferring and readiness to transfer, which was adopted and modified from Szulanski (2000), Xu and Ma (2008) and Parent et al. (2007) as shown in Table 1. Three indicators were used to measure transferring using the social network (codification, knowledge repositories and database). Approach to transferring knowledge was

measured with three indicators comprising an exchange through personal contacts, exchange of pertinent information and exchange of pertinent ideas and skills arising from a person. Readiness to transfer by construction workers and other staffs was assessed through intention to transfer and workers' confidence, which is betrothed in knowledge transfer conduct (Szulanski, 2000).

Organizational leadership was measured using three latent constructs namely: emotional intelligent, leadership traits and project team transformation as suggested by Gallos (2014) and Goleman et al. (2013). The indicators that measure impassioned bright, includes self-awareness and self-control, motivation, charisma as suggested by (Akhavan Tabassi et al., 2014; Grint, 2007). Leadership traits were measure with five indicators such as good listener and open mind, leadership vision, delegation to task work, inspiring team work and flexibility of the leaders as suggested by Lopez (2014) and Müller and Turner (2007). Thus, team transformation was measured using four indicators; increasing people's awareness on the benefit of knowledge transfer, helping team group to self –fulfillment, commitment to greatness and trust building as suggested by Müller and Turner (2007), Senaratne et al. (2015) and Turner and Müller (2006). Table 1 presents the adopted measuring variables as they are validated.

Table 1. Summary of measuring indicators adopted for the study

Measuring indicators	References	Validity	Recommended
Organizational leadership			
1 Emotional intelligent	Muller & Turner, 2007; Lopez, 2014; Turner & Muller, 2005	Validated empirically	Recommended
2 leadership traits	Gallos, 2014; Muller & Turner, 2007; Grint, 2007	Validated empirically	Recommended
3 transformation team	Muller & Turner, 2007; Senaratne, 2015; Goleman, 2013	Validated empirically	Recommended
Knowledge transfer			
1 Approach toward transfer	Szulanski, 2000; Xu & Ma, 2008; Parent et al., 2007	Validated empirically (SEM)	Recommended
2 Using social network	Szulanski, 2000; Xu & Ma, 2008; Parent et al., 2007	Validated empirically (SEM)	Recommended
3 Readiness to transfer	Szulanski, 2000; Xu & Ma, 2008; Parent et al., 2007	Validated empirically (SEM)	Recommended

2.1 Hypothesis Development

In the construction organization, knowledge transfer process view knowledge about an entity which can be shared automatically from the originator to the interpreter who accepts and communicates the ideas to end users (Parent et al., 2007). Knowledge is buried in the worker's know-how and heads as it is gaining much more momentum in research areas of different discipline (Pollack, 2012). Nonaka et al. (2005) argue that knowledge can either be unexpressed or explicit. Unexpressed knowledge is obtainable through experiences, skill and philosophy while explicit knowledge is the ideas obtained through, textbooks, journals, seminars, etc. According to the communal constructive theory, knowledge is transferred and communicated in communal situation. Thus, knowledge is an unstable paradigm that changes as it is dismissed, transfer and re-claimed (Leana & Pil, 2006). Ashforth and Mael (1989) further argue that the relationships between knowledge and human society are globular or rounded rather than undeviating. Hence, knowledge transfer is a merchandise of the operative group of communal solidity and attitudes, different approach to transfer within a communal system in the construction organization and idiosyncratic customs that oversee transferring anticipation (Albino, et al., 2004). The community and construction environment depends on these long-time variables. Human behavior or deed is a social influence to implement or not to implement (Kuo & Young, 2008; Parent et al., 2007), however, approaches towards knowledge transfer reflect individual readiness to implement an act or conduct. Organizational attitude or approach obviously influences the transfer of knowledge (Yang et al.; Yang & Farn, 2009). Koballa (1988) and Ajzen (2001) argues in their theories that attitude and idiosyncratic customs are determinant of individual purpose to implement an act. Therefore, the relationship between organization leadership and social solidity indicates that there is an influence of organizational leadership on knowledge

transfer. The proposed measurement, analysis model was developed as shown in Figure 1 with the following hypotheses;

H1: organization leadership demonstrated statistically influence on knowledge transfer

H1a. EI can influence positively OL

H1b. LT can influence positively OL

H1c. TT can influence positively OL

H1d. TSN can influence positively KT

H1e. ATT can influence positively KT

H1f. RT can influence positively KT

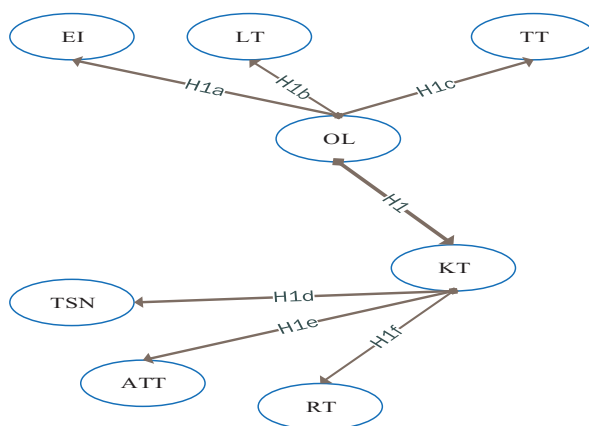


Figure 1. Proposed confirmatory analysis model of organization leadership and knowledge transfer

Note. KT= Knowledge Transfer, RT= Readiness to transfer, TSN= Transfer using Social network, ATT= Attitude towards transfer, OL= Organization Leadership, TT= Transformation Team, LT= Leadership Traits, EL=Emotional Intelligent.

3. Analysis and Result

3.1 Result Summary for Exploratory Factor Analysis (EFA)

Table 2. Test of reliability-KMO and Bartlett's Test for organizational leadership

Analysis	Results
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.878
Bartlett's Test of Sphericity Approx. Chi-Square	1676.014
<i>df</i>	36
Sig.	.000

The Kaiser-Mayer-Okin (KMO) measures of sampling accuracy for the organization’s leadership after, measure of sampling activities (MSA), population correlation matrix as well as Bartlett’s Test of sphericity display as follows; the value of KMO .878 is above recommended values of .5 by (Byrne, 2013) and the p value is significant, the total variance extracted for the exploratory factor analysis (EFA) is 56.633% and 14.797%. Therefore, the result of factor analysis is meaningful.

Table 3. Test of reliability-KMO and Bartlett's Test for knowledge transfer

Analysis	Result
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.731
Bartlett's Test of Sphericity Approx. Chi-Square	1588.316
<i>df</i>	36
Sig.	.000

Original measures of knowledge transfer consist of nineteen indicator. Table 2 indicate the result of EFA with homogeneity of the indicators; the Kaiser-Meyer-Olkin measure sample of adequacy is .731 also exceeding 0.5 as lower boundary if factor analysis was to be evocative (Byrne, 2013; Cohen, 2013). The factor analysis extracted two factors with eigenvalue above one, thus the factor explains 33.566% and 20.744% of the variance.

3.2 Confirmatory Factor Analysis

The confirmatory factor analysis is used to analyse the model as proposed by (Bollen, 1998). The p-value recorded 0.001 with all the factor loading above the 0.5 benchmark recommended by (Byrne, 2012). The average variance extracted as shown in Table 4 is also above the recommended benchmark of 0.6 as suggested by (Zainudin, 2014). The instrument reliability of variables was tested via Cronbach Alphas, with all the values above recommended benchmark of 0.7 as argued by (Jöreskog, 1993). CMIN was used to measured normalized χ^2 for the model ($\chi^2/df = 2.831$, where $df = 130$). The result is in line with the benchmark of $\geq 2.5 \leq 3.5$ as suggested by (Kline, 2006). The root means square error (RMSEA) shows a reliable value of 0.08, which is within the recommended benchmark of $\geq 0.05 \leq 0.08$ as suggested by (Kenny et al., 2014). GFI (goodness of fit index) recorded 0.880 and AGFI (adjusted goodness of fit index) is 0.842 which accord to suggested value of ≥ 0.8 by Marcoulides and Schumacker (2013) as marginal fit. Thus, CFI (comparative fit index) has a value of 0.932, which is lined with ≥ 0.9 recommended by (Mueller, 1997). The authors agree that CFI ≥ 0.9 and RMSEA $\geq 0.05 \leq .08$ indicate strong model.

Table 4. Measurement variance analysis and reliability for organizational leadership and knowledge transfer.

Variable/ Indicators	Factor loadings	Cronbach Alphas	T-Value	Variance extracted
Emotionally intelligent				
EI1	.74			
EI2	.77	.853	2.528	.609
EI3	.83		12.632	
Leadership traits				
LT1	.78			
LT2	.82	.855	14.185	.662
LT3	.84		13.473	
Transformation team				
TT1	.90			
TT2	.87	.917	20.094	.786
TT3	.89		21.720	
Approach Toward Transfer				
ATT1	.82			
ATT2	.83	.851	13.950	.657
ATT3	.78		14.684	
Transfer using Social network				
TSN1	.91			
TSN2	.90	.911	20.318	.828
TSN3	.92		21.519	
Readiness to Transfer				
RT2	.76			
RT3	.98	.900	20.471	.759
RT4	.86		15.994	

Note., RT= Readiness to transfer, TSN= Transfer using Social network, ATT= Attitude towards transfer, TT= Transformation Team, LT= Leadership Traits, EL=Emotional Intelligent.

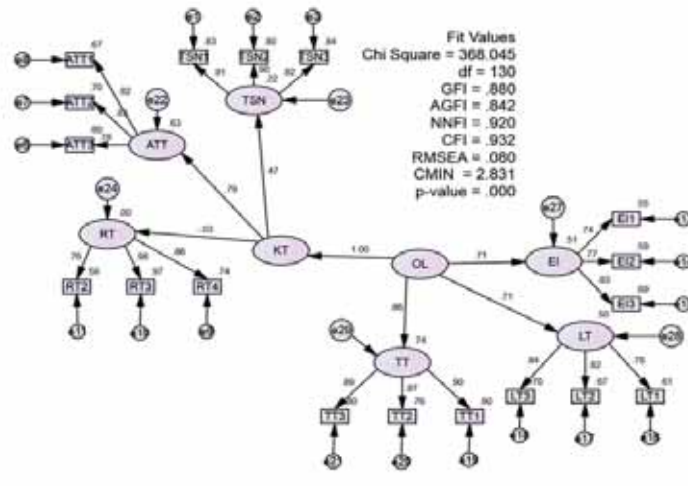


Figure 1. Confirmatory analysis of organization leadership and knowledge transfer

Note. KT= Knowledge Transfer, RT= Readiness to transfer, TSN= Transfer using Social network, ATT= Attitude towards transfer, OL= Organization Leadership, TT= Transformation Team, LT= Leadership Traits, EL=Emotional Intelligent.

4. Discussion

The effect of organizational leadership was assessed via Hypothesis 1 (H1) with the sub hypothesis range from H1a, H1b, H1c, H1d, H1e and H1f as shown in Figure 1. The path coefficient of 0.2 and above was measured as basically substantial loading (Cohen et al., 2013). The output of confirmatory factor analysis (AMOS) demonstrated trustworthy and robust factors loading as shown in figure 2. Organizational leadership path loadings measuring 0.71, 0.86, and 0.71 for emotional intelligence, transformation team and leadership trait correspondingly, while constructing measuring knowledge transfer recorded a path loadings of -.03, 0.79 and 0.47 in readiness to transfer, approaches towards transferring and using social means to transfer correspondingly. Organizational leadership shows the highest path loading of 1 to knowledge transfer, which implies that organizational leadership replicates personal and group potential of the construction workers to transfer their knowledge. The result analysis supported all the hypotheses of H1 (main hypotheses), H1a, H1b, H1c, H1d, H1e while H1f was not supported. Thus, it is suitable to assume that organizational leadership influences the transfer of tacit knowledge in the construction organization (Figure 2 and Table 5). The significant relationship is supported by leadership emotional intelligent, leadership traits and transformation team among the organizational leadership and transferring using social networks with worker attitudes and willingness to transfer/leverage their knowledge. The prime hypothesis is supported- H1; organizational leadership can significantly influence the transfer of knowledge in construction organization.

Table 5. Structural equation model summary result

Hypotheses	path hypotheses	path coefficient	Result
H1a	EI can influence positively organization leadership	0.71	Supported
H1b	LT can influence positively organization leadership	0.71	Supported
H1c	TT can influence positively organization leadership	0.86	Supported
H1d	TSN can influence positively transfer of knowledge	0.47	Supported
H1e	ATT can influence positively transfer of knowledge	0.79	Supported
H1f	RT can influence positively transfer of knowledge	-.03	Not Supported
H1	Organizational leadership can positively influence the transfer of knowledge	1	Supported

Note. RT= Readiness to transfer, TSN= Transfer using Social network, ATT= Attitude towards transfer, TT= Transformation Team, LT= Leadership Traits, EL=Emotional Intelligent.

5. Conclusion

It is imperious to decide that organizational leadership elicit societal solidity and societal unity among construction workers and increase their potential to transfer knowledge among their colleagues and staff member. Transferring of knowledge through a social network (codification, knowledge repositories and database) is prompted through societal solidity, cognitive process and attitude towards transfer in the construction organization. This suggests that when skilled workers in the construction organization tent to transfer their knowledge, the knowledge rotates within the technical know-how of individuals. Thus, organizational leadership has the latent to transfer and promote knowledge leverage among their associates and co-workers in construction organization. The study also reveals that transferring of knowledge is within the milieu of speculative and skill surrounded in every individual head. The finding from the research can help knowledge management canvassers as well as expertise to advance and heightened thoughtfulness of the excelling role of leadership inside the transfer of knowledge about the construction organization.

The research has a subsequent contribution to the body of knowledge in the distinct ways; first, in the production of model for a research model for empirical research that highlighted the effect of organizational leadership, and knowledge sharing on organizational performance based on the views of project managers in Nigerian construction organizations. In addition, the researcher provides a research framework for scholars and construction practitioners who intend to carry out research- related research. This research adopted three valid constructs for knowledge transfer that can be used as a reference to further studies.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual review of psychology*, 52(1), 27-58. <http://dx.doi.org/10.1146/annurev.psych.52.1.27>
- Akhavan Tabassi, A., Ramli, M., Hassan Abu Bakar, A., & Hamid Kadir Pakir, A. (2014). Transformational leadership and teamwork improvement: the case of construction firms. *Journal of Management Development*, 33(10), 1019-1034. <http://dx.doi.org/10.1108/JMD-01-2012-0003>
- Albino, V., Garavelli, A., & Gorgoglione, M. (2004). Organization and technology in knowledge transfer. *Benchmarking: An International Journal*, 11(6), 584-600. <http://dx.doi.org/10.1108/14635770410566492>
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of management review*, 14(1), 20-39. Retrieved from <http://www.jstor.org/sTable/258189>
- Barnes, S. J. (2001). *Knowledge management systems: theory and practice*. Cengage Learning.
- Bollen, K. A. (1998). *Structural equation models*. Wiley Online Library.
- Byrne, B. M. (2012). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge.
- Byrne, B. M. (2013). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Routledge.
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Routledge Academic.
- Cohen, J. F., & Olsen, K. (2015). Knowledge management capabilities and firm performance: A test of universalistic, contingency and complementarity perspectives. *Expert Systems with Applications*, 42(3), 1178-1188. <http://dx.doi.org/10.1016/j.eswa.2014.09.002>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.
- Davenport, T. H., De Long, D. W., & Beers, M. C. (1997). Building successful knowledge management projects. *Center for business innovation working paper*, 4.
- Gallos, J. V. (2014). *Business leadership: a Jossey-Bass reader*. John Wiley & Sons.
- Goleman, D., Boyatzis, R., & McKee, A. (2013). *Primal Leadership. With a New Preface by the Authors: Unleashing the Power of Emotional Intelligence*. Harvard Business Press.
- Grint, K. (2007). Learning to lead: can Aristotle help us find the road to wisdom? *Leadership*, 3(2), 231. <http://dx.doi.org/10.1177/1742715007076215>
- Hoch, J. E., & Kozlowski, S. W. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and

- shared team leadership. *Journal of applied psychology*, 99(3), 390. <http://dx.doi.org/10.1177/0149206314559946>
- Jöreskog, K. G. (1993). Testing structural equation models. *Sage focus editions*, 154, 294.
- Kenny, D. A., Kaniskan, B., & McCoach, D. B. (2014). The performance of RMSEA in models with small degrees of freedom. *Sociological Methods & Research*. <http://dx.doi.org/10.1177/0049124114543236>
- Kline, R. B. (2006). *Structural equation modeling*. New York: The Guilford Press.
- Koballa, T. R. (1988). Attitude and related concepts in science education. *Science Education*, 72(2), 115-126. <http://dx.doi.org/10.1002/sci.3730720202>
- Kuo, F.-Y., & Young, M.-L. (2008). Predicting knowledge sharing practices through intention: A test of competing models. *Computers in Human Behavior*, 24(6), 2697-2722. <http://dx.doi.org/10.1016/j.chb.2008.03.015>
- Leana, C. R., & Pil, F. K. (2006). Social capital and organizational performance: Evidence from urban public schools. *Organization Science*, 17(3), 353-366. Retrieved from <http://www.jstor.org/sTable/25146039>
- Lopez, R. (2014). The Relationship between Leadership and Management: Instructional Approaches and its Connections to Organizational Growth. *Journal of Business Studies Quarterly*, 6(1).
- Marcoulides, G. A., & Schumacker, R. E. (2013). *Advanced structural equation modeling: Issues and techniques*. Psychology Press.
- Mueller, R. O. (1997). Structural equation modeling: Back to basics. *Structural Equation Modeling: A Multidisciplinary Journal*, 4(4), 353-369.
- Müller, R., & Turner, R. (2007). The influence of project managers on project success criteria and project success by type of project. *European Management Journal*, 25(4), 298-309. <http://dx.doi.org/10.1016/j.emj.2007.06.003>
- Nonaka, I. (2005). *Knowledge management: critical perspectives on business and management* (Vol. 2). Taylor & Francis.
- Nonaka, I., Toyama, R., & Konno, N. (2005). SECI, ba and leadership: a unified model of dynamic knowledge creation. *Knowledge Management: Critical Perspectives on Business and Management*, 2, 317.
- Nousala, S., Hall, W., & John, S. (2007). Transferring tacit knowledge in extended enterprises. *Proceedings of the 2007 International Conference on Information and Knowledge Engineering*.
- O'Dell, C., & Grayson, C. J. Jr. (1998). *The transfer of internal knowledge and best practice: if only we knew what we know*. New York: The Free Press.
- Parent, R., Roy, M., & St-Jacques, D. (2007). A systems-based dynamic knowledge transfer capacity model. *Journal of Knowledge Management*, 11(6), 81-93. <http://dx.doi.org/10.1108/13673270710832181>
- Pemsel, S., & Müller, R. (2012). The governance of knowledge in project-based organizations. *International Journal of Project Management*, 30(8), 865-876. <http://dx.doi.org/10.1016/j.ijproman.2012.02.002>
- Pollack, J. (2012). Transferring knowledge about knowledge management: Implementation of a complex organisational change programme. *International Journal of Project Management*, 30(8), 877-886 <http://dx.doi.org/10.1016/j.ijproman.2012.04.001>.
- Rowley, J. E. (2008). *Organizing knowledge: an introduction to managing access to information*. Ashgate Publishing, Ltd.
- Senaratne, S., Samaraweera, A., Kumaraswamy, M., & Ruwanpura, J. (2015). Construction project leadership across the team development process. *Built Environment Project and Asset Management*, 5(1). <http://dx.doi.org/10.1108/BEPAM-10-2012-0049>
- Singh, S., Chan, Y. E., & McKeen, J. D. (2006). Knowledge Management Capability and Organizational Performance: A Theoretical Foundation. *Proceedings of the 2006 Conference at the University of Warwick, Coventry*, 1-54.
- Szulanski, G. (2000). The process of knowledge transfer: A diachronic analysis of stickiness. *Organizational behavior and human decision processes*, 82(1), 9-27. <http://dx.doi.org/10.1006/obhd.2000.2884>
- Toor, S.-u.-R., & Ofori, G. (2008). Leadership for future construction industry: Agenda for authentic leadership. *International Journal of Project Management*, 26(6), 620-630.

- Turner, J. R., & Müller, R. (2006). Choosing appropriate project managers: Matching their leadership style to the type of project. *Proceedings of the 2006*. Project Management Institute. <http://dx.doi.org/10.1016/j.emj.2007.06.003>
- Turner, K. L., & Makhija, M. V. (2006). The role of organizational controls in managing knowledge. *Academy of Management Review*, 31(1), 197-217. <http://www.jstor.org/sTable/20159192>
- Von Krogh, G., Nonaka, I., & Rechsteiner, L. (2012). Leadership in organizational knowledge creation: a review and framework. *Journal of Management Studies*, 49(1), 240-277. <http://dx.doi.org/10.1111/j.1467-6486.2010.00978.x>
- Voon, W. (2007). *Knowledge management repositories: Supporting knowledge work and activity in organizations*. Rutgers The State University of New Jersey - New Brunswick, Ann Arbor.
- Widén-Wulff, G., & Ginman, M. (2004). Explaining knowledge sharing in organizations through the dimensions of social capital. *Journal of Information Science*, 30(5), 448-458. <http://dx.doi.org/10.1177/0165551504046997>
- Xu, Q., & Ma, Q. (2008). Determinants of ERP implementation knowledge transfer. *Information & Management*, 45(8), 528-539. <http://dx.doi.org/10.1016/j.im.2008.08.004>
- Yang, L.-R., Huang, C.-F., & Hsu, T.-J. (2013). Knowledge leadership to improve project and organizational performance. *International Journal of Project Management*. [http://dx.doi.org/10.1016/j.ijproman.2013.01.011\(0\)](http://dx.doi.org/10.1016/j.ijproman.2013.01.011(0))
- Yang, S.-C., & Farn, C.-K. (2009). Social capital, behavioural control, and tacit knowledge sharing—A multi-informant design. *International Journal of Information Management*, 29(3), 210-218. <http://dx.doi.org/10.1016/j.ijinfomgt.2008.09.002>
- Zainudin, A. (2014). *A Handbook on SEM for Academicians and Practitioners*. MPWS Training Center, Bander Baru Bangi, Selangor: MPWS Rich Resources.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Migration as a Social Problem

Albina Alexandrovna Nesterova¹, Tatjana Fedorovna Suslova¹, Mihail Evgenevich Tsyiganov¹ & Natal'ya Vladimirovna Kobzeva¹

¹ Laboratory of self-control of the identity of the Institute for Fundamental and Applied Researches of the Federal State Autonomous Educational Institution of Higher Professional Education, North Caucasian Federal University, Stavropol, Russian Federation

Correspondence: Albina Alexandrovna Nesterova, Kulakov Avenue, 2, Stavropol, 355029, Russian Federation.
E-mail: anesterova77@rambler.ru

Received: March 29, 2015 Accepted: April 24, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p111

URL: <http://dx.doi.org/10.5539/ass.v11n21p111>

Article is executed as a part of a state task in scientific research area (Task № 25.2566.2014 "Developing constructivist approach and cognitive modelling methods in the psychological mentoring of social adaptation of migrants")

Abstract

This article analyzes psychological problems of migrants and migration as a process. Using the method of the survey revealed some features of the attitude of Muscovites and residents of Moscow region towards migrants. The study which purpose was to identify the views of the indigenous population about the migratory situation in the city of Moscow and the Moscow region is described. The study involved 235 people aged 24 to 60 who were asked to answer 56 questions of socio-psychological questionnaire. Results of the study demonstrate the collective frustration and inner tension of the Muscovites and residents of the Moscow region, which shows the prevalence of intolerance among indigenous population to visitors from other countries, expressed in rejection of "foreigners".

Negative attitude towards migrants reflects pendency of many social and economic problems of the inhabitants of the host country (region, city), the solution of which will help to reduce the migration phobia and formation of acceptance, respect and tolerance for each other among the indigenous population and migrants, that will allow them to live together within a single living space.

Keywords: migrant, tolerance, psychological problems of migration and migrants, adaptability/ne-adaptability, social stress, migrant-phobia

1. Introduction

21th century is the era of unprecedented human migrations at the international level, leading to significant changes at the global landscape and on the composition of the population over all countries and continents. These changes will inevitably have the most serious challenges to the existing order of things.

The key role of migration in the ongoing and expected changes makes us to talk about migration challenge as an important independent part of this broader, multi level challenge.

According to the report of the International Organization for Migration, the number of international migrants in 2010 was 214 million people (3.1% of the world population). If the growth of this indicator would remain at the same rate, it will reach 405 million in the 2050s (Rerkins, Palmer, & García-Ramírez, 2011).

In situation of migration each migrant is faced with various problems: problems of social and domestic arrangement, employment opportunities; need of learning the language, legal, moral, social and cultural norms. Difficulties occur in adopting values and behaviors inherent in the new environment. There are certain difficulties in establishing the interaction with others, both in business and interpersonal contact (Efremova, Nesterova, Suslova, & Pavlova, 2015).

Social and psychological adaptation of migrants is a complex, multifaceted, long-term process. Its success depends on many factors. Foremost is formation of the ability to actively change personality traits, skills, self-transformation, self-correction and self-development.

To understand the character of the social integration of migrants, it is important to research the system of relations between migrants and indigenous (host) population. Attitude towards migrants, the ratio of different cultural attitudes and the ability to take foreign mentality cause many problems.

Many studies argue that attitudes toward migrants depend on the number of people arriving to the country or region (Chandler & Tsai, 2001; Demidova & Paas, 2014; Espenshade & Hempstead, 1996; Kehrberg, 2007; McLaren, 2003; Mayda, 2006; Nesterova & Suslova, 2014; O'Rourke & Sinnott, 2006; Paas & Halapuu, 2012).

Attitudes towards migrants affect the size of migration flows, arriving in the region or country. Also the nature of personal contact with migrants is important. A large number of migrants in the region increases the perception of the danger of the indigenous population, so a casual meeting with immigrants increases the negative attitude towards them. But on the other hand, personal contact with migrants increases tolerance (people are becoming to better know each other, it reduces the illusion of "social threat").

Migration of population (lat. migratio - relocation) – means movement of people from one region (of country, continent) to another one, in some cases by large groups and over long distances. A Russian scientist O. D. Vorobyova in her writings defines migration of the population – as "any territorial movement of population associated with the intersection of both external and internal boundaries of administrative-territorial units in order to change a permanent residence or long term residence for study or work" (Vorobyova O. D).

There are several classifications of migration processes. One of them was suggested by V. I. Moiseenko, whose taxonomy was based on the duration of stay:

- 1) Total migration: migration from one country to another, most often associated with the change of citizenship;
- 2) Permanent migration: migration for a long period of time;
- 3) Short-term migration: departure or arrival to another country for up to 1 year (according to the UN classification) or a period to be determined by national legislation;
- 4) Seasonal migration: temporary labour migration of workers depending on regularly reproducing tasks;
- 5) Commuting migration: temporary labour migration related to short-term (daily or weekly) transfers;
- 6) Episodic migration involves the temporary transfer to another country for either business or touristic interests (Moiseenko, 2004).

2. Migration Processes in Russia

The issue of migration for Russia is a top issue compatibly with other countries. Migration processes in Russia take a huge scale today. As noted by T. N. Yudina "Russia takes the second place in terms of migration flows (after the United States). Russia has become a center of attraction for migrants from the republics of former Soviet Union" (Yudina, 2004, p. 201).

Researchers note that migration in Russia starts to play an increasingly important role in the economic, social and cultural life of the country, in the formation of ethnic composition, the development of the socio-cultural space of Russia. The results of the migration are interethnic contacts at the social level, when migrants engage in a more or less long-term cross-cultural interaction with the dominant culture, and this interaction is not always positive, and often leads to conflicts, tensions, and negative manifestations, both on the part of the receiving environment and on the part of migrants.

It should be noted that currently Russia is experiencing great difficulties in coping with the matters typical to the most types of migrants. According to psychologists, sociologists and demographers, case of "migrants with no adaptation" causes problems for hosting societies.

A migrant with insufficient level of adaptation contributes ethnic tension, negative emotional states (depression, stress, etc.), and deviant behavior. Generally, migrants are unprepared for the conditions of the receiving environment, it increases social stress, mental stress, arising from human hardship of everyday life. Specialists in different fields of science and practice note that social stress conditions (situations) can be caused by various factors related to the complexity of social, economic and cultural life of modern society, the speed and frequency of social and cultural change. Such factors include the scientific and technical progress, changes in forms of employment, the deformation of the demographic structure, environmental changes of such social processes as migration.

In order to analyze the specifics of the migration processes and the nature of the adaptation of migrants to living conditions of the host country, it is also important to study the features of the receiving environment, namely the legislation on migration politics, the activities of national associations, communities, federations of migrants,

charities, etc., their interaction with the State Migration Service and other organizations and institutions; and most importantly, the characteristics of the dominant ethnic group, its moods, attitudes, relationships. We conducted a study aiming to identify the views of the indigenous population of the migratory situation in Moscow and Moscow region. The study involved 235 respondents, 24-60 years old; the survey included 56 questions constructing various social and psychological profiles of the attitudes towards migration. The answers were analysed dividing the respondents into four groups: the first – 24-30 years; the second – 31-40 years; the third – 41-50 years; the fourth – 51-60 years. This article does not attempt to fully illuminate all the results of the study, it will focus only on four of them, consistent with the purpose of this article.

So answering the question: “How do you feel about migrants?”, 74.0% of respondents chose to answer negatively, 16.1% said that they felt indifferent to them, 7.3% found it difficult to answer, and only 2.6% (6 persons) chose to answer positively.

Answers to the question “Can you name characteristics of migrants that annoy you personally?” (respondents were asked to choose more than one answer) were the following: the majority of respondents, 231 persons (98.2%) noted “Behavior”; 209 persons (88.9%) named “The attitude towards us, indigenous population”; a sufficiently large number of survey participants identified such answers as “Appearance” – 194 persons (82.5%); “Peculiarities of communication” - 177 persons (75.3%); “Language” – 151 persons (64.2%).

Various views were expressed in response to the following question: “Please, answer, do migrants interfere or not in the implementation of your life plans?”. Almost equal share of respondents said “no” and “yes, to some extent” – respectively, 86 respondents (36.5%) and 94 respondents (40.0%). However, 42 respondents (17.8%) believe that “migrants interfere with implementation of their life plans” and the other 13 persons (5.5%) found it difficult to answer this question.

The next question was: “What kind of life plans do you mean?”, it specified the respondents' answers to the previous question. Respondents were able to mention a few possible answers. In answering this question, respondents demonstrated a unanimous opinion, highlighting three possible answers: “Work” (179 respondents – 76.1%); “Housing” (137 respondents – 58.3%); “Rest” (154 respondents – 65.3%). As can be seen from the results, most of the participants are concerned about competition for jobs, their own safety and the safety of their own families.

We wondered whether the answers to these four questions depend on the age of the respondents or not. After analysing the survey outcomes we could conclude that all four groups of survey participants were compatible in the degree of the negative attitudes to migrants; all of them highlighted the characteristics of migrants, namely, behaviour and attitude towards them, the indigenous people. However, the point of view about the negative impact of migrants on the success of the life plans, the “work” and “leisure” in particular, was noted mainly by the last oldest groups of respondents: 41-50 years and 51-60 years.

3. Discussion about the Research Results

It is clear that the results show collective frustration and inner tension of the Muscovites and the residents of the Moscow region. This provides us to talk about the prevalence of intolerance of indigenous populations to visitors from other countries.

Researchers note that the positive, negative or neutral perception of people who belong to different nationality involves many components like historic interaction (wars or alliances), old grudges for harassment and some inherent features of particular ethnic groups (high self-esteem, arrogance, conflict, familiarity, greed, pettiness, etc.), rejection of national lifestyle and national customs, music and language, as well as the threat of life prosperity, national identity, values, traditions, lifestyles, etc (Demidova & Paas, 2014; Kehrberg, 2007; McLaren, 2003; Quillian, 1995; Wilson, 1991; Zolberg, 1991).

The following quotation from A. G. Vishnevsky confirms some of the results of this study: “Now the inhabitants of many developed countries with large flow of migrants are concerned about the fact that a large influx of migrants, entailing changes in the composition of the population of host societies, is a threat to their collective identity and their value system” (Vishnevsky, 2011, p. 92). As noted by D. Coleman, if the next generation of migrants and people of mixed descent will increasingly identify themselves with the major population of the country, to which they arrived to, the change in composition of the population will not have any consequences. If, in the opposite case, they alienate themselves from the major population and feel that they are different from the natives, decreasing both in absolute numbers and relative, then the situation will be different. Such processes may be diverse and significant consequences may affect the identity of a country, on the social cohesion of its population. A situation may arise where different groups of people will want to speak different languages, it will

require applying to different legal regulations in terms of religious norms. These groups may have different orientation from the standpoint of foreign policy of the country they belong to (Coleman, 2007).

These fears are substantiated, as both the indigenous population and migrants have their own values, traditions, their own culture, language, religion, which neither of them do not want to waive. According to A.G. Vishnevsky, "their (migrants') values often do not coincide with the values of host societies, and they are sometimes hostile to them, and the clash of different value systems leads to mutual intolerance and conflict, sometimes very sharp and dangerous" (Vishnevsky, 2011, p. 92).

In addition, the values and norms, which are formed among the indigenous population and migrants are different, and this becomes an obstacle for their tolerant interaction. It is known that every nation by virtue of their social, biological, cultural, psychological and other features has a certain line of development in the history of its formation. The changes that have occurred throughout the history of any ethnic group, created a conviction of every nation particular in the rightness of its ethnic group vaccinated values and the basis for further patterns in finding the meaning of life. Perhaps this is one of the most important determinant of negative emotional attitude, as among the host population (who try as much as possible to understand and accept newcomers) and among migrants trying to adapt to the new environment and culture. However, researches have shown that it does not always work on both sides, as people violate the habitual way of life, it destabilized the "internal Me". As a result instinct comes as a natural reaction to protect migrants' values and lives. This is manifested in the form of the negative statements about migrants, which we quoted above.

However, in many aspects, such negative attitude towards migrants reflects many unresolved social and economic problems of the residents of the hosting societies (region, city), the solution of which will help to reduce the migrant-phobia and to form mutual tolerance, acceptance and respect to live together within one space among the indigenous population and migrants. It is known that the stability of the society, the confidence in the future of its members, the quality of their lives are linked with the patience and strength in relation to the various types of socio-economic and political changes. Of course, tolerance is not a concession, condescension or indulgence moral duty. This, above all, is an active attitude prompted by recognition of universal human rights and freedoms, political and legal requirement, providing an opportunity to conflict-free cooperation between people.

However, ethnic tensions, intolerance in Russia began to grow, not only between the indigenous population and visitors, but also between the migrants themselves. In the media we often can hear (and see) information about the various collisions, disassembly within one nation. This brings up another problem - deviant behavior of visitors to Russia from other countries.

4. Conclusion

The world witnesses the exigent social fallouts due to social fragmentation, the difference of the quality of life between the indigenous (resident) population, the first and the second generations of migrants. The prerequisites of such conflicts and problems in Russia have been already registered. The research outcomes into the causes, factors and mechanisms of evolving processes stipulating the mutual alienation between local and migrant population, the conclusions based on the analysis of the data will serve as a basis for proposals for the need to use those or other mechanisms, tools and technologies towards the integration of migrants in Russia.

Without claiming formulated completeness our proposals are the following:

- Despite the increasing attention to the issue of migrants in Russia, the evolvement of migration requires the coherent treatment with economical, legal, social, psychological and other toolkits to maintain social sustainability and reduce the risks of social fallouts;
- It is necessary to promote legal, economic, social and cultural integration of migrants in Russia, and their families into social life. Not only government agencies, service centres play an important role in this work, but also social, ethnic groups, associations, federations of migrants, etc. "A society is taking migrants and looks forward to further perspectives, openness of diasporas. They should act as a gateway, which allows a migrant to avoid the "aeroembolism" when immersed in a new environment, to freely choose his new multiple identities. This will allow a migrant, if he so wishes, at the same time stay Tajik, Muslim, Russian, to be a Muscovite and Europeans etc." (Vishnevsky, 2011, p. 96). This applies not only to migrants who move to permanent residence in Russia, but also to migrant workers, who came for employment on a temporary basis, to make money for themselves and their families left in homeland. As a rule, they are "delayed" for a long period of time, it happens that they work for five or probably ten years, later bringing their relatives;

- Tolerance should become a social norm in Russia as a civil society, which is manifested in a sustainable balance of different ethnic and other social groups, respect for the diversity of cultures, ethnics, willingness to recognise and cooperate with people who are different in appearance, language, beliefs and traditions. This attitude will prevent the growth of discontent on the part of how local people and visitors of people;
- It is important to take into account that the solution of the problems of migration requires a systematic approach. Systemacy lies in the economic, political, social, socio-psychological, socio-cultural, ethnic, environmental factors in the formation of tolerant behavior of migrants and indigenous people to make decisions, to develop national and regional programs for the harmonization of society, personality, interpersonal interaction, subjective well-being and etc. It is very important to involve all participants of the migration process in these activities: those who regulate, and those who provide various forms of assistance;
- It is necessary to create a number of programs for psychological assistance to migrants for supporting them in positive adaptation and in solving intrapersonal problems (at the first stage of adaptation it can be provided in their own language);
- Psychological prevention and intervention on a deeper level with emotions, human complexes, with their consciousness, attitudes, values and motives are necessary. In this regard, to our point of view, it can be effective to apply the constructivist approach. The possibilities of this approach for the socio-psychological work on the formation of adaptive behaviour of migrants are enormous. We believe that techniques of constructivist approach, namely the change of mental maps of migrants, environmental loads that make up the world picture of a human and determine his social behavior and his individual way of construction of social reality, will contribute to a positive integration of migrants, tolerance towards indigenous people and receiving environment, integration of migrants in Russia;
- No less important to the study are the factors of the receiving environment, characteristics of the dominant ethnic group in order to determine the success of the interaction of different ethnic groups, as well as the choice of the strategy of their interaction. It is important to shape a national identity, patriotism and tolerant attitude in Russia.

References

- Chandler, C. R., & Tsai, Y. (2001). Social Factors Influencing Immigration Attitudes: An Analysis of Data from the General Social Survey. *The Social Science Journal*, 38, 177-188. [http://dx.doi.org/10.1016/S0362-3319\(01\)00106-9](http://dx.doi.org/10.1016/S0362-3319(01)00106-9)
- Coleman, D. (2007). Third demographic transition. *Polit.ru. September 16, 2007*. Retrieved from <http://www.polit.ru/article/2007/09/12/demoscope> 299
- Demidova, O., & Paas, T. (2014). *What explains people's attitudes towards immigrants? A comparative study of Estonia and Russia*. Tartu.
- Efremova, G. I., Nesterova, A. A., Suslova, T. F., & Pavlova, O. E. (2015). Constructivist Approach to the Problem of Social Psychological Adaptation of Migrants. *Asian Social Science*, 11(1), 112-118.
- Espenshade, T. J., & Hempstead, K. (1996). Contemporary American Attitudes toward U. S. immigration. *International Migration Review*, 30(2), 535-570. <http://dx.doi.org/10.2307/2547393>
- Kehrberg, J. E. (2007). Public Opinion on Immigration in Western Europe: Economics, Tolerance, and Exposure. *Comparative European Politics*, 5, 264-281. <http://dx.doi.org/10.1057/palgrave.cmp.6110099>
- Mayda, A. M. (2006). Who is against immigration? A cross-country investigation of individual attitudes toward immigrants. *Review of Economics and Statistics*, 88, 510-530. <http://dx.doi.org/10.1162/rest.88.3.510>
- McLaren, L. M. (2003). Anti-Immigrant Prejudice in Europe: Contact, Threat Perception, and Preferences for the Exclusion of Migrants. *Social Forces*, 81(3), 909-936. <http://dx.doi.org/10.1353/sof.2003.0038>
- Moiseenko, V. M. (2004). *Internal migration*. Moscow: Publishing house "Vlados".
- Nesterova, A. A., & Suslova, T. F. (2014). *Study of migrants need in psychological help*. The International Conference on Social Science and Humanity Held by SCIEURO in London, 28-29 September 2014, 97-108.
- O'Rourke, K. H., & Sinnott, R. (2006). The determinants of individual attitudes towards Immigration. *European Journal of Political Economy*, 22, 838-861. <http://dx.doi.org/10.1016/j.ejpoleco.2005.10.005>
- Paas, T., & Halapuu, V. (2012). Attitudes towards immigrants and the integration of ethnically diverse societies. *Eastern Journal of European Studies*, 3(2), 161-175.

- Perkins, D. D., Palmer, N. A., & García-Ramírez, M. (2011). Psychosocial Studies of Migration and Community. *Psychosocial Intervention, 20*(3), 237-242. <http://dx.doi.org/10.5093/in2011v20n3a1>
- Quillian, L. (1995). Prejudice as a response to perceived group threat: population composition and anti-Immigrant and racial prejudice in Europe. *American Sociological Review, 60*(4), 586-612. <http://dx.doi.org/10.2307/2096296>
- Vishnevsky, A. G. (2011). Russian migration strategy and politics of tolerance. *National Psychological Journal, 2*(b), 90-97.
- Vorobieva, O. D. (2003). Population migration processes: Theory and State Migration Policy. Problems of legal regulation of migration processes in the Russian Federation. *Analytical compilation of the Federation Council, 9*(202), 35-46.
- Wilson, T. C. (1991). Urbanism, Migration, and Tolerance: A Reassessment. *American Sociological Review, 56*(1), 117-123. <http://dx.doi.org/10.2307/2095677>
- Yudina, T. N. (2004). Labor migration in Russia: economic and social effects. Social processes and social relations in modern Russia. *Proceedings of the IV International Congress of Social, 1*, 201-203.
- Zolberg, A. R. (1991). Bounded States in A Global Market: The Uses of International Labor Migrations. In P. Bourdieu, & J. S. Coleman (Eds.), *Social Theory for a Changing Society*. Boulder, CO: Westview.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Determinants that Influencing the Adoption of E-HRM: An Empirical Study on Bangladesh

Abdul Kadar Muhammad Masum^{1,2}, Mohammad Jonaed Kabir¹ & Mustafa Manir Chowdhury¹

¹ Department of Business Administration, International Islamic University Chittagong, Chittagong, Bangladesh

² Department of Administrative Studies & Politics, University of Malaya, Kuala Lumpur, Malaysia

Correspondence: Abdul Kadar Muhammad Masum, Department of Administrative Studies & Politics, University of Malaya, Kuala Lumpur, Malaysia. Tel: 60-17-60-5543. E-mail: akmmasum@yahoo.com

Received: April 3, 2015 Accepted: April 15, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p117

URL: <http://dx.doi.org/10.5539/ass.v11n21p117>

Abstract

Nowadays, information systems (ISs) have tremendous impact on processes and practices of human resource management (HRM). Realizing the effectiveness and efficiency of ISs, now, human resource (HR) managers are reliant on electronic human resource management (E-HRM) – an information system to accomplish HR activities. This system is implemented to reduce the administrative burden for HR professional thus they can deliver better services to firm's stakeholders (e.g., employees, managers). If the E-HRM is not adopted properly, management of human resource in an organization cannot work smoothly. This paper aims at exploring the determinants that influence the adaptation decision for E-HRM among firms in Bangladesh. This study developed research framework based on the theoretical foundation and previous literature in order to better investigate the relationship between individual, organizational, technological, and environmental determinants, and E-HRM adoption. A total number of 331 respondents were considered from forty six large scale private sector organizations in Bangladesh using stratified random sampling. Employees of the organizations responded a close-ended questionnaire based on a 5-point Likert scale. Here, data was analyzed by statistical tools, for example, descriptive statistics, and factor analysis. They study found top level management support, employee's individual attributes, system complexity, IT infrastructure, and industry pressure as the most influential determinants that influencing the adoption decision for E-HRM. Limitations and policy implications are discussed at the end of this paper. The scope of future studies is also addressed.

Keywords: electronic human resource management (E-HRM), influencing determinants, adaptation, firms, Bangladesh

1. Introduction

In the present knowledge economy, the performance of HRM undoubtedly related to organizational success (Masum, Azad, & Beh, 2015). Recently, traditional HRM has been lifted its attention on strategic management of organizations through a significant contribution in strategic workforce analysis and knowledge sharing to achieve organizational goal (Lawler & Mohrman, 2003). This shift is moderately attributed to human resource (HR) technologies such as E-HRM, HRIS - human resource information systems, and etc. Some researchers claimed that E-HRM has been interchangeably coined with Intranet-based HRM, virtual HRM, web-based HRM, and HRIS. Typically, E-HRM is defined as an integrated information system that comprises some applications of HR supply and demand forecast, HR planning, staffing information, recruitment and selection, information on training and development, pay increase, compensation forecast, promotion-related information, employee relations, and so on (Masum, Bhuiyan, & Kabir, 2013). Due to its ease of speedy accessibility to information related to employees, E-HRM can improve the strategy of decision making process, and therefore it is considered as a strategic partner of the firms (Rodríguez & Ventura, 2003).

There are some determinants that influence HR managers for implementing E-HRM. Previous studies show that research work that focuses the influential determinants to adopt e-HRM is limited, especially in developing economy as like Bangladesh. So, in Bangladesh, the implementation and usage of E-HRM can be considered as an innovation stage. Jahan (2014) reported that E-HRM was initiated at large organizations of Bangladesh in last 5 years. But, still now, its operation is partial and limited within the large organizations. Realization of the

benefits from E-HRM by Public organizations and small organizations are failed and initiatives to implement E-HRM are inadequate in Bangladesh.

The foremost obstacle for implementing E-HRM is the shortage of management attention and fear of high cost, lack of experience, and lack of training on E-HRM (Jahan, 2014; Masum et al., 2013). But the advantages of the E-HRM are more than the limitations. Jahan (2014) stated that if E-HRM is implemented in the firms of Bangladesh, managers and employees will accept the systems. Though, E-HRM implementation is really a challenging task in Bangladesh.

The main thrust of this study is identifying most influential determinants that are related to managerial decision for adapting E-HRM in the private sector of Bangladesh. This study contributes to the knowledge of human resource management by exploring some important determinants that are under organizational, environmental, and technological issues, especially for developing countries. In search of our objective, the variables used in our analysis are selected by extensive literature review. Next, a conceptual framework of influencing determinants for E-HRM adoption is developed. In the next section, the methodology, and the results of the study are deliberated. Convinced final remarks and recommendations for future research are mentioned in the concluding section.

2. Related Works

Researchers identified some important determinants for adopting new technology. In this study, we examined some determinants for adopting E-HRM that taken from technology innovation literature. The influencing determinants are divided into individual level, organizational level, technological level, and environmental level. Authors of this paper have found that both qualitative and quantitative methods are available in innovation adoption research, though qualitative approach was widely visible.

Previous research proved that the effectiveness and success of HRIS largely remained in the hands of its end-users. Research on the technology acceptance model developed by Richter, Stocker, Müller, & Avram (2013) has extensively examined the users' perception, attitude, motivation, intentions and adoption of information systems and technologies. This body of knowledge explains that users' attributes and their interaction with information system decide the success or failure of information systems and technologies implementation (Delorme & Arcand, 2010; Troshani, Jerram, & Rao Hill, 2011). In addition, Thong (1999) pointed out that CEO's attitude toward technology information has a great impact on the decision to IT adoption in Singapore small and medium sized enterprises (SMEs). Some researchers agreed that the IT expertise of the employees and their acquaintance with the electronic tools facilitate e-HRM adoption (Ruël, Bondarouk, & Looise, 2004; Voermans & van Veldhoven, 2007).

Organizational determinants represent some administrative characteristics which influence adoption of E-HRM. Strohmeier (2009) and Troshani et al. (2011) identified firm size, and supporting organization settings including a skilled workforce as significant determinants in effective innovation adoption. Moreover, top management support is essential to adopt a system in the organizations (Teo, Lim, and Fedric, 2007). They also identified skilled employee greatly influence the management commitment. Similarly, numerous researchers found that management commitment and their positive attitude on IT adoption plays a vital role to implement E-HRM in organizations (Altarawneh & Al-Shqairat, 2010; Teo et al., 2007; Troshani et al., 2011). Additionally, Teo et al. (2007) stated that the availability of skilled professionals, who are also acquainted to IT, is precondition for effective and efficacious adoption of E-HRM. They denoted that it can be a foremost hindrance in E-HRM adoption if the end-users don't sufficient understanding of the system functions and features. Sizeable research found that the vital determinant in the effective implementation of E-HRM is the adequate financial support from the firms (Ngai & Wat, 2006; Parsa, 2007; Reddick, 2009; Masum, 2015).

Technological determinants represent the manner where technology characteristics can influence adoption (Hoon Yang, Lee, & Lee, 2007). Adopters assess the characteristics of innovations in terms of "possible gains and barriers". Gains refer to the benefits that organizations expect to receive upon adoption and include increased levels of service quality, efficiency, and reliability (Oliveira & Martins, 2010). According to Rogers (2003), barriers include innovation compatibility and its complexity with organizational technology capability and legacy. Again, Rogers (2003) defined complexity as the degree to which an innovation is perceived as relatively difficult to understand and use. Moreover, a study on Singapore conducted by Teo et al. (2007) explored compatibility and relative advantage as significant determinants in managerial decision to implement E-HRM. Some researchers identified technological readiness as a major determinant for the decision of IT adoption in a firm. Oliveira and Martins (2010) stated that adequate IT professionals and strong organization's technology Infrastructure indicate the technology readiness of a firm.

Environmental determinants describe the area where organizations conduct their business, and include industry characteristics, government regulation, and supporting infrastructure (Oliveira & Martins, 2010; Troshani et al., 2011). Kittipong (2009) demonstrated that industry pressure is environmental determinant and it related with organizational adoption of innovation. In this study, industry pressure refers to the entire trend, direction of operational practices and extent of competition that drive a firm to adopt technology innovation so that it can achieve competitive advantages and can survive in the industry. According to Teo et al. (2007) and Masum (2015), competitive pressure or industry pressure compels a firm to adopt more strategic approach such as decreasing cost, and effectively and efficiently human resource management. Thong (1999) stated that a firm cannot be competitive without effective human resource management. Consequently, this pressure has driven the firms to implement and use E-HRM. Therefore, competition is counted as an influencing environmental determinant in adopting E-HRM.

3. Research Model

Researchers identified some influential determinants of E-HRM adoption. Among them, we examined some independent variables for E-HRM adoption among firms in Bangladesh. On the basis of past literature, a conceptual model was developed. The model indicates the determinants that influencing decision to adopt E-HRM in firm. This model consists of seven variables. These are employee's individual attribute (Delorme & Arcand, 2010; Troshani et al., 2011; Richter et al., 2013), IT infrastructure (Kwon & Zmud, 1987; Hoon Yang et al., 2007; Oliveira & Martins, 2010; Masum, 2015), complexity (Thong, 1999; Rogers, 2003), compatibility (Rogers, 2003; Teo et al., 2007), top level management support (Teo et al., 2007; Altarawneh & Al-Shqairat, 2010; Troshani et al., 2011; Masum, 2015); Industry pressure (Thong, 1999; Teo et al., 2007; Kittipong, 2009; Masum, 2015), and IT expertise (van Veldhoven & Ruël et al., 2004; Voermans, 2007; Masum, 2015).

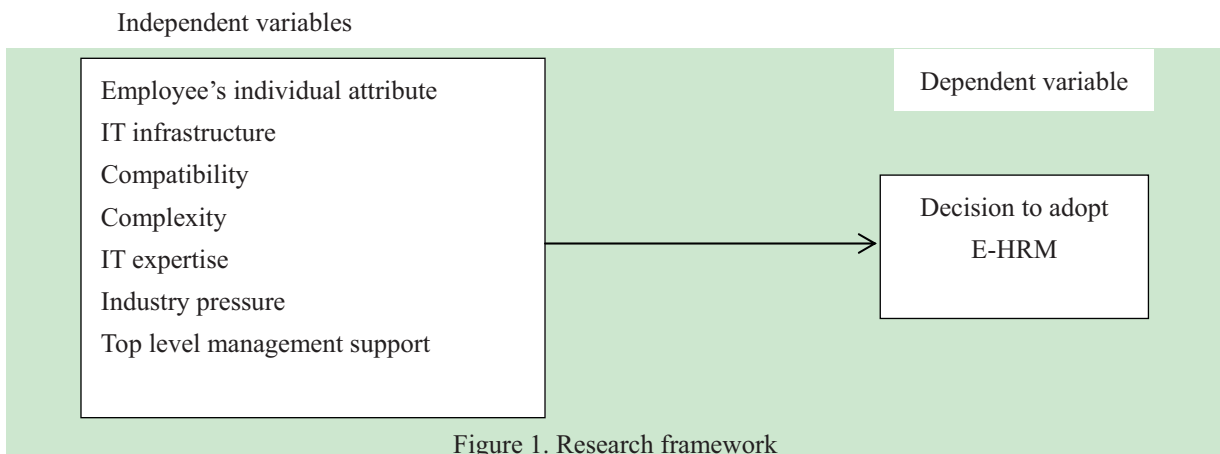


Figure 1. Research framework

4. Methodology of the Study

Quantitative techniques were adopted to explore the determinants that influencing E-HRM adoption. Three hundred and fifty questionnaires were sent to HR officer, Senior HR office, HR manager, HR executives, and IT experts of sample firms in Bangladesh. The useable questionnaires were 282 with the response rate 70.5%. The close-ended questionnaire was distributed among the participants applying non-probability sampling technique. To measure selected independent variables, it was designed with a 5-point likert scale (where 1 = strongly disagree, and 5 = strongly agree). The survey was conducted for 2 months (October 2014 – November 2014). Descriptive statistics and exploratory factor Analysis (EFA) were used as statistical tools to analyze the collected data. Statistical Package for Social Sciences Program (SPSS) version 20.0 was used as statistical software.

5. Data Analysis and Findings

5.1 Sample Characteristics

Tables below demonstrated the results of the statistical analysis of sample characteristics, which includes organizations' size, and industry.

In Table 1, refer to organization size, the number of companies with less than 100 employee accounts for 6.5%. The quantity of companies with less than 400, but more than 200 is 10, accounting for 21.8% of the total firms. There are 12 firms (26 %) that have people more than 500, but less than 1000. Here, each bank represents only a branch.

Table 1. Organizations' size statistics

Number of employee	Frequency	Percent	Cumulative Percent
<100	3		6.5
100 - 199	6	6.5	19.6
200 - 399	10	13.1	41.4
400 - 599	5	21.8	52.3
600 - 799	7	10.9	67.5
800 - 999	12	15.2	93.5
>1000	3	26.0	100.0
Total	46	6.5	

Table 2. Industry statistics

Firm type	Frequency	Percent %	Cumulative Percent
Banking	12	26.0	26.0
Education	11	23.9	49.9
Manufacturing	13	28.3	78.2
Telecommunication	3	6.6	84.8
Logistics/transportation	7	15.2	100.0
Total	46		

Table 2 shows the industry statistics data of total forty six firms. There are 26% of the firms come from banking industry, the number of firms from the industry of education accounts for 23.9%. 28.3% of the firms are manufacturing firms. 6.6% and 15.2% of the total firms are from telecommunication and logistics/transportation industry respectively.

5.2 Validity and Reliability Analysis

It is revealed that discriminant validity is satisfactory as these items more strongly loaded on single determinants than other determinants. It seems that there is much similarity on the content among HR manager's attitude, and IT expertise. Therefore, we combined the two construct into one single determinant, renamed employee's individual attribute. Here, most of the multi-item indicators confirmed enough convergent validity expect IT expertise and HR manager's attitude in factor analysis. For factor analysis, the sample size (331) was statistically significant. The sample was adequate as Kaiser-Meyer-Olkin (KMO) value for the overall matrix was 0.814. To know the appropriateness of the data for factor analysis, we applied Bartlett's test of sphericity (Bartlett, 1950). The test value also was significant. We found very high reliability for our data by determining Cronbach's coefficient (α) value for each dimension. It was ranged from 0.76 to 0.92 (typically 0.6 and above is acceptable) (Cronbach, 1951; Malhotra, 2010).

5.3 Determinants Extraction

To identify the most influential determinants that influencing decision for E-HRM adoption, we employed Principal Component Analysis (PCA) followed by the varimax rotation. Table 1 includes 28 items, their loading value, Cronbach's alpha, and Eigen values. In this study, we considered the loading value of the variable as 0.50 and above. According to Hair, Anderson, Tatham, & Black (2003) loading value 0.50 is significant for factor extraction. Due to lower loading value, we dropped some variable from our analysis (i.e., Com1, Com2, Comp1, Env3, and etc.). Now, the E-HRM adoption scales were reduced to 20 items. The factor analysis explored five determinants and together it explained 64.827% of the total variance.

Employee's individual attribute is the explored first determinant. This determinant is denoted by 6 variables (Att1, Att3, Att4, Exp4, Exp2, and Exp3). This explored factor explains 19.262% of the variance. The determinant loadings of the variables range from 0.598 to 0.811. These 6 items are: I consider adoption of E-HRM as a wise decision for the company, I consider that E-HRM contributes to HRM strategic effectiveness, I consider that E-HRM contributes to HRM technical effectiveness, HR personnel knows how IT can be used to support HR activities, and employees' understanding of computer is better in comparison to other organizations in the industry, Employees feel comfort with E-HRM applications.

Table 3. Summary of Rotated Component Matrix, Cronbach's alpha, variance and Eigen values

Determinant Name	Items	Item loading	% of variance (Cumulative)	Cronbach's Reliability Coefficient	Eigen value
Employee's individual attribute	Att1	0.811	19.262 (19.262)	0.85	9.986
	Att3	0.792			
	Att4	0.788			
	Exp4	0.785			
	Exp2	0.662			
Top management support	Exp3	0.598	13.453 (32.715)	0.83	5.326
	Top4	0.845			
	Top3	0.783			
	Top1	0.778			
IT infrastructure	Top2	0.668	11.116 (43.831)	0.76	3.153
	Infr2	0.812			
	Infr3	0.786			
	Infr4	0.645			
Compatibility	Infr1	0.511	9.654 (52.485)	0.92	1.907
	Comp2	0.782			
	Comp3	0.654			
Competitive pressure	Comp4	0.578	8.342 (60.827)	0.89	1.139
	Env1	0.712			
	Env2	0.594			
	Env4	0.523			

Top level management support is the explored second determinant. This determinant is denoted by 4 variables (Top1, Top2, Top3, and Top4). This explored factor explains 13.453% of the variance. The determinant loadings of the variables range from 0.668 to 0.845. These 4 items are: top management knows the advantages of E-HRM and they are enthusiastic to implement the system, They provides satisfactory financial support for IT infrastructure, They encourages HR personnel to use E-HRM in all HR related activities, and They has allocated adequate resources for E-HRM implementation.

IT infrastructure is the explored third determinant. This determinant is denoted by 4 variables (Infr2, Infr3, Infr4, and Infr1). This explored factor explains 11.116% of the variance. The determinant loadings of the variables range from 0.511 to 0.812. These 4 items are: The firm has a secure networking system, the existing IT infrastructure is suitable for E-HRM, the firm has sufficient back up plan in case of disaster, and the firm has swift internet facility.

Compatibility is the explored fourth determinant. This determinant is denoted by 3 variables (Comp2, Comp3, and Comp4). This explored factor explains 9.654% of the variance. The determinant loadings of the variables range from 0.578 to 0.782. These 3 items are: E-HRM applications are compatible with existing organizational plan, the existing IT infrastructure is compatible with E-HRM applications, and E-HRM applications are compatible with existing digital data resources.

Industry pressure is the explored fifth determinant. This determinant is denoted by 3 variables (Env1, Env2, and Env4). This explored factor explains 8.342% of the variance. The determinant loadings of the variables range from 0.523 to 0.712. These 3 items are: we keenly keep track of innovative usage of technology by competitors, E-HRM application is strategic need to strive in the industry, and the overall operational practices in our industry pressure us to adopt E-HRM.

The item loading values of Complexity was below 0.5. So, this construct was dropped by PCA.

6. Discussions

The findings of the present study indicate that employee's individual attribute, top level management support, compatibility, IT infrastructure, and industry pressure are some influential determinants for managerial decision to adopt E-RM among firms in Bangladesh. However, complexity is not explored as a determinant i.e. it is not influencing decision to adopt E-HRM.

Employee's individual attribute is the first explored determinant that is integration of two constructs - IT expertise and HR manager's attitude. Some researchers exposed that IT expertise (Ruël et al., 2004; Voermans & van Veldhoven, 2007; Masum, 2015) and HR manager's attitude (Kittipong, 2009; Delorme & Arcand, 2010; Troshani et al., 2011; Richter et al., 2013) affect technological adoption of any technological innovation that is alike with our findings. The earlier research found that top management support is a key factor for technology innovation (Teo et al., 2007; Hoon Yang et al., 2007; Altarawneh & Al-Shqairat, 2010; Troshani et al., 2011; Masum, 2015). The explored determinant - top level management support is one of the influencing determinants to adopt E-HRM in firm of Bangladesh that is similar to the past research. Another most important extracted determinant to take decision for E-HRM adoption is IT Infrastructure that also supports the past research (Kwon & Zmud, 1987; Hoon Yang et al., 2007; Oliveira & Martins, 2010; Masum, 2015). The fourth extracted factor is compatibility with existing resource and organizational plan. The findings of Rogers (2003) and Thong (1999) are consistent to your present finding of the study. They identified that the compatibility nature of technology is most essential characteristics to adopt any new system. Finally, Industry pressure has influence to adopt E-HRM among firms in Bangladesh. Finally, industry pressure is explored as an influence determinant to adopt E-HRM. This finding is similar to previous studies (Kittipong, 2009; Teo et al., 2007; Thong, 1999; Masum, 2015).

7. Conclusion

E-HRM provides competitive advantages for supporting human resource management processes. It ensures easier, faster, and cheaper HR activity accomplishment and helps in all types of operational, functional and strategic human resource management processes. It helps to take more effective and strategic decision to solve HR problems. All these benefits of E-HRM can be attained seamlessly only if the system is adopted or adapted in an organization accurately and more effectively. However, there are some hindrances and challenging issues to implement and to adopt E-HRM all over the world. The purpose of this study was to examine determinants that influencing E-HRM adoption in firms of Bangladesh. The present study has contributed to the knowledge arena of human resource management through providing important insights and greater understanding into the determinants that influencing the managerial decision to adopt E-HRM in the context of developing countries. The findings of the study suggested that employee's individual attributes, top management support, IT infrastructure, compatibility, and industry pressure are the extracted determinants to the adoption of E-HRM. However, the findings of this study also suggested that employee's system complexity does not have an impact on the organizational adoption of E-HRM. Moreover, future studies are required in detecting the degree of the impact of these determinants identified. Additionally, many organizations are working in a global network in this globalization era. So, culture of both the country and the organization play an important role as influencing determinant in adopting E-HRM. As a result, the researchers strongly recommend investigating the aspect of other determinants including culture in E-HRM adoption.

8. Limitations and Future Research

During the preparation of this study, we found some limitations of it. Firstly, all selected firms in the sample are from Dhaka, the capital city of Bangladesh. As Dhaka is one of the districts out of 64, the findings of the study don't reflect the correct state of all firms in Bangladesh as a whole. Secondly, only 331 is the sample size of the present study. It is established that the larger the sample is more representative and produce better results. Thirdly, although there are a good number of potential determinants that influence the decision of E-HRM adoption, we have selected only 7 determinants to examine the decision of E-HRM adoption. The paper only concentrated on the decision to E-HRM adoption but not extent of E-HRM implementation. For further study, researchers can concentrate the implementation issues of E-HRM choosing a representative sample size.

References

- Altarawneh, I., & Al-Shqairat, Z. (2010). Human resource information systems in Jordanian universities. *International Journal of Business and Management*, 5(10), 113-123.
- Bartlett, M. S. (1950). Tests of significance in determinant analysis. *British Journal of statistical psychology*, 3(2), 77-85. <http://dx.doi.org/10.1111/j.2044-8317.1950.tb00285.x>
- Bondarouk, T., Ruel, H., & van der Heijden, B. (2009). E-HRM effectiveness in a public sector organization: a multi-stakeholder perspective. *The International Journal of Human Resource Management*, 20(3), 578-590. <http://dx.doi.org/10.1080/09585190802707359>
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334. <http://dx.doi.org/10.1007/BF02310555>
- Delorme, M., & Arcand, M. (2010). HRIS implementation and deployment: a conceptual framework of the new

- roles, responsibilities and competences for HR professionals. *International journal of Business information systems*, 5(2), 148-161. <http://dx.doi.org/10.1504/IJBIS.2010.030626>
- Hair, J., Anderson, R., Tatham, R., & Black, W. (2003). *Multivariate data analysis*. New Delhi: Pearson Education.
- Hoon Yang, K., Lee, S. M., & Lee, S.-G. (2007). Adoption of information and communication technology: impact of technology types, organization resources and management style. *Industrial Management & Data Systems*, 107(9), 1257-1275. <http://dx.doi.org/10.1108/02635570710833956>
- Jahan, S. (2014). Human Resources Information System (HRIS): A Theoretical Perspective. *Journal of Human Resource and Sustainability Studies*, 2, 33-39. <http://dx.doi.org/10.4236/jhrss.2014.22004>
- Kittipong, S. (2009). The adoption of techno-relationship innovations. *Marketing Intelligent and Professionals*, 27(3), 380-412.
- Kwon, T. H., & Zmud, R. W. (1987). *Unifying the fragmented models of information systems implementation*. Paper presented at the Critical issues in information systems research.
- Lawler, E. E., & Mohrman, S. A. (2003). HR as a strategic partner: What does it take to make it happen? *Human Resource Planning*, 26(3), 15-29.
- Malhotra, N. (2010). *Marketing Research: An applied orientation*. New Jersey: Pearson Education.
- Masum, A. K. M., Azad, M. A. K., & Beh, L.-S. (2015). The role of human resource management practices in bank performance. *Total Quality Management & Business Excellence*, 1-16. <http://dx.doi.org/10.1080/14783363.2014.1002762>
- Masum, A. K. M. (2015). Adoption Factors of Electronic Human Resource Management (e-HRM) in Banking Industry of Bangladesh. *Journal of Social Sciences*, 10(5), 37-45
- Masum, A. K. M., Bhuiyan, F., & Kabir, R. (2013). HRIS Practices in Universities: An Exploratory Study on the Private Universities In Bangladesh. *Global Journal of Human-Social Science Research*, 13(7), 25-29.
- Ngai, E., & Wat, F. (2006). Human resource information systems: a review and empirical analysis. *Personnel Review*, 35(3), 297-314. <http://dx.doi.org/10.1108/00483480610656702>
- Oliveira, T., & Martins, M. F. (2010). Understanding e-business adoption across industries in European countries. *Industrial Management & Data Systems*, 110(9), 1337-1354. <http://dx.doi.org/10.1108/02635571011087428>
- Parsa, H. (2007). Critical Determinants in Implementing HRIS in Restaurant Chains. *Advances in Hospitality and Leisure*, (3), 69-86.
- Reddick, C. G. (2009). Human Resources Information Systems in Texas City Governments: Scope and Perception of its Effectiveness. *Public Personnel Management*, 38(4), 19-34. <http://dx.doi.org/10.1177/009102600903800402>
- Richter, A., Stocker, A., Müller, S., & Avram, G. (2013). Knowledge management goals revisited: A cross-sectional analysis of social software adoption in corporate environments. *VINE*, 43(2), 132-148. <http://dx.doi.org/10.1108/03055721311329927>
- Rodríguez, J. M., & Ventura, J. (2003). Human resource management systems and organizational performance: an analysis of the Spanish manufacturing industry. *International Journal of Human Resource Management*, 14(7), 1206-1226. <http://dx.doi.org/10.1080/0958519032000114273>
- Rogers, E. M. t. e. (2003). *Diffusion of Innovation* (4th ed.). New York: The Free Press.
- Ruël, H., Bondarouk, T., & Looise, J. K. (2004). E-HRM: innovation or irritation. An explorative empirical study in five large companies on web-based HRM. *Management Revue*, 15(3), 364-380.
- Strohmeier, S. (2009). Concepts of e-HRM consequences: a categorisation, review and suggestion. *The International Journal of Human Resource Management*, 20(3), 528-543. <http://dx.doi.org/10.1080/09585190802707292>
- Teo, T. S., Lim, G. S., & Fedric, S. A. (2007). The adoption and diffusion of human resources information systems in Singapore. *Asia Pacific Journal of Human Resources*, 45(1), 44-62. <http://dx.doi.org/10.1177/1038411107075402>
- Thong, J. Y. (1999). An integrated model of information systems adoption in small businesses. *Journal of*

management information systems, 15(4), 187-214.

Troshani, I., Jerram, C., & Rao Hill, S. (2011). Exploring the public sector adoption of HRIS. *Industrial Management & Data Systems*, 111(3), 470-488. <http://dx.doi.org/10.1108/02635571111118314>

Voermans, M., & van Veldhoven, M. (2007). Attitude towards E-HRM: an empirical study at Philips. *Personnel Review*, 36(6), 887-902. <http://dx.doi.org/10.1108/00483480710822418>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Social and Humanitarian Expert Assessment of Biomedical Innovations

Irina A. Aseeva^{1,2} & Vladimir G. Budanov^{1,2,3}

¹ Southwest State University (SWSU), Kursk, Russian Federation

² Belgorod State National Research University, Russian Federation

³ Institution of the Russian Academy of Sciences Institute of Philosophy of RAS, Moscow, Russian Federation

Correspondence: Irina A. Aseeva, Department of Philosophy and Sociology, Faculty of Economics and Management, Southwest State University, 94, 50 Let Oktyabrya St., 305040, Kursk, Russian Federation. Tel: 7-910-319-4005. E-mail: irinaaseeva2011@yandex.ru

Received: April 9, 2015 Accepted: April 25, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p125

URL: <http://dx.doi.org/10.5539/ass.v11n21p125>

Abstract

Universal development convergence, which is an intertwinement, interaction and interpenetration of different social spheres, leads to new synergistic effects and rapid transformations of scientific, technological and social development of the society. Nowadays the necessity of introducing effective constituents of ethical and humanitarian comprehension of innovations to science, especially in the field of biomedicine, is becoming increasingly apparent. In this regard, it is of particular interest to compare the opinions of student-age youth and the experts – well-known Russian scientists on the use of new converging technologies and their impact on an individual and society.

Keywords: philosophy of science, interdisciplinarity, biomedical innovations, ethical and humanitarian expert assessment, human enhancement, converging technologies

1. Introduction

As early as at the beginning of the 20th century, the possibility of purposive impact on human mind and body was considered to be science fiction or utopian projects. The origination of genetic engineering changed the situation radically. Having deciphered DNA's structure, the rapidly developing science saw no real obstacles to bold genetic experiments. Complex manipulations with cells and their fragments, new gene series synthesizing, molecular cloning, transfer and integration of genes and their structural elements into another organism genome, artificial insemination of animals and people have become routine procedures. At present, methodological patterns and possibilities of biomedical technologies application have become clear. There are expert reports on the creation of organisms with a modified genome that has no analogues in nature: on gene therapy they write about treatment of hereditary diseases introducing normal genes into the cells-carriers of genetic hereditary diseases; on gene diagnostics they study detecting congenital defects, risks of certain hereditary diseases, genetically predetermined body response to specific medicinal drugs; on total genetic control they discuss identifying abnormal or undesirable genetic carriers; on genetic fingerprinting their studies concern person's identification based on his/her genetic characteristic features; finally, on cloning of the whole organism and/or its certain organs.

According to experts for modern genetic technologies, there are no fundamental theoretical limitations in engineering any conceivable combinations of hereditary features of new artificially bred organisms. This means that the issue of human future comes under consideration of applied sciences, ethics and politics rather than philosophical reasoning and fiction. Science, having at its disposal a set of advanced technologies, greatly increases human possibilities and inevitably causes significant changes in the society; moreover, universal development convergence, which is an intertwinement, interaction and interpenetration of different social spheres, leads to new synergistic effects, rapid transformations of scientific, technological and social development of the society, and serious psychological problems (Breazeal, C., Edsinger, A., Fitzpatrick, P., Scassellati, B., Varchavskaia, P. Social Constraints on Animate Vision (MIT Artificial Intelligence Lab.). <http://www.ai.mit.edu/projects/humanoid-robotics-group/cog/cog-publications/IEEE-vision.pdf>).

These trends are especially noticeable in the field of biomedical research, which can be regarded as a kind of 'training range' for developing and testing both new technologies impact on a person, his/her changes, and new mechanisms for his/her protection.

2. NBIC-Convergence: Concept Definition

The history of the development of the 20th century science changed its specialization from narrow to interdisciplinary, then to transdisciplinary, and now, actually, we deal with the synthesis of sciences. But the synthesis of sciences is a synergistic effect of their interpenetration and mutual enrichment rather than just a simple vectorial addition of methods and results. This synthesis is most clearly seen in the new scientific and technological patterns and is based on the so-called converging NBIC-technologies.

The term 'NBIC-convergence' was introduced in the report "Converging Technologies for Improving Human Performance" made for the U.S. National Science Foundation and Department of Commerce by Mihail Roco and William Bainbridge in 2002 (Roco, Bainbridge 2003). The report indicates the importance and peculiarity of NBIC-convergence, its significance in the development of the civilization, and the formation of modern culture.

Convergence comes from Latin '*convergo*' which means 'close in, incline together'. However, the modern meanings of the concepts of 'converging technologies' and 'technologies of convergence' are much broader and much deeper: they refer to the processes of interpenetration, interaction which create the basis for obtaining incredible technological results. Being put into practice, these results are so powerful that they are capable of interfering and altering the very nature of a person. Besides, it is their enormous resource that humanity is still unable to assess accurately due to the rapid development of NBIC-technologies.

Meanwhile, the impulses coming from the promising technological applications of scientific knowledge are becoming dominant in the development of science; 'technoscience' is being formed (Bruno Latour); a man as such is becoming the direct object of both scientific research and technological impact. Mihail Roco and William Bainbridge point at the evolutionary significance of these technologies for the nature of a man as a biological species. Now, the natural world is being filled with artificial creatures of biotechnology and nanotechnology, which carry a potential threat to the biosphere (Roco, 2003). "The distinction between artificial and biological is blurring. Our cognitive apparatus, which was formed during the evolution of the natural world, now is being transformed taking into account the evolution of natural-artificial world under the influence of technoscience" (Chernikova 2010). In this regard, not only scientists, but also the whole society, is worried about the problem of applying new and super-new technologies for changing the human nature.

3. Humanitarian and Social Consequences of Converging NBIC-Technologies

The result of NBIC-technologies converging should lead to the union of four global branches of today's science and technology: nanotechnology is a new approach to creating customized materials for specific purposes using atomic-molecular engineering; biotechnology will allow introducing biological constituents when engineering inorganic materials, thus obtaining hybrid materials; information technology will provide with advanced intellectual system of processing data, modeling and interface; cognitive technology based on studying the consciousness and the cognition will allow better understanding of mental processes and behavior of living beings, more effective developing of artificial intelligence and human-machine cyber-environment; social technology is vital for managing and harmonizing globalizing net world.

Converging technologies set up a new strategy for the civilization development; in this case they are in need of adequate social and humanitarian comprehension. Today, due to the development of converging technologies, which have an enormous transforming power, the question concerning the limits of such transformations with regard to an individual him/herself arises (Aseeva, 2013).

Even now, NBIC-technologies offer new opportunities for alleviating human sufferings, speed up the production of new energy sources, contribute to solving the problem of hunger, improve globally the whole health care system. There is a strong possibility of biological changing an individual by means of direct intervention into the genetic code and in the processes of human life activities (deciphering the genetic code, cellular technologies, simulation of biochemical processes, implantation of electronic devices and use of nanomedical robots). The idea of creating artificial life is becoming more and more evident (Bouchard, 2003).

At the same time technological possibilities, which are being revealed in the course of NBIC-convergence, will inevitably lead to serious cultural, philosophical and social upheavals. They refer particularly to reconsideration of such fundamental concepts as 'life', 'mind', 'person', and 'nature' (Kamensky, 2015).

The idea of creating HI-HUME technologies (by analogy with HI-TECH technologies) presupposed large-scale manipulation of human nature including cardinal improvement of health and enhancement of human abilities. Currently HI-HUME technologies are no longer separate modifications of technological patterns, which represent the implementation of several basic theoretical paradigms. They are now systemic and affect all the areas of human psychosomatic existence. F. Fukuyama (2004) distinguishes four areas where the transformation of human 'self' is already possible:

- neurophysiology and human evolutionary psychology;
- neuropharmacology and the technique of human emotions and behavior modification;
- gerontology and the development of the technologies of individual human life prolongation;
- genetic engineering.

However, the rapid development of converging technologies leads not only to new unprecedented opportunities, but also to new challenges and threats. The origination of NBIC-technologies has significantly changed the paradigm of scientific research. Today, the period between the creation of a theoretical model and obtaining practical results has become as short as it has not been ever. As a result, the emergence of new technological opportunities is often far ahead of the knowledge of fundamental basics that they contain, as well as the consequences of their application. That is why the introduction of new technologies must be preceded by the studies of their social impact, as well as the permissible limits of their application; these requires significant modeling studies of the alternatives of virtual worlds using supercomputing systems and deep insight into the socio-humanitarian nature.

It is necessary to pay attention to one aspect of new technologies application: it is the problem of new inequalities and new dangers of relations with 'others'. If a jump, as a result of which humanity will find itself in a new condition due to nano-technology and genetic engineering, will take place, where are the guarantees that it will happen to all the people at the same time? Therefore, both political cleavages and the system of social stratification, which will also be inevitable in posthuman society, will be constructed in a new way. Initially new technologies and 'paradisaical' opportunities will be available to the minority (Kovalev, 2011). How will the majority react? Will it be possible to cope with this new inequality?

Moreover, the process of human opportunities enhancement is at risk of becoming unmanageable, multi-directional and multi-functional. Thus, the original goal of the interface 'brain – computer' may be the corrective actions aimed, for example, at stopping loss of vision, but the technology created for this purposes can on its own, like mobile communication, get many additional features in the range of human possibilities. The paths of different ways of changing a person are blurry, intertwined and are involved in the convergence of different technologies, becoming more and more unpredictable. A famous Ukrainian geneticist Acad. V.A. Kordyum believes that the humanity has reached a final anthropogenesis stage which is characterized by the transformation of its biological form of evolution into socio-cultural form. This means that there is a time gap when the stability of the biosphere is already close to its minimum, but the noospheric (socio-cultural) mechanisms of self-regulation are still not able to provide a sufficient level of stability.

4. Convergent Technologies in the 'Mirror' of Youth Public Opinion

In 2014 an empirical study on two levels (at the level of students of higher educational establishments – 500 people and at the expert level – 10 well-known and reputable Russian scientists) was conducted. The goal of the research was to study the mechanisms of the formation of social assessment of modern convergent technologies, in particular NBIC complex system, as well as opinions, judgments and assessments of student-age youth concerning both the technologies themselves and the prospects and possible consequences of their development.

Students of economic, engineering, humanitarian, and medical specialties of Kursk universities (Russia) were student survey respondents. Scientists competent in the area under study and the allied sciences participated as the experts. Questions that the students and the experts answered partially overlapped, or were similar in accordance with the specific features of the both surveys.

In the course of the study, the respondents were asked the following question: "Do you know about NBIC-technologies?" As it turned out, 75% of the respondents know or have ever heard of NBIC-technologies (nano-, bio-, information and cognitive technologies). In particular, the young people are more or less familiar with information technology (33%) and nanotechnology (35%); 27% of the students surveyed heard about biotechnology; 5% of the respondent students heard about cognitive technologies. This data scattering can be explained by the fact that among the young people and in many information sources the information on cognitive

technologies is often not widely spread and is not considered as a separate technology in the public consciousness.

Among the sources from which the young people mostly get information about NBIC-technologies are the Internet (93.3% of the respondents), mass media, namely newspapers, radio, television (73.3%); a third of the students (33.3%) learned about NBIC-technologies from documentary films and programs, as well as science fiction movies. Also among the information sources, young people mentioned the specialized and non-specialized literature, and advertisements. Little information about the converged technologies comes from friends, family, populist literature and other sources.

Such distribution of information sources is due to the fact that today the Internet and mass media play an important role in the daily lives of people, particularly young people. Young people mostly spend a lot of time on the Internet and watching TV; so, both directly and indirectly they receive information about different spheres of life, including modern technologies. Currently, mass media is one of the main information-carrying media. Cinema contains many science fiction films on new nano-, bio-, information technologies. Robots are often the heroes of modern science fiction films, but the information and technological achievements taken as a basis of the plots in most cases carry a potential threat, however. There are a lot of documentaries, which subject is based on the new information opportunities and new achievements of nano- and biotechnologies, their development prospects and both real and potential consequences (Malinetskii, 2008). An interesting fact is that a quarter of the respondents learned about converged technologies from specialized literature; this indicates a conscious, deliberate interest for this subject.

Of course, if we talk about the information which young people would like to get on the technologies under consideration, it covers the subject of the level of development of the technologies in our country. Thus, 66.7% of the respondents would like to know more about the level of the development of nanotechnology, 53.3% – about biotechnology, 68.8% – about information technology, and 43.8% – about cognitive technologies.

Almost half of the respondents are concerned about availability of biotechnology; a third expressed a wish to learn more about the availability of nano- and information technologies. Availability of cognitive developments appeals to a quarter of the respondents. The young people (46.7%) are also worried about possible consequences caused by the application of the technologies under study, mostly it concerns biotechnology.

When discussing the topics related to the development of modern technologies in the classroom, the respondents' answers were distributed equally. 50% of the respondents discussed modern technologies, for example, while studying Philosophy, Chemistry, Physics, Information Technology.

The students were also asked a question concerning various events and activities (conferences, round tables, seminars, etc.) devoted to the development of modern technologies and their participation in such events. It was found out that only a quarter of the respondents (24%) know about such events and participated in them. This is shown in Figure 3. These thematic activities were devoted mainly to nano- and information technologies, as well as the general progressive technologies. Our experts were asked the same question. It turned out that the experts themselves, by their own admission, do not often participate in special activities and conferences devoted to the development of modern technologies, mainly because there are not so many of them. This fact again confirms the validity of the results of the students' survey.

Table 1. To what degree are you ready for the interference of technologies into human nature?

Possible responses	%
Disease treatment	31.3%
Technical appliances to make the lives (sufferings) of people with disabilities easier	43.6%
Informational technological devices implanted into the body	9.4%
Technological interventions that can improve intellectual, physical level of development of a person	9.4%
Creating bio-robots that perform certain types of work	6.3%
Complete integration of a human being and 'machine', technical inventions	0.0%
In total	100.0%

Considering the willingness of the students to allow the introduction of NBIC-technologies into our lives at a general level, the following data were obtained. The vast majority is ready for implementation of information

technologies (70%). This is due to the fact that nowadays these types of technologies have become ingrained in our everyday lives, and it seems logical that young people actively use the achievements of this area. Besides, the current time is not for nothing called the ‘age of information technologies’: the majority of people, especially young people, often cannot imagine their lives without various information devices. The implementation of the developments of nanotechnology is acceptable for 35% of the respondents. A small percentage of the respondents is ready for the interference of bio- and cognitive technologies into human lives (see Table 1).

The analysis of the distribution of the responses suggests that young people find it possible to use considered technologies only for humanitarian purposes. It is noteworthy that none of the respondents consider that it is possible to allow complete integration of a human being and ‘machine’ or technical inventions.

In this case, the vast majority of the young people are not ready to allow interference of NBIC-technologies in their body (72.2%). Perhaps this is due to the fact that 65% of the respondents find NBIC-technologies dangerous. Biotechnology triggers particular concern among the young people. Mainly young people are apprehensive about the fact that these technologies may get out of control, which, in turn, is fraught with serious consequences and threats. Some respondents are also worried that the development and implementation of NBIC-technologies could eventually lead to ‘smearing’ of the concepts of ‘a man’ and ‘humanity’, to blurring the boundaries between them, as well as to deepening inequality between people. The last is connected, firstly, with different levels of availability of these technologies, and secondly, with ‘the improvement of human nature’, when some people can become more developed (physically and mentally) than the others. There are some concerns about the commercialization of NBIC-technologies application. Ultimately, it can be said that some risks cause the others, and they are interrelated to some extent.

Young people’s opinions about the so-called ‘enhancement of human functionality’, ‘extension of a human being’, ‘improvement of human nature’ are distributed almost equally: 56% of the respondents consider it to be positive; the remaining respondents (44%) disapprove the possibility of such improvements.

Moreover, the vast majority of the respondents (90%) believe that the development of NBIC-technologies should be preceded by social and humanitarian comprehension, should be accompanied with social technologies which are mentioned more often today and should be subject to these technologies. This fact is confirmed both by the scientific and public communities. It should be noted that in recent years people have not been talking just about NBIC-technologies, but about NBICS complex system.

77.8% of the respondents believe that the socio-humanitarian initiative will allow anticipating changes caused by NBIC-technologies and managing them. In addition, according to the respondents, this will make it possible to control the application of convergent technologies (44.4%); this is quite logical because the majority of the respondents are worried about uncontrolled use of the technologies under consideration. In general, there is a trend of extremely restrained attitude concerning biotechnology.

Also among the positive features of socio-humanitarian initiative it is possible to distinguish versatile public education about these technologies, bringing them into the humanistic mainstream, providing NBIC innovative forms of social, legal, economic, and international coordination and cooperation (see Table 2). It is impossible to develop convergent technologies harmoniously and safely without this.

Table 2. What is social and humanitarian comprehension necessary for?

Possible responses	%
To anticipate and manage changes caused by NBIC-technologies	43.7%
To control the application of NBIC-technologies at all levels	25.0%
Social and humanitarian comprehension will allow educating versatile public community about NBIC-technologies	12.5%
NBIC-technologies development should have high humanitarian goals	9.4%
NBIC-initiative is in the need of innovative forms of social, legal, economic, and international coordination and cooperation; these can be provided only by means of social and humanitarian technologies	9.4%
In total	100.0%

It should be noted that, despite the various concerns that NBIC-technologies cause, the vast majority of the respondents believe that it is necessary to develop the technologies under consideration. As for the development of NBIC-technologies for everyday life use, the young people are mainly in favor of their application, particularly with regard to information technologies (90%), cognitive technologies (75%) and nanotechnologies (70%). Regarding biotechnology, the respondents' opinions are divided almost evenly: 55% of the respondents have a positive attitude to the biological developments application in everyday life; the remaining 45% are against such innovations.

Thus, today the young people are aware of the NBIC-technologies complex to some extent. This applies especially to the information constituent as the most common and the most available at the moment. However, despite the fact that the young people predominantly recognize the need for further development and application of convergent technologies achievements, there is a rather reserved attitude towards them, especially with regard to biotechnologies, which are considered to be extremely dangerous by many respondents. In general, the main concerns according to their opinions are connected with the fact that there is a possibility that these technologies can get out of control, be commercialized and deepen the already existing inequalities between people.

To a large extent such an attitude of young people to this technologies complex system can be explained by the information pattern created by the media and contemporary cinema. Modern films, in particular Western, American ones, very often have a storyline connected with the development, expansion, and application of super-technologies. Almost always alongside the tremendous possibilities that these technologies can bring to the improvement and the enhancement of human life, such films demonstrate huge threats of their thoughtless, uncontrolled application which menace to the safety of all mankind.

Based on the results of the conducted studies, we can conclude that the concerns of the young people about the uncontrolled NBIC-technologies use, deepening inequalities between different categories of people, as well as the existing level of the convergent technologies development and the need for their further development is determined by the influence of the media, the Internet, science fiction, etc. It is these sources and means that mainly form social NBIC-technologies assessment.

5. Experts' Opinions on the NBIC-Convergence Consequences

The experts, well-known Russian scientists who are specialists in the problem under study, mainly agree with young people, but there are some differences in their assessments.

According to the experts, the main sources in which NBIC-technologies are discussed in one way or another is the Internet, specialized literature and to a lesser extent documentaries and science fiction. In this aspect, there is a concurrence with students' opinions. However, according to the experts, when they themselves are searching for the information on the convergent technologies, they use mainly specialized literature and, to a lesser extent the Internet, documentaries, and TV-programs. This suggests that in open access there is not much qualitative information on the technologies under study and accurate information can be provided only by specialized literature. The experts mostly agree that there is not enough information in the open sources about the consequences of NBIC-technologies use for nature and the society, as well as about the nature of some constituents of NBIC-complex system. It is noteworthy what the experts say about the lack of information specifically with regard to cognitive technologies (Gorokhov, 2008).

As for the readiness of the experts to the introduction of the developments of NBIC-technologies in their lives, the results are rather contradictory. With regard to the application of information technologies, the experts support the youth and, in this case the principle of "post factum" works, i.e. when these technologies are already firmly established in our lives, we cannot image our activities without them. It is interesting that, unlike young people, the experts are more inclined to the introduction of cognitive technologies into our lives and to a much lesser extent, to the introduction of bio- and nanotechnologies.

Further, the experts were asked to make an assessment of new technologies at different levels. According to the experts, NBIC-convergence is assessed mainly positively among scientists; it is considered as a necessary and logical stage in the development of modern scientific interdisciplinary knowledge. The experts were unanimous when pointing out that only nanotechnologies got special attention at the state level. This is evidenced by the announcement of nanotechnology as a priority direction of the development, the creation of the State Corporation RUSNANO and a number of grant programs for research and application of nanotechnologies. The government considers modern technologies as the prospect of a new technological structure and the main innovative resource of the development of the country. While the public generally know little about NBIC-technologies, that part that has some idea about them, mainly considers them as something mysterious, fantastic, and ambiguous. According to one expert, such assessments are often formed as a reaction to the

activities of Russian scientists advocating the technologies that could overcome fundamental human limitations. Such assessments are often quite contradictory. Specialized and non-fiction programs on TV also have some influence, but mainly in the framework of 'fashion-oriented trends' which have often spontaneous, short-term and fragmented overview of these issues and cannot allow developing assessment mechanisms qualitatively.

6. Conclusion

The issue of human nature is a fundamental problem, and our future depends on its solution. HI-HUME technologies give us the possibility for self-constructing in accordance with pre-set goals. But the scenario of the future to which we aspire depends upon our moral choice, upon our sense of values, upon what is good and what is evil. And all these factors are changing with us. The future of human beings and the future of the world in which they live, is increasingly dependent on a human being himself, but it is still open and is still unpredictable. There is a growing need to include social technologies into NBIC-technologies complex system. Social technologies are aimed at performing the functions of the system of values and their regulation. In recent years, the letter "S" is more often added to NBIC-initiative i.e. NBICS – this means taking into account social technologies. They can become a controlling constituent in the NBIC structure, aimed at the moral development of super-technologies for the benefit of the mankind, the progressive development and avoiding all those negative and dangerous scenarios that we envisage and cinema creates.

Social and humanitarian knowledge and social technologies should become an integral part of this dynamic system and should serve as an essential factor in its development. In the near future, this factor should gain enough 'strength' to perform the functions of stimulating and forming the priority vectors of development, regulation, forecasting and expert authorization of the processes and results of convergent mega-technologies development (Boev, 2015). Social technologies are said to be a social institution of innovations and social creativity, diagnostics, tactics and strategy of social development. We believe they are capable of carrying out thoughtful humanitarian assessment of brilliant scientific discoveries.

Thus, the changes caused by the convergence of technologies can be characterized as revolutionary according to the comprehensiveness of the covered phenomena and the scale of future transformations. However, no one can say with any certainty to what consequences such changes will lead in the future. Will any favourable stable states be reached? Will the growth and complexification continue unlimitedly or will this path of development lead to some kind of catastrophe? But whatever surprising or even shocking the discussed possible consequences of NBICS-convergence would be, this process is already going on and the issue of scientific courage and honesty lies not in 'taking the back seat', but in its impartial profound analysis.

Acknowledgments

This research was supported by a research grant of Russian Science Foundation, project No 14-38-00047 "Forecasting effort and social risks management of anthropogenic human-caused systems development over time human environment transformation processes" with the participation of the Belgorod State National Research University, Institute of Socio-Political Research RAS, the Southwest State University.

References

- Aseeva, I. A. (2013). Social and Ethical Risks and Benefits of Human's Genetics Modifications. *World Applied Sciences Journal*, 25(9), 1349-1352. <http://dx.doi.org/10.5829/idosi.wasj.2013.25.09.13412>
- Boev, E., & Kamensky, E. (2015). An Innovation Civilization in the Context of the Anthroposphere Crisis of the Technogenic Society. *Asian Social Science*, 11(4), 328-335. <http://dx.doi.org/10.5539/ass.v11n4p328>
- Bouchard, R. (2003, June). *BioSistemics Synthesis. Science and Technology Foresight Pilot Project* (Vol. 4). STFPP Research Report. Ottawa.
- Breazeal, C., Edsinger, A., Fitzpatrick, P., Scassellati, B., & Varchavskaia, P. (n. d.). *Social Constraints on Animate Vision (MIT Artificial Intelligence Lab.)*. Retrieved from <http://www.ai.mit.edu/projects/humanoid-robotics-group/cog/cog-publications/IEEE-vision.pdf>
- Chernikova, D. V., & Chernikova, I. V. (2010). The problem of human nature in the light of NBIC – technologies. *Izvestiya of Tomsk polytechnic University*, 316(6).
- Fukuyama, Y. F. (2004). *Our Posthuman Future: Consequences of the Biotechnology Revolution* (pp. 3-7). Farrar, Straus and Giroux, 2002. Moscow.
- Gorokhov, V. G. (2008). Nanotechnology – new paradigm of scientific technological thought. *High education today*, 5, 37.

- Kamensky, E., & Shapovalova, I. (2015). Social risks of anthropogenic human-caused systems: relevance and prospects. *Advanced Materials Research*, 1073-1076, 2886-2889. Energy, Environment and Sustainable Development. <http://dx.doi.org/10.4028/www.scientific.net/AMR.1073-1076.2886>
- Kovalev, V. A. (2011). In expectation of new Frankenstein (about transhumanism, NBIC-technologies and posthuman world). *Russia and the world in the XXI century*, 9, 68.
- Malinetskii, G. G. (2008). Nanotechnologies: achievements and perspectives. *Science in Russia*, 1, 24.
- Roco, M. C., & Bainbridge, W. S. (Eds.) (2003). *Converging Technologies for Improving Human Performance*. NSF-DOC Report. Boston: Cluwer. <http://dx.doi.org/10.1007/978-94-017-0359-8>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Analysis of Students' Errors in Solving Higher Order Thinking Skills (HOTS) Problems for the Topic of Fraction

Abdul Halim Abdullah¹, Nur Liyana Zainal Abidin¹ & Marlina Ali¹

¹ Faculty of Education, Universiti Teknologi Malaysia, Skudai, Malaysia

Correspondence: Abdul Halim Abdullah, Faculty of Education, Universiti Teknologi Malaysia, 81310 UTM Skudai, Malaysia. Tel: 60-13-374-0024. Email: halim_aman@yahoo.com

Received: April 7, 2015 Accepted: June 12, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p133

URL: <http://dx.doi.org/10.5539/ass.v11n21p133>

Abstract

Problem-solving is an activity that can generate Higher Order Thinking Skills (HOTS) among students. However, only some of the students are capable of solving problems and some are having difficulties. The difficulties have caused students to make various kinds of errors. Hence, this study conducted is to identify and analyze students' errors in solving problems that involve HOTS in the topic of Fraction. The samples consisted of 96 Form One students of a secondary school in Johor. The instrument of the study consisted of a set of test questions that contained four HOTS questions. The errors were analyzed according to Newman's Error Analysis Model consisting of reading, comprehension, transformation, process skills and encoding. The results showed that students frequently made errors in encoding (27.58%), followed by process skills (27.33%), transformation (24.17%) and comprehension (20.92%). The findings showed that students faced problems to correlate the information and implementation of strategies used in solving mathematical problems involving HOTS.

Keywords: higher order thinking skills (HOTS), students' error, fraction, Newman's error analysis model

1. Introduction

One of the teaching strategies that promote HOTS is problem-solving. Problem-solving is an activity that involves various actions in the mind of thought including accessing and using knowledge and experience (Lester & Kehle, 2003). Thus, teaching strategies that involve the use of non-routine problems in the classroom give students the opportunity to develop higher order thinking skills in the process of understanding, exploration and application of mathematical concepts (Polya, 1973). Since problem-solving involves the activities of processing, the knowledge used in the process of solving the problems is different. As stated by Mayer (1982, 1987), the knowledge covers a) knowledge of language and facts, b) knowledge of schemes, c) knowledge of algorithms, and d) strategic knowledge. In short, students need to equip themselves with various knowledge and high skills in problem-solving, which involves higher order thinking.

In the process of problem-solving, students must go through several phases before getting the final answer. According to Polya (1973), the problem-solving process has four phases, which are: a) understand the problem, b) plan the strategy, c) execute the plans and d) review the answers. Meanwhile, Newman (1977) stated that there are five phases in problem-solving, namely a) reading, b) comprehension, c) transformation, d) process skills and e) encoding. Guided by the phases described by Polya and Newman, students can solve problems more easily and systematically even if they are given problems with various levels of difficulties. However, not all students are able to solve the problems as they are having difficulties in the specific phases. Based on the study by Effandi and Siti Mistima (2010), students have difficulties in the transformation and process skills phases while solving problems of Quadratic Equations. Students' difficulties in problem-solving process have caused them to make various errors. Quoting Widiharto (2008), mathematical concepts and skills that are not fully mastered by students have led to difficulties and errors in solving mathematical problems. A study conducted by Susanti et al. (2014) found out that students are difficult to solve problems that involve the use of HOTS and among the difficulties faced by them are a) reading and interpreting data, b) determining and delegating data and c) making conclusions and arguments. Therefore, teachers need to realize the difficulties and errors encountered by students and take appropriate approaches to improve their teaching practices (Ashlock, 2005). In conclusion, teachers are responsible to identify in advance the difficulties in learning mathematics, which led to errors before teaching other mathematical topics.

In Malaysia, before changing to the School-Based Assessment system, Malaysia adopted the conventional assessment where it relied solely on examination alone to assess the progress and performance of the students. Any error made by the students was not analyzed on "where" and "why" they made such errors. Through a study conducted by Trance (2013), students' errors in problem-solving related to algebra were analyzed according to Newman's Error Analysis (Newman, 1977). Students were given the questions related to algebra and they were asked to complete them orally, before they could show the calculation processes. The students should describe how they understand the issues and processes used to obtain the answers. The findings revealed that 70% of the errors found were comprehension and transformation. In order to solve the problems faced by students, they should be provided with remedial classes so the comprehension and transformation errors can be reduced. Therefore, this study was undertaken to analyze the types of errors that are often done by students in problem-solving involving HOTS in the topic of Fraction.

2. Fraction and Higher Order Thinking Skills (HOTS)

The education system in Malaysia has highlighted the aspects of thinking skills among students. However, the report of Malaysian Education Development Plan (PPPM) for 2013 to 2025 shows that the implementation of critical and creative thinking skills (CCTS) has failed to be implemented in the classroom. As a result, the performance of Malaysian students in the international assessments that test students' thinking skills, namely Trends in International Mathematics and Science Studies (TIMSS) and Programme for International Student Assessment (PISA) was not at the satisfactory level. Among the factors that caused the failures are the teaching methods that did not apply and focus on HOTS as laid out in the curriculum (Kementerian Pelajaran Malaysia, 2013). This clearly shows the average mathematics scores obtained by the students for TIMSS 1999 of 519, which had dropped sharply to 440 for TIMSS 2011 (Mullis et al., 2012). Meanwhile, the mathematical assessment scores obtained by the students for PISA 2012 were 421, of which the scores were below the OECD average scores of 494 (OECD, 2012).

There are two domains that are being tested in TIMSS assessments, namely content and cognitive domains. For the tested cognitive domain, it covers applying, analyzing, evaluating and creating, which also the components of higher-order are thinking in Bloom's Taxonomy. Meanwhile, the tested content domain covers four areas of mathematics learning namely Numbers, Geometry, Algebra, Data and Probability. Fraction is one of the topics contained in the Number domain. By looking at the average scores obtained by Malaysian students for the Number content domain for TIMSS 2007, the scores were 494 and for TIMSS 2011, the scores were 451, which indicate a sharp decline compared to other countries (Mullis et al., 2012). Meanwhile, the assessment of mathematics for PISA has four content categories, namely Quantity/Number; Data and Uncertainty; Change and Relationship; and Space and Shape. The questions tested in PISA involve the use of HOTS. Mathematics topics such as round numbers, sequences and patterns of numbers, fractions, decimals, percent and integers are components in the content of Quantity/Number. Based on the report of PISA 2012, the average scores obtained by Malaysian students for the content of Quantity/Number were 409, whereas the average scores were below the overall OECD average of 495. If we were to compare with other countries such as Vietnam (509), Thailand (419) and Singapore (569), Malaysia is the last in Southeast Asian countries. The PISA assessment questions which test the students also require HOTS, which is similar to the TIMSS assessment.

3. Newman's Error Analysis

The model proposed by Newman (1977) has been proven to be a reliable model for mathematics teachers to be used to classify and categorize students' errors (Prakitipong & Nakamura, 2006; Effandi Zakaria & Siti Mistima, 2010) in solving mathematical problems involving HOTS. According to Effandi and Siti Mistima (2010), the Newman's Error Analysis Model has the hierarchy that categorizes types of error based on the levels of problem-solving by the students. The above statement is in line with Ellerton and Clements (1996), who stated that Newman used the "hierarchy" as he gave the reason that students who fail at any level of problem-solving prevented them from getting the required solution. In the process of problem-solving, there are two factors that make students unable to produce the correct answer, namely a) problems in language fluency and conceptual understanding (reading and comprehension) and b) problems in mathematical processing (transformation, process skills and encoding) (Prakitipong & Nakamura, 2006). This clearly shows that students need to understand the meaning of the questions before going through the mathematical processing in order to produce the correct answers.

The Newman's Error Analysis Model is shown in Figure 1. The first type of error is reading, which the ability of students to read the mathematical problems given and to identify the sentences and mathematical symbols used. The second type of error is comprehension, which is the ability of students to understand the mathematical

problems given. The next error is transformation, which sees the ability of students to choose the appropriate mathematical solution methods. The following error is process skills, where students can perform mathematics process correctly or not, and lastly the error of encoding, which is the ability of students to express the final answer.

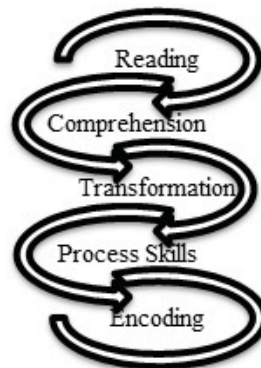



Figure 1. The Newman’s error analysis model

4. Research Methodology

This study is a descriptive study that used a quantitative approach. The sample for this study consisted of 96 Form 1 students (13 years old) in a secondary school of the district of Mersing, Johor. The students were placed in three classes of different levels of achievement based on the results of the Primary School Evaluation Test (UPSR). The instrument used for this study was a set of test questions to identify the types of students' errors. The items contained in the instrument were built by the researcher and it has been adapted with the questions of international assessments of Trends in International Mathematics and Science Study (TIMSS). Four items were built in a subjective form, and the items contained the elements of HOTS which require students to use higher-order thinking as shown in Table 1.

Table 1. Items developed based on HOTS

Item	Question
1	Siti has 2.75 kg of sugar. She bought another 7.25 kg of sugar and used $\frac{3}{8}$ of the amount of sugar to bake a cake. How much sugar is left?
2	Ravi spent $\frac{1}{4}$ of his pocket money on Monday and $\frac{3}{8}$ again on Tuesday. If he still has around RM 15, how much pocket money Ravi had initially?
3	Studies show that $\frac{5}{6}$ of the students play sepak takraw. $\frac{1}{2}$ of the students who play sepak takraw also play badminton. If there are 132 pupils, what is the number of students who play both sepak takraw and badminton?
4	 P and Q represent two fractions on the numbered line above. $P \times Q = N$. Where is the location of the N on the numbered line above?

The samples of the study were required to answer the questions contained in the instruments that have been prepared under the supervision of individual mathematics teachers who taught the respective class. The time allocated to answer questions was 20 minutes. As this study was a descriptive study, data for the types of error that are often made by students were scheduled based on the percentage. The errors were analyzed using

Newman’s Error Analysis (Newman, 1977) and classified into five types of errors namely, reading, comprehension, transformation, process skills and encoding.

5. Data Analysis

Background information for the study samples by gender and category of classes is shown in Table 2. Majority of the samples for this study were female students (53.1%) and the rest were males (46.9%). The samples consisted of students in three different classes namely 1 *Rancangan Khas* (Special Program) (34.4%), 1 *Amanah* (38.5%) and 1 *Murni* (27.1%), which achieved good, medium and low grades respectively.

Table 2. Profiles of the study samples

Class	Male	Female	Total
1 <i>Rancangan Khas</i>	12	21	33 (34.4%)
1 <i>Amanah</i>	19	18	37 (38.5%)
1 <i>Murni</i>	14	12	26 (27.1%)
Total	45 (46.9%)	51 (53.1%)	96 (100%)

5.1 Analysis of the Errors According to Newman’s Type of Error

This section discusses the errors made by the students according to the procedure proposed by Newman (1977). Newman has listed five types of errors, namely reading, comprehension, transformation, process skills and encoding. For reading error, no error was recorded. Meanwhile, there were other types of errors made by the students, which include comprehension, transformation, process skills and encoding.

5.1.1 Comprehension Error

Comprehension error occurs when the students are able to read the questions but fail to understand the wants and needs. Examples of comprehension error are shown in Figure 2.

Question: Ravi spent $\frac{1}{4}$ of his pocket money on Monday and $\frac{3}{8}$ again on Tuesday. If he still has around RM 15, how much pocket money Ravi had initially?

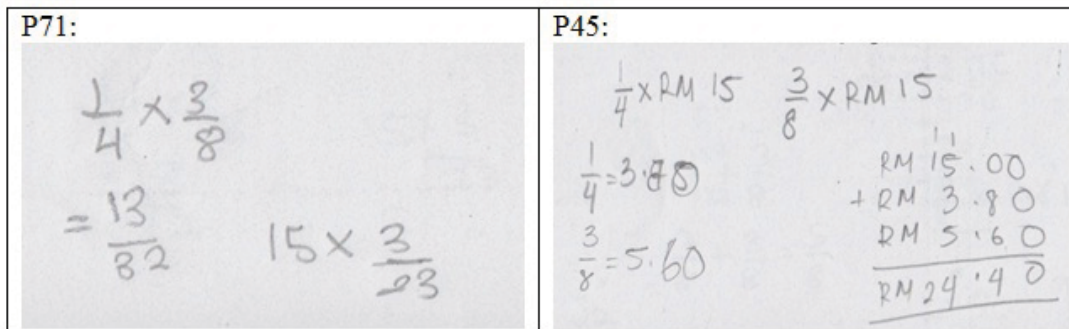


Figure 2. Examples of students’ answers for comprehension error

The students were not able to interpret the questions and the strategies used to manipulate the question were also less precise, in which they failed to solve the following problem. There were also other errors recorded, namely transformation, process skills and encoding that were caused by comprehension error.

5.1.2 Transformation Error

Transformation error occurs when the students already understand the needs of the question but fail to identify the mathematical operations involved. Examples of transformation error are shown in Figure 3.

Question: Siti has 2.75 kg of sugar. She bought another 7.25 kg of sugar and used $\frac{3}{8}$ of the amount of sugar to bake a cake. How much sugar is left?

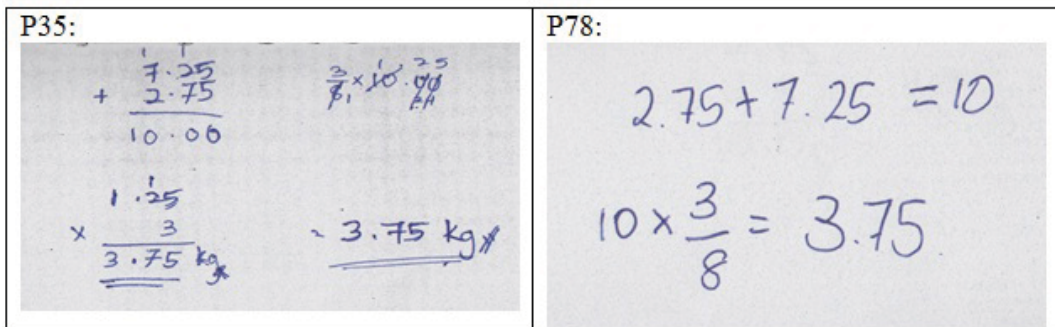


Figure 3. Examples of students' answers for transformation error

The students were able to read and understand the requirements needed for the question. However, they had difficulties in the transformation process as the operations used by them in solving this question were only addition and multiplication, but actually, there was another operation involved, which was subtraction.

5.1.3 Process Skills Error

Process skills error occurs when students fail to perform the procedure correctly. An example of process skills error is shown in Figure 4.

Question: Siti has 2.75 kg of sugar. She bought another 7.25 kg of sugar and used $\frac{3}{8}$ of the amount of sugar to bake a cake. How much sugar is left?

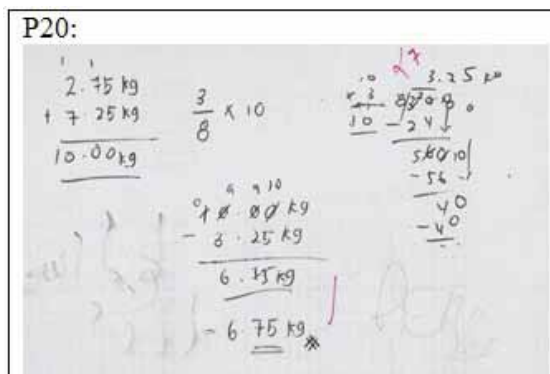


Figure 4. An example of student's answer for process skills error

Based on Figure 4, although the student was able to read and understand the question correctly and identify mathematical operations that should be used, the student made an error in the calculation procedure, where the final answer should be six kilograms and twenty five grams.

5.1.4 Encoding Error

Encoding error occurs when the students fail to write the desired answer correctly. An example of encoding error is shown in Figure 5. The student has failed to write the final answer correctly, where it was supposed to be 55 students play sepak takraw and badminton, while the student stated that 55 students only play badminton.

Question: Studies show that $\frac{5}{6}$ of the students play sepak takraw. $\frac{1}{2}$ of the students who play sepak takraw also play badminton. If there are 132 pupils, what is the number of students who play sepak takraw and badminton?

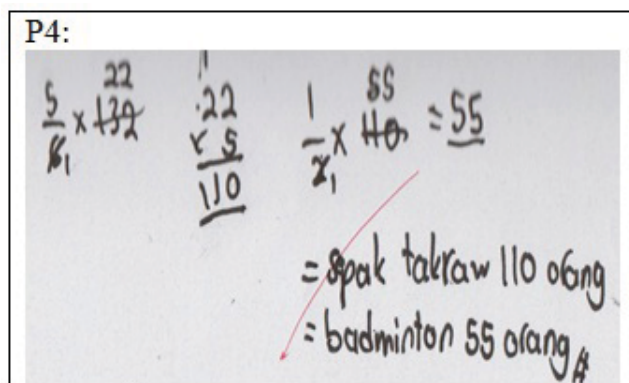


Figure 5. An example of student's answer for encoding error

Table 3 shows the number of errors according to Newman's items and types of errors from the samples of the study in solving HOTS mathematics problems solving for the topic of Fraction. The highest number of errors made by the students was in item 4, which was 380 (31.68%) in various types of errors compared to other items. Meanwhile, the lowest number of errors made by the students was in item 1, which was 235 (19.58%) in various types of errors. In addition, encoding was the highest type of errors made by the students, which recorded the number of errors of 331 (27.58%). On the other hand, it can be seen that the types of common errors made by students were process skills, transformation and comprehension with the number of errors of 328 (27.33%), 290 (24.17%) and 251 (20.92%) respectively. Overall, the study found that the students almost made all types of Newman's errors although there was only one type of error that was not made by the students, which was reading.

Table 3. Total number of errors according to items and Newman's error analysis

Item	Types of Newman's errors					Total
	Reading	Comprehension	Transformation	Process Skills	Encoding	
Item 1	0	28 (2.33%)	54 (4.50%)	76 (6.33%)	77 (6.42%)	235 (19.58%)
Item 2	0	73 (6.08%)	82 (6.83%)	94 (7.83%)	94 (7.83%)	343 (28.57%)
Item 3	0	55 (4.58%)	59 (4.92%)	63 (5.25%)	65 (5.42%)	242 (20.17%)
Item 4	0	95 (7.92%)	95 (7.92%)	95 (7.92%)	95 (7.92%)	380 (31.68%)
Total	0	251 (20.92%)	290 (24.17%)	328 (27.33%)	331 (27.58%)	1200 (100%)

5.2 Analysis of Students' Errors Based on Items, Newman's Error Analysis and Level of Achievement

Further analysis was conducted to identify the number of errors in solving HOTS problems in the topic of Fraction according to the level of students' achievements. As shown in Table 4, 288 (24%) errors were made by the students from the group of high achievement level, 537 (45%) errors were made by the students from the group that has medium achievement level and 372 (31%) errors were made by the students from the group with low achievement level. Table 4 also shows the total number of Newman's errors based on the items and levels of achievement made by the samples in solving HOTS mathematics problems for the topic of Fraction. For item 1, the error that was most often made by the students with high achievement was encoding with a total of 22 (1.83%). Next, the most often errors made by the students with medium achievement for item 1 were process skills and encoding, with a total of 29 (2.42%) and the most often errors made by the students with low achievement for item 1 were transformation, process skills and encoding, with a total of 26 (2.17%). For item 2, the errors that were most often made by the students with high achievement were process skills and encoding, with a total of 31 (2.58%). Next, the errors that were most often made by the students with medium achievement for item 2 were transformation, process skills and encoding with a total of 37 (3.08%). Meanwhile, the students

with low achievement made almost all Newman's errors, namely comprehension, transformation, process skills and encoding with a total of 26 (2.17%).

Next in item 3, the error that was most often made by the students with high achievement was encoding with a total of 9 (0.75%). Next, the error that was most often made by the students with medium achievement for item 3 was encoding with a total of 36 (3%) and the errors that were most often made by the students with low achievement for item 3 were transformation, process skills and encoding, with a total of 20 (1.67%). For item 4, majority of the students with high, medium and low achievements had done almost all Newman's errors, with a total of 32 (2.67%), 37 (3.08%) and 26 (2.17%) respectively.

Table 4. Total number of errors according to items, Newman's Error Analysis and levels of achievement

Item	Levels of achievement														
	High					Medium					Low				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Item 1	0	0	1 (0.08%)	21 (1.75%)	22 (1.83%)	0	21 (1.75%)	27 (2.25%)	29 (2.42%)	29 (2.42%)	0	7 (0.58%)	26 (2.17%)	26 (2.17%)	26 (2.17%)
Item 2	0	11 (0.92%)	19 (1.58%)	31 (2.58%)	31 (2.58%)	0	36 (3%)	37 (3.08%)	37 (3.08%)	37 (3.08%)	0	26 (2.17%)	26 (2.17%)	26 (2.17%)	26 (2.17%)
Item 3	0	2 (0.17%)	5 (0.42%)	8 (0.67%)	9 (0.75%)	0	34 (2.83%)	34 (2.83%)	35 (2.92%)	36 (3%)	0	19 (1.58%)	20 (1.67%)	20 (1.67%)	20 (1.67%)
Item 4	0	32 (2.67%)	32 (2.67%)	32 (2.67%)	32 (2.67%)	0	37 (3.08%)	37 (3.08%)	37 (3.08%)	37 (3.08%)	0	26 (2.17%)	26 (2.17%)	26 (2.17%)	26 (2.17%)
Total	0	45 (3.76%)	57 (4.75%)	92 (7.67%)	94 (7.83%)	0	128 (10.63%)	135 (11.24%)	138 (11.5%)	139 (11.58%)	0	78 (6.5%)	98 (8.18%)	98 (8.18%)	98 (8.18%)
Grand			288					540					372		
Total			(24%)					(45%)					(31%)		

*1= Reading Error, *2= Comprehension Error, *3= Transformation Error, *4= Process Skills Error, *5= Encoding Error

6. Discussions

Based on the classification criteria proposed by Newman (1977), it was found that a total of 1200 errors have been identified in the problem-solving process involving HOTS. Out of this total number of errors, it was found that a total of 251 (20.92%) errors were caused by the fluency factors (reading and comprehension) and 949 (79.08%) errors were caused by the mathematical processing factors (transformation, process skills and encoding). The results of the study are supported by the research conducted by previous researchers namely, Singh et al. (2010) and Ellerton and Clements (1996), who found that the errors caused by language fluency were the minor errors, and mathematical processing errors were the major errors made by students when answering exam questions.

Students frequently make errors in comprehension, transformation, process skills and encoding. The errors occur because the students fail to understand and explain what is required by the question. Most students did not manage to solve the problems of Fraction involving the use of HOTS. The results are consistent with the study done by Singh et al. (2010) in which the students fail to convert the mathematical problems into mathematical forms. The failures could be due to the teachings by teachers who do not emphasize on the comprehension and mathematical skills needed by a student and eventually affect them for failing to produce the required result. Therefore, teachers should ensure that each student master the mathematical concepts and basic skills before teaching the new topics. As stated by Jones et al. (1999), teaching of mathematics at an early stage should focus on the development of the concept before going to a higher level.

In the study conducted, process skills and encoding were the most common errors. The students used the wrong procedure, did not perform the calculation process carefully and wrongly applied the manipulation. Hence, the students could not state the final answer correctly due to the problems encountered. Newman (1977) and

Newman (1983) in Trance (2013) stated that in order to get the correct answer, there are some processes that need to be followed in sequence, namely reading, comprehension, transformation, process skills, and encoding. The statement is in line with Ellerton and Clements (1996), who stated that Newman used the word "hierarchy" as a failure at any level of problem-solving, namely reading, comprehension, transformation, process skills, and encoding, which prevent students to get the required answers. Hence, there are many errors in the process skills and encoding.

The levels of achievement contribute to the frequency of students making errors. The study found out that many errors were made by the students with low and medium levels of achievement. The students with medium level of achievement made the most errors for item 1, 2, and 3. This was due to the number of students with medium level of achievement which took the test were the highest compared to the number of students with low and high levels of achievement. Meanwhile for item 4, most students who made the errors were those in medium and low levels of achievement. This situation may be due to the differences in the level of thinking among students. According to Ismail (2010), students make errors in mathematics that are associated with the following characteristics; a) cognitive activities, b) metacognitive abilities, c) attitudes and d) the knowledge possessed by them. Various levels on the characteristics have led the different errors made by students and different abilities for them to solve the mathematical problems (Hoard et al., 2008). Problem-solving process is one of the cognitive strategies and skills that is carefully planned by individuals to achieve goals. Therefore, for students with low achievement level, they do not have clear plan and strategy to solve the problem. They are facing with difficult and challenging situations while solving problems. The situations are even more complicated when the students do not understand the given problems and cannot identify the mathematical operations involved.

The instrument provided in this study has the structure, manipulation and content that test the levels of HOTS among students. This has caused students fail to complete the given questions. Looking back at the instrument, the structure of the questions is arranged with the easy level to begin with and up to the complex level. This has caused many students to make errors on the final questions rather than the rest of the questions. For questions one to three, the level of difficulty is medium, where the students should have no difficulty in solving the given problems, and the operations involved are basic operations such as addition, subtraction, multiplication and division. As for question four, the level of difficulty is high, where the students need to link previous knowledge with the numbered line in order to obtain the solution. Question four also only involves variables that make students confused in answering the questions. As a result, students cannot convert the problems into mathematical forms. This finding agrees with the study conducted by Norasiah (2002) and Rahim (1997), in which the students have problems to convert mathematical problems into mathematical forms and they also have problems in understanding the specific terminologies that exist in mathematics. This failure may be due to the teachings by teachers, which lack of emphasis in understanding the language of mathematics. Therefore, teachers need to ensure that each student master the basic skills and mathematical terminologies before they learn other topics of mathematics.

7. Conclusion

Through the study conducted, it is found that students tend to make almost any type of errors found in Newman's Error Analysis, namely comprehension, transformation, process skills and encoding. This indicates that students have problems in interpreting mathematical problems, failed to devise a strategy and develop a strategic plan, which eventually led to errors in choosing the operations involved and failed to state the answers. Students should understand the problems well and have a thorough planning in order to achieve the transformation process. When devising mathematical solutions, students will review and recall all the information and knowledge in their memory in order to understand the mathematical problems. At this stage, students will correlate between the information and formula involved. Therefore, thorough planning is important to help students solve mathematical problems. The questions provided to the students in this study are in the form of HOTS. Based on the observation, majority of the students are not able to solve the questions. This may be caused by the questions that are outside of the context of the common questions that they have seen. The questions are different from the aspect of the organization, concentration and level of complexity. Therefore, teachers should play a role to cultivate the use of questions that demand the use of higher order thinking in the classroom while recognizing the difficulties faced by students in solving problems related to HOTS. This is relevant with the concept of school-based assessment that is being practiced in Malaysia which focuses on the students' learning development.

Acknowledgments

The authors would like to thank Universiti Teknologi Malaysia and Ministry of Education for their financial support. This work was supported by the Fundamental Research Grant Scheme (FRGS) Grant no. R.J130000.7831.4F426

References

- Ambia, N. (2002). *Diagnosis jenis kesilapan dalam hierarki Pembelajaran Serentak*. Master of Education Research Project, Universiti Kebangsaan Malaysia.
- Ashlock, R. B. (2005). *Error patterns in computation* (8th ed.). New York: Merrill
- Ellerton, N. F., & Clements, M. A. (1996). Newman error analysis. A comparative study involving Year 7 students in Malaysia and Australia. *Technology and mathematics education*, 186-193.
- Hoard, M. K., Geary, D. C., Byrd-Craven, J., & Nugent, L. (2008). Mathematical cognition in intellectually precocious first graders. *Developmental Neuropsychology*, 33(3), 251-276. <http://dx.doi.org/10.1080/87565640801982338>
- Jones, G. A., Langrall, C. W., Thornton, C. A., & Mogill, A. T. (1999). Students' probabilistic thinking in instruction. *Journal for Research in Mathematics Education*, 487-519. <http://dx.doi.org/10.2307/749771>
- Kementerian Pelajaran Malaysia. (2012). *Laporan Awal Pelan Pembangunan Pendidikan Malaysia 2013-2025*.
- Kementerian Pelajaran Malaysia. (2013). *Pentaksiran Kemahiran Berfikir Aras Tinggi*. Putrajaya: Lembaga Peperiksaan.
- Lester, F. K., & Kehle, P. E. (2003). From Problem Solving to Modeling: The Evolution of Thinking About Research on Complex Mathematical Activity. In R. Lesh, & H. M. Doerr (Eds.), *Beyond Constructivism – Models and Modeling Perspectives on Mathematical Problem Solving, Learning, and Teaching* (pp. 501-517). Mahwah, NJ: Lawrence Erlbaum Associates.
- Mayer, R. E. (1982). The psychology of mathematical problem solving. In F. K. Lester, & J. Garofalo (Eds.), *Mathematical problem-solving: Issues in research* (pp.1-13). Philadelphia: The Franklin Institute Press
- Mayer, R. E. (1987). Learnable aspects of problem solving: some examples. In D. E. Berger, K. Pezdek, & W. P. Banks (Eds.), *Applications of cognitive psychology: Problem Solving, education and computing*. ERA, NJ: Hillsdale.
- Mullis, I. V. S., Martin, M. O., Foy, P., & Drucker, K. T. (2012). *Chestnut Hill*. MA: TIMSS & PIRLS International Study Center, Boston College. Retrieved from http://timss.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf
- Newman, M. A. (1983). *Strategies for diagnosis and remediation*. Sydney: Harcourt, Brace Jovanovich.
- Newman, N. A. (1977). An analysis of sixth-grade pupils' errors on written mathematical tasks. *Victorian Institute of Educational Research Bulletin*, (39), 31-43.
- Nor, R. M. (1997). *Kemahiran penyelesaian masalah matematik dikalangan pelajar menengah rendah*. Master of Education Research Project. Universiti Kebangsaan Malaysia.
- OECD. (2014). *PISA 2012 Results in Focus. OECD* (pp. 1-42). Retrieved from December 25, 2014, from <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf>
- Polya, G. (1973). *How to solve it: A new aspect of mathematical method*. Princeton, N. J.: Princeton University Press.
- Prakitipong, N., & Nakamura, S. (2006). Analysis of mathematics performance of grade five students in Thailand using Newman procedure. *Journal of International Cooperation in Education*, 9(1), 111-122.
- Raduan, I. (2010). Error analysis and the corresponding cognitive activities committed by year five primary students in solving mathematical word problems. *Procedia-Social and Behavioral Sciences*, 2(2), 3836-3838. <http://dx.doi.org/10.1016/j.sbspro.2010.03.600>
- Singh, P., Rahman, A. A., & Hoon, T. S. (2010). The Newman Procedure for Analyzing Primary Four Pupils Errors on Written Mathematical Tasks: A Malaysian Perspective. *Procedia-Social and Behavioral Sciences*, 8, 264-271. <http://dx.doi.org/10.1016/j.sbspro.2010.12.036>
- Susanti, E., Kusumah, Y. S., & Sabandar, J. (2014). Computer-Assisted Realistic Mathematics Education for Enhancing Students' Higher-Order Thinking Skills (Experimental Study in Junior High School in

- Palembang, Indonesia). *Journal of Education and Practice*, 5(18), 51-58.
- Trance, N. J. C. (2013). Process Inquiry: Analysis of Oral Problem-Solving Skills in Mathematics of Engineering Students. *Online Submission*, 3(2), 73-82.
- Widdiharto, R. (2008). Diagnosis Kesulitan Belajar Matematika SMP dan Alternatif Proses Remidinya. *Yogyakarta: Pusat Pengembangan dan Pemberdayaan Pendidik dan Tenaga Kependidikan Matematika*.
- Zakaria, E., & Maat, S. M. (2010). Analysis of Students' Error in Learning of Quadratic Equations. *International Education Studies*, 3(3), 105. <http://dx.doi.org/10.5539/ies.v3n3p105>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Impact of Organizational Justice on Turnover Intention of Bankers of KPK, Pakistan: The Mediator Role of Organizational Commitment

Norhani Bakri¹ & Nazim Ali¹

¹ Faculty of Management, Universiti Teknologi Malaysia, Malaysia

Correspondence: Nazim Ali, Faculty of Management, Universiti Teknologi Malaysia, Malaysia. E-mail: nazimali1000@gmail.com

Received: April 21, 2015 Accepted: May 18, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p143

URL: <http://dx.doi.org/10.5539/ass.v11n21p143>

Abstract

The main purpose of this research was to investigate the mediating effect of organizational commitment between organizational justice and turnover Intention of bankers, Pakistan. Data were collected through organizational commitment questionnaire, organizational justice questionnaire and turnover Intention questionnaire from 177 bankers of KPK, Pakistan. Results showed that organizational justice had a significant positive relationship with organizational commitment and negative relationship with turnover Intention. It was also found that organizational commitment had a significant negative relationship with turnover Intention. Confirmatory factor analysis explored that the measurement model of organizational justice, organizational commitment and turnover Intention fit the sample data very well. Organizational justice showed a direct impact of -68 on turnover Intention. The impact of organizational justice on turnover Intention came down to -22% when organizational commitment as mediator was included. Organizational commitment mediated the role between organizational justice and turnover Intention. Furthermore, OJ showed a significant impact of 68% on organizational commitment that led to -72% impact on turnover Intention.

Keywords: organizational commitment, organizational justice, turnover intention, bankers, Pakistan

1. Introduction

Banks are service sector organizations whose employees are playing very important role in the accomplishment of the predetermined goals. Most of the time performances are associated with organizational justice (OJ). Greenberg (1990) says that "social scientists have long recognized the importance of the ideals of justice as a basic requirement for the effective functioning of organizations and the personal satisfaction of the individuals they employ." OJ describes the individuals' (or groups') perception of the fairness of treatment received from an organization and their behavioral reaction to such perceptions (James, 1993). OJ has three dimensions which are distributive justice (DJ), procedural justice (PJ) and interactional justice (IJ) (Martinez-tur et al., 2006). DJ is referred to as "the fairness of outcomes an employee receives such as pay and promotions" (Moorman, 1991). PJ is "the fairness of the procedures used in determining employee outcomes" (Moorman, 1991), whereas IJ is "the interpersonal treatment employees receive from decision makers and the adequacy with which the formal decision-making procedures are explained" (Greenberg, 1990). The primary focus of the OJ is about the fairness at workplace and it has a bearing on the attitudes of employees like job satisfaction, turnover intention (TI), absenteeism, role breadth, job performance, leadership and Organizational Commitment (OC), leader-member exchange and trust (Bakhshi, 2009; Boer et al., 2002; Byrne, 2005; Colquitt, 2001; Greenberg, 2004; Hubbel & Chory-Assad, 2005; Judge & Colquitt, 2004; Lambert, Hogan, & Griffin, 2007; Vermunt & Steensma, 2003; Wat & Shaffer, 2005)

In the management literature OC is an important aspect. A sense of loyalty with the organization and aligning with the goals of the organization and giving value to these goals is all about OC (Fang, 2001; Lambert et al., 2007). OC has three dimensions which are affective commitment, continuance commitment and normative commitment. Kanter (1968) defines affective commitment as "the attachment of an individual's fund of affectivity and emotion to the group". Buchanan (1974) says that affective commitment is "partisan, affective attachment to the goals and values, and to the organization for its own sake, apart from its purely instrumental

worth". Similarly, Mowday et al., (1979) describe affective commitment as "the relative strength of an individual's identification and involvement in a particular organization". Continuation commitment refers to the "profit associated with continued participation and 'cost' associated with leaving" Kanter (1968). Likewise, Stebbins (1970) describes continuance commitment as the awareness of the impossibility of choosing a different social identity ... because of the immense penalties involved in making the switch". Normative commitment, also known as the 'Sense of Obligation to Stay', refers to the commitment that is based on moral obligation and belief that "it is the right and moral thing" not to quit the organization.

Price (2001) defines turnover as the "individual movement across the membership boundary of an organization". The intention of quitting the current job and removal of organizational membership is called TI (Meyer & Allen, 1984). High turnover rate (calculated as: number of employees who have quit the organization during a year / total number of employees during a year * 100) is very baleful for the organization in the form of direct and indirect cost. An organization has to spend millions of dollars on advertisement, recruitment, selection, induction, orientation, and training and development of newly hired employees when turnover rate is high.

We found only two studies on the relationship between OJ and TI of bankers. Saeidi, et al., (2013) collected data from bankers of mellat bank of Golestan Province, Iran and tested the relationship between OJ and TI. They found a significant negative relationship between OJ and TI. Hassan (2002) collected data from 181 middle and lower level managers of the banking, finance, production, manufacturing, and service sector and concluded that internal and external equity contributed to increased commitment and decreased intent to leave.

The present study was conducted for a few reasons. First, there is a paucity of research to investigate the relationship between OJ and TI of bankers. Second, no study has ever been conducted to explore the mediating effect of OC between OJ and TI. Third, the studies of Molaeifaret al., (2013) and Hussan (2002) used correlation and regression to test the relationship between OJ and TI of bankers while in the current study I used confirmatory factor analysis and tested every individual model and a combine model of all the three variables which were OJ, OC and TI.

2. Methods

2.1 Data Collection

Data were collected through questionnaire from one hundred and seventy seven (177) employees of Officer Grade I, II and III working in private sector banks of KPK Province, Pakistan. We visited thirty (30) branch managers and informed them about the study and its benefits for the organization. They were requested to give us 20 minutes to discuss with employees the purpose of the study and data collection from them through questionnaire. The managers agreed and I physically distributed the questionnaires to the employees of thirty branches. First I took five minutes to inform the employees of the purpose of the research and then distributed the questionnaires. It took almost 15 minutes to complete and return the completed questionnaire.

2.2 Measurement

2.2.1 Organizational Justice Questionnaire

OJ questionnaire was adapted from by Price and Mueller (1986) to measure DJ, PJ and IJ. DJ has five (5) items, PJ six (6) items and IJ nine (9) items. In this study, all justices were measured by four (4) items each. The reason for choosing only four (4) items for each type of justice was to save the time of respondents. 7 point likert scale ranging from 1 "strongly disagree" to 7 "strongly agree" was used to elicit the responses of participants.

2.2.2 Organizational Commitment Questionnaire

Affective, continuance and normative commitment were measured by Meyer et al's (1993) six-item versions of the scales. Each dimension of OC has six items. Responses were elicited by using 7-point likert scale ranging from 1 "Strongly Disagree" to 7 "Strongly Agree".

2.2.3 Turnover Intention Questionnaire

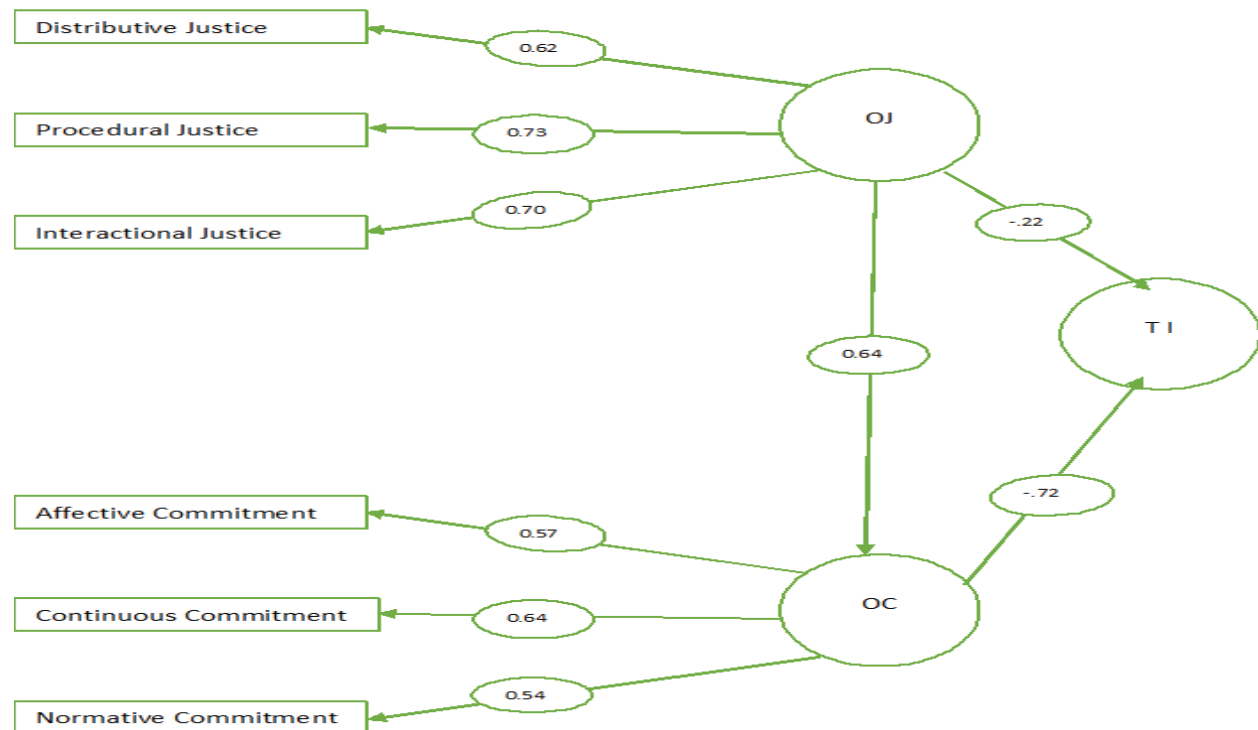
Three items from Michigan Organization Assessment Questionnaire (Cammann, Fichman, Jenkins, and Klesh, 1979) were adapted to measure TI of bankers. Responses were elicited by using 5-point likert scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree".

3. Results

Table 1 showed that OJ had a significant positive relationship with OC and negative relationship with TI. It was also found that OC had a significant negative relationship with TI.

Table 1. Relationship between OJ, OC and TI

	OJ	OC	TI
OJ	1	.380**	-.494**
OC	.380**	1	-.554**
TI	-.494**	-.554**	1

Model

Confirmatory factor analysis (CFA) explored that all the individual models of OC, OJ and TI fit the sample data very well. For OC: Chi square (N = 177) = 155.543, df = 132, $p < 0.079$; GFI = 0.919; CFI = 0.988; SRMR = 0.092 and RMSEA = 0.031. For OJ: Chi square (N = 177) = 83.201, df = 51, $p < 0.003$; GFI = 0.929; CFI = 0.968; SRMR = 0.077 and RMSEA = 0.060. For TI after applying 1 as additional constraint: Chi square (N = 177) = 0.889, df = 1, $p < 0.046$; GFI = 0.997; CFI = 1; SRMR = 0.027 and RMSEA = 0.000. For OJ and TI: Chi square (N = 177) = 132.22, df = 86, $p < 0.001$; GFI = 0.911; CFI = 0.961; SRMR = 0.080 and RMSEA = 0.055. OJ showed a direct impact of -68 % on TI.

Confirmatory factor analysis (CFA) also explored that the measurement model of OJ, OC and TI fit the sample data very well. Chi square (N = 177) = 589.804, df = 486, $p < 0.001$; GFI = 0.944; CFI = 0.967; SRMR = 0.063 and RMSEA = 0.035. OJ showed an indirect impact of -22% on TI when OC as mediator was included. OC mediated the role between OJ and TI. Furthermore, OJ showed a significant impact of 68% on OC that led to -72% impact on TI.

4. Conclusion and Recommendation

The basic aim of this study was to test the mediating effect of OC between OJ and TI of employees working in private sector banks of KPK, Pakistan. Data were collected through questionnaires from 177 bankers. Results showed that OJ had a significant positive relationship with OC and negative relationship with TI. It was also found that OC had a significant negative relationship with TI. Confirmatory factor analysis (CFA) explored that the measurement model of OJ, OC and TI fit the sample data very well. OJ showed a direct impact of -68 on TI. The impact of OJ on TI came down to -22% when OC as mediator was included. OC mediated the role between OJ and TI. Furthermore, OJ showed a significant impact of 68% on OC that led to -72% impact on TI.

The management of private sector banks are requested to reduce turnover rate of bankers by increasing distributive, procedural and IJ practices because OJ showed a significant negative relationship with TI. The management should also consider OC because it mediated the relationship between OJ and TI. The current study may be repeated to test the mediating effect of OC between OJ and TI by taking sample from public sector banks of Pakistan or any other country.

References

- Bakhshi, A. K. K., & Rani, E. (2009). OJ perceptions as predictor of job satisfaction and OC. *International Journal of Business and Management*, 4(9), 145-154. <http://dx.doi.org/10.5539/ijbm.v4n9p145>
- Boer, E. M. D., Bakker, A. B., Syroit, J. E., & Schaufeli, W. B. (2002). Unfairness at work as a predictor of absenteeism. *Journal of Organizational Behavior*, 23, 181-197. <http://dx.doi.org/10.1002/job.135>
- Buchanan, B. (1974). Building OC: The Socialization of Managers in Work Organizations. *Administrative Science Quarterly*, 19, 533-546. <http://dx.doi.org/10.2307/2391809>
- Byrne, Z. S. (2005). Fairness reduces the negative effects of organizational politics on TIs, citizenship behavior and job performance. *Journal of Business and Psychology*, 20(2), 175-200. <http://dx.doi.org/10.2307/2391809>
- Colquitt, J. A. (2001). On the dimensionality of OJ. A construct validation of a measure. *Journal of Applied Psychology*, 86, 386-400. <http://dx.doi.org/10.1037/0021-9010.86.3.386>
- Fang, Y. (2001). Turnover propensity and its causes among Singapore nurses, an empirical study. *International Journal of Human Resource Management*, 12(5), 859-871. <http://dx.doi.org/10.1080/713769669>
- Greenberg, J. (1990). Looking Fair Being Fair: managing Impressions of OJ. *Research in Organizational Behavior*, 12, 57-111.
- Greenberg, J. (2004). Stress Fairness to Fare No Stress: Managing Workplace Stress by Promoting OJ. *Organizational Dynamics*, 33(4), 352-365. <http://dx.doi.org/10.1016/j.orgdyn.2004.09.003>
- Hassan, A. (2002). OJ as a Determinant of OC and Intention to Leave. *Asian Academy of Management Journal*, 7(2), 55-66.
- Hubbel, A. P., & Chory-Assad, R. M. (2005). Motivating Factors: Perceptions of Justice and Their Relationship with Managerial and Organizational Trust. *Communication Studies*, 56(1), 47-70. <http://dx.doi.org/10.1080/0008957042000332241>
- James, K. (1993). The social context of OJ: cultural, intergroup and structural effects on justice behaviors and perceptions. In R. Cropanzano (Ed.), *Justice in the Workplace: Approaching Fairness in Human Resource Management* (pp. 21-50).
- Judge, T. A., & Colquitt, J. A. (2004). OJ and Stress: The Mediating Role of Work-Family Conflict. *Journal of Applied Psychology*, 89(3), 395-404. <http://dx.doi.org/10.1037/0021-9010.89.3.395>
- Kanter, R. M. (1968). Commitment and social organization: A study of commitment mechanisms in Utopian communities. *American Sociological Review*, 33, 499-517. <http://dx.doi.org/10.2307/2092438>
- Lambert, E. G., Hogan, N. L., & Griffin, M. L. (2007). The impact of distributive and PJ on correctional staff job stress, job satisfaction, and OC. *Journal of Criminal Justice*, 35, 644-656. <http://dx.doi.org/10.1016/j.jcrimjus.2007.09.001>
- Martínez-tur, V., Peiró, J. M., Ramos, J., & Moliner, C. (2006). Justice perceptions as predictors of customer satisfaction: the impact of distributive, procedural, and IJ. *Journal of Applied Social Psychology*, 36, 100-119. <http://dx.doi.org/10.1111/j.0021-9029.2006.00005.x>
- Meyer, J. P., & Allen, N. J. (1984). Testing the side-bet theory of OC:some methodological considerations. *Journal of Applied Psychology*, 69(3), 372-378. <http://dx.doi.org/10.1037/0021-9010.69.3.372>
- Molaeifar, H. R., Aghaei, A., & Saeidi, P. (2013). An Investigation Relationship between OJ and Organizational Citizenship Behavior, and Intent to Leave Job. *International Journal of Basic Sciences & Applied Research*, 2(3), 257-260.
- Moorman, R. H. (1991). Relationship between OJ and Organizational Citizenship Behavior: Do fairness perceptions influence employee Citizenship? *Journal of Applied Psychology*, 76, 845-855. <http://dx.doi.org/10.1037/0021-9010.76.6.845>
- Mowday, R., Steers, R., & Porter, L. (1979). The measurement of organizational commitment. *Journal of*

Vocational Behavior, 14, 224-247. [http://dx.doi.org/10.1016/0001-8791\(79\)90072-1](http://dx.doi.org/10.1016/0001-8791(79)90072-1)

Price, J. (2001). Reflections on the Determinants of Voluntary Turnover. *International Journal of Manpower*, 22, 600-624. <http://dx.doi.org/10.1108/EUM00000000006233>

Stebbins, R. A. (1970). On misunderstanding the concept of commitment: A theoretical clarification. *Social Forces*, 48, 526-529. <http://dx.doi.org/10.1108/EUM00000000006233>

Vermunt, R., & Steensma, H. (2003). Physiological Relaxation: Stress Reduction Through Fair Treatment. *Social Justice Research*, 16(2), 135-149. <http://dx.doi.org/10.1023/A:1024200120646>

Wat, D. d., & Shaffer, M. A. (2005). Equity and relationship quality influences on organizational citizenship behavior. *Personnel Review*, 34(4), 406-422. <http://dx.doi.org/10.1108/00483480510599752>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Investment in Employees and Research and Development and the Signalling of Intellectual Capital by UK Listed Companies

Walter P. Mkumbuzi¹

¹ The Department of Accountancy, The University of Zimbabwe, Zimbabwe

Correspondence: Walter P. Mkumbuzi, The Department of Accountancy, The University of Zimbabwe, P O Box MP167, 630 Churchill Avenue, Mt. Pleasant, Harare, Zimbabwe. Tel: 263-71-680-0268. E-mail: wmkumbuzi@commerce.uz.ac.zw

Received: April 13, 2015 Accepted: May 4, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p148

URL: <http://dx.doi.org/10.5539/ass.v11n21p148>

Abstract

This paper examines the cross-sectional effect of investment in employees and investment in research and development on the extent of voluntary disclosure of intellectual capital of 443 FTSE All Share Index companies for the year 2003/2004. The extent of disclosure is measured by a disclosure index based on intellectual capital attributes included in the narratives and illustrations of the annual reports. The paper predicts that agency costs may be minimised through voluntary disclosure. In addition, that in some industries, the benefits of signalling valuable, rare, inimitable and non-substitutable attributes may outweigh the competitive costs of reporting this information. The results suggest that large companies operating in non-manufacturing, high-tech and innovative industries that are characterised by investment in employees and research and development processes have higher levels of hidden value; these companies are associated with the signalling of intellectual capital.

Keywords: disclosure; intellectual capital, employees, research and development, industry, investment, listed companies

1. Introduction

1.1 Background

There appears to be a broad acceptance that intellectual capital (IC) resources applied to generate innovativeness in products and services through investment in employees and research and development are the key drivers of sustained competitive advantage and market value (Chen, Cheng, & Hwang, 2005; Drucker, 1993; Grant, 1996). The process of investment, development and signalling of IC and the realisation of sustained superior returns and share price value as a result, is a lengthy and risky one (Kothari, Laguess, & Leone, 1998). Not all investment in employees generates motivation, innovativeness and efficient productivity; neither is all investment in research and development (R&D) effective in generating successful products, services, brands, licenses, patents (Lev, 2001), customer loyalty, customer retention, market share and market value. In some cases, investments may not be well planned nor well managed (Meremadi, Musso, & Oxgaard, 2013), and in other cases innovative ideas may not be commercially viable.

It appears equity markets are unable to bridge this gap of uncertainty until products and services generate revenue as illustrated by Joos (2002) within the biotechnology industry. The signalling of IC attempts to mitigate this risk of uncertainty by providing information on the investment and return in IC. Financial decisions made by stakeholders require an assessment of the value of organisational IC. Entwistle (1999) examined the R&D disclosure environment of 113 technology firms listed on the Toronto Stock Exchange in 1994 and found that managers consider both capital and product market concerns in their R&D disclosure decisions. Incentives exist therefore for companies to develop those characteristics that set themselves apart from their competitors and to signal their competitiveness. Signalling mechanisms improve the allocation of resources ensuring that companies that are more efficient receive more capital as signalling reveals the company's competitive advantage within the market (Inchausti, 1997).

1.2 The Demand for Information on Intellectual Capital

However, voluntary disclosure of IC is hampered by competitive costs which arise with a lack of value, a lack of rareness, perfectly imitable and an ease of substitution (VRIN) of the IC (Barney, 1991). However, insufficient

IC information may be problematic with respect to the market's identification, analysis, valuation and therefore differentiation of superior and inferior market participants. The onus is therefore on companies to make this information available. Furthermore, IC reporting is limited due to the traditional financial reporting framework not effectively accounting for all intangible assets (IA). Compounding the issue as reported by Lev and Zarowin (1999), book values in financial statements are largely unrepresentative of equity (Amir & Lev, 1996). Moreover, voluntary disclosure as a framework for conveying information may be limited by other factors not specific to IC; agency and political costs are issues influencing management decisions on voluntary disclosure. In addition, the inherent nature of IC makes its title, identification, measurement and reporting complex. Intangible assets are more associated with this complexity than other types of assets such as physical and financial assets, due to the high uncertainty in their value, ill-defined legal and ownership rights (Webster, 1999) and the lack of active markets to provide reliable value estimates (Lev, 2001).

Faced with this dilemma, it seems likely that companies would resort to alternative means of communicating their IC levels particularly as the traditional reporting model neither sufficiently conveys IA nor meets the public's demand for information. The alternative means is found within the traditional reporting framework, the annual report, and takes the form of words, sentences, pictures and diagrams and has been gaining importance as a means of communicating IC. Whereas the traditional reporting model places focus on quantitative audited financial statements; this alternative approach however, examines qualitative, narrative and non-narrative disclosures. There has been a steady shift by investors and analysts towards analysing qualitative disclosures in particular for companies whose value remains hidden from the market.

In response to these demands for information, companies implement policies that identify and report IC generated by the organisation. These policies maintain and disclose important sources of IC including research and development (R&D), sources of innovation and skilled employees. Companies recognise the importance of and economic benefits to be derived from a well-managed disclosure policy (Williams, 2001). As this IC is not visible, the existence of adequate structures for investing in, developing and signalling may be invaluable. Furthermore, this process is likely to be influenced by IC investment, resource availability, market share and its industry membership. Disclosing information on such categories of IC as structural capital (SC), relational or customer capital (RC) and human or employee capital (HC) is likely to reduce uncertainty about future prospects of a company and to facilitate a more precise valuation of the company (Botosan, 1997).

1.3 Analytical Framework and Literature Review

The literature has identified five motivational factors as driving management's disclosure decisions and five factors that may constrain disclosure (Graham, Harvey, & Rajgopal, 2005). The first is explained by Diamond and Verrecchia (1991), who suggest that voluntary disclosure reduces information asymmetry between uninformed and informed investors. The second factor relates to the availability of information to analysts; Lang and Lundholm (1996) argue that not all management information is revealed and therefore analysts may invest in information collection costs. The third motivational factor examines management performance. Healey and Palepu (2001) suggest that the risk of replacement due to poor share price performance encourages management to apply disclosure in reducing the likelihood of undervaluation and the need to explain poor performance. Moreover, Trueman (1986) argues that when management performance is above average, management may have an incentive to signal this performance. The fifth motivational factor emanates from the limitations imposed by mandatory disclosures that ignore non-financial indicators of future earnings (Graham et al., 2005). Management may therefore be motivated to disclose that which has been omitted by mandatory disclosure.

On the other hand, management may be restricted in their voluntary disclosure policy. The first constraint relates to setting a precedent that management may not be able to maintain in the future. Verrecchia (2001) refers to this constraint as the commitment cost of increasing voluntary disclosure. The second constraint relates to the threat of litigation that may induce management not to disclose IC (Skinner, 1997) and that can potentially reduce management's incentives to provide forward-looking information which if materially misstated may result in litigation costs. The third constraint explains why management do not provide full disclosure as it is understood that some disclosures may jeopardise the company's competitive position in the product market (Verrecchia, 2001). This limitation is therefore associated with proprietary costs. The fourth constraint is associated with agency costs and asymmetric information that may result in reduced disclosure as management attempt to perpetuate and entrench their positions (Berle & Means, 1934). Finally, the fifth constraint is motivated by management's need to reduce political costs. Watts and Zimmerman (1978 and 1986) suggest that political costs reduce voluntary disclosure as management shy away from undue attention from regulators.

With respect to the theoretical approach to IC disclosure, the paper refers to Abeysekera (2006) who outlines the development of a theoretical framework underlying IC disclosure. Theories that have been considered include legitimacy and stakeholder (Guthrie, Petty, Yongvanich, & Ricceri, 2004; Abeysekera & Guthrie, 2005), signalling (Penrose, 1959; Wernerfelt, 1984; Bozzolan, Favotto, & Ricceri, 2003; Garcia & Martinez, 2005), resource based view of the firm (RBV) (Barney, 2001), agency (Bozzolan et al., 2003; Garcia & Martinez, 2005) and information asymmetry (Amir & Lev, 1996). Although the IC literature illustrates the application of various theoretical approaches, the general disclosure literature has overall indicated a close association with agency and signalling theories. The number of different theoretical approaches in prior studies is indicative that a theoretical framework of IC investment and reporting has not been established. It is expected nevertheless that various conflicting forces influence management who are contractual bound as agents of the company but who may not necessarily behave as such at all times. This paper proposes that companies' pursuit of a maximum disclosure policy may be explained by the RBV and signalling theory. A minimal or no disclosure policy may be explained by industry membership and or proprietary cost theory as certain firms may be tangible asset intensive due to the nature of their operations and may not possess any IC. Where mitigating factors exist however, a partial disclosure outcome may result from limited success in investments in R&D and employees, limited possession of IC, a lack of comparative advantage in the IC developed, a highly competitive industry in which proprietary costs are prohibitive (Wagenhofer, 1990), lower industry barriers consisting of low R&D investment requirements, low barriers to entry for incumbent firms and barriers that increase the perceived potential disclosure costs for existing firms within the industry. This paper adopts a positivist approach by developing several hypotheses based on selected theories to explain observed management behaviour.

The model for this paper is based on the premises of positive accounting theory (Watts & Zimmerman, 1978; 1986). The theory utilises economics, in particular agency theory (Jensen & Meckling, 1976) to explain and predict observed behaviour. Explanations of accounting behaviour are important, as any changes of accounting practice depend on existing political and economic forces (Gould, 1977). The first theoretical approach proposed by this paper is agency theory that may explain management behaviour when objectives are not aligned with those of shareholders (Barako, Hancock, & Izan, 2006; Berle & Means, 1934; Cheney & Carroll, 1997; Jensen & Meckling, 1976). The second theoretical approach is signalling theory (Spence, 1973; Akerlof, 1970) in which management need to decide on whether the voluntary IC attributes are associated with disclosure costs that take the form of proprietary costs (Dye, 1985; Gray, Meek, & Roberts, 1995; Verrecchia, 1983). The existence of proprietary costs generally leads to minimal or no disclosure however, the existence of mitigating circumstances such as barriers to entry may lead to partial disclosure of IC attributes. These barriers to entry may render otherwise costly disclosures, less costly resulting in partial disclosure depending on management's ability to accurately quantify related benefits and costs. Nevertheless, the lack of mitigating factors renders disclosure costly and may lead to little or no disclosure that may be explained by competitive costs hypothesis and proprietary cost hypothesis.

This paper introduces an additional dimension which has had very little attention in previous studies; how is the decision on voluntary disclosure of IC (VDIC) influenced by the investment in employees and R&D. Prior investigations have examined either R&D expenditure (Kothari et al., 2002; Amir & Lev, 1996) or employee costs; few studies have examined both investments simultaneously. The survey results in the study by Awano, Franklin, Haskel, & Kastrinaki, (2010) suggest that 42 per cent of UK firms are not active in R&D but are active in one or more other category of intangible spending which includes reputation and branding, software, training, design and business process improvement (Awano et al., 2010). This finding provides evidence suggesting that press releases provide information that is not captured by R&D expenditures reported in financial statements. This study therefore considers both investments in employees and in R&D for the following reasons. On the one hand, a relationship exists between R&D and employee costs as illustrated by Clinch (1991) in which high R&D firms may have higher total compensation contracts in order to retain employees that may be in possession of firm private information in the form of trade secrets. On the other hand, the quality of employees is likely to influence the quality of the R&D, its development and its commercialisation. As such, higher total compensation is likely to attract the required skill that would further the investment in R&D and in employees. Thus, high R&D firms appear to tie compensation awards more closely to stock- and accounting-based performance measures than do low R&D firms (Clinch, 1991).

The analytical framework proposed by this research argues that such investments are geared at generating sustained competitive advantage. If management delay informing markets about the possession of IC and the expected returns (Hunter, Webster, & Wyatt, 2012), mis-pricing may take place in equity markets which may only be rectified once markets become aware of actual earnings attributable to the possession of IC and/or the

reduction in marginal costs of production. The economic decision to invest in intangible inputs must necessarily be based on the economic returns or outputs of the investment; furthermore, the economic returns from a timely voluntary disclosure policy must be accounted for as R&D expenditure and employee costs do not convey the IA value generated by these investments. This approach is consistent with that adopted by Weissa, Falkb, & Zion, (2013) who provide evidence that suggests voluntary press releases provide non-financial information that is not captured by R&D expenditures reported in financial statements. Gelb (2002) undertook a similar study on two high technology industries, in which supplemental voluntary disclosures in (1) annual report (2) quarterly reports and other voluntary publications and (3) investor relations programs, were investigated to determine whether firms with significant levels of intangible assets choose the more flexible voluntary supplemental disclosures ahead of the traditional annual report. The findings indicated an increase in supplemental voluntary disclosures as a result of a higher incidence of investment in R&D and advertising expenditure. These supplementary voluntary disclosures make take the form of patents filed, clinical trial results, analyst reports, press releases, conference calls, company announcements, conference abstracts and medical and scientific journal articles, that are alternative information sources on innovative processes within the pharmaceutical industry (Joos, 2002). The existence of alternative sources of information will vary from industry to industry due to industry stage of development as well as differences in lead times of the process of generating R&D over time (Ball, 1980). What therefore is the information content held in reported employee and R&D expenditure considering the existence of other communication channels and the existence of industry variation? In their study, Lev and Zarowin (1999) illustrated that increased investment in R&D and advertising has contributed to the reduced quality of accounting disclosures due to the traditional reporting framework's inability to convey the value of these investments. As a result, it is likely that greater information asymmetry exists between R&D intensive firms and their investors (Aboody & Lev, 2000). Annual and quarterly reports only provide a small fraction of information on R&D (Joos, 2002). Few mandatory R&D disclosure requirements exist, and accounting standards require the immediate expensing of most R&D activities, which likely understates their long-run value (Lev, 2001).

1.4 Hypotheses and Research Design

In order to link the decision to invest in employees and in R&D and the decision for voluntary disclosure, reference is made to the literature on investment in R&D and in employees. On the one hand, Schumpeter's (1950) hypothesis and those of the neo-Schumpeterians refer to market power and economies of scale respectively as necessary elements for investment in innovation to take place. These hypotheses may be influenced by whether the industry's development is in the innovation, imitation, technological competition or standardisation stage. On the other hand, Hamburg (1963) contends that the laboratories of large firms have not been an important source of major inventions and that their investments in R&D are relatively safe and aimed at modest advances in technology. In addition, Mueller and Tilton (1969) concluded in their study that large firms may not have an advantage over small firms in the imitation stage of R&D. In this stage barriers to entry are relatively low. Nevertheless, during the technological competition stage, economies of scale are able to accelerate the process of product innovation but taper off as the industry's technology becomes standardised (Mueller & Tilton, 1969). Size and industry appear to be determinants of the extent of investment in employees and in R&D. In addition, size and industry have been confirmed as determinants in the process of VDIC. The study's proxy for economies of scale and for market power is market value (MV) which was applied as a determinant in disclosure studies by Hossain, Tan, & Adams, (1994) and Lang and Lundholm (1993). Signalling theory explains the competitive resources available to larger companies in providing VDIC. The perceived benefits of signalling IC are expected to outweigh the potential disclosure costs arising from political and proprietary costs and a significant positive association is expected.

High investment in employee remuneration and benefits may result in management signalling HC attributes to disclose investment in employees that differentiates it from its competitors. The motivation for the variation in VDIC due to the variation in employee cost (EMPC) may be explained by signalling theory. EMPC captures the degree to which management is efficient in hiring the optimal number of employees under the assumptions of competitive labour and product markets and in extracting value from investment in HC. Human resource management is therefore a crucial feature of research and development (R&D) management. Chen and Huang (2009) find evidence that knowledge management capacity plays a mediating role between strategic human resource practices and innovation performance. High remuneration may provide the company with a competitive edge in attracting quality employees and retaining existing ones, signalling of HC attributes may ensue as management disclose successful management practice. Furthermore, Sofian, Tayles, & Pike, (2005) reiterate the importance of investment in employees adding that such investment is associated with management accounting practices, organisational culture and corporate performance. However, despite the benefits to be gained from

disclosure of these investments, pressure from competitors, may curb full disclosure due to the mobility of employees in some industries. Furthermore, political costs may restrict such voluntary disclosures due to the risk of pressure from labour unions and other regulatory bodies. Where management voluntarily disclose, companies can differentiate themselves from their peers within their industry through the signalling of high-quality HC (Akerlof, 1970). An expectation to see companies with a higher investment in human resources voluntarily disclosing more HC exists. This paper expects that higher EMPC as measured by staff costs including all employee benefits such as health insurance and pension plan contributions divided by the number of employees representing both full and part time employees of the company may lead to more VDIC. The arguments are derived from RBV and signalling theory and the propensity of companies to disclose their competitive advantage. These motivations are expected to outweigh any competitive pressures and labour related proprietary costs that are associated with such disclosures.

The expectation is a positive association between R&D development expenditure (R&D) and VDIC. High R&D companies are likely to be characterised by high levels of VDIC due to asymmetric information on IA. This independent variable identifies whether R&D necessarily leads to VDIC. R&D is also highly firm-specific and is associated with higher information asymmetry and uncertainty (Aboody & Lev, 2000; Kothari et al., 2002). Although R&D is associated with IA generation, patents and copyrights protection may take lengthy processes before successful registration. R&D may signal success to the market, as investment in IC is made possible by surplus earnings. Lev and Sougiannis (1996) developed a model relating companies' earnings (output) to their investment inputs, including expenditures on R&D. The authors reported that the average duration of R&D benefits varies across industries from five to nine years and the estimated benefits of these R&D programs vary from \$1.66 to \$2.63 per dollar of R&D spending. Gray et al., (1995) confirmed a positive significant relationship with the voluntary disclosure of 64 UK and 116 USA companies and R&D information. R&D is defined as all direct and indirect costs related to the creation and development of new processes, techniques, applications and products with commercial possibilities. As R&D has been found to increase IA and growth prospects, the paper expects an increase in VDIC associated with new venturing activities/projects. Greater R&D spending translates into lower expected marginal costs. Hughes and Kao (1991), describe a two stage game in which, in one disclosure regime, only the level of R&D investment is publicly reported and in the other regime, both the level of R&D investment and the actual marginal cost benefit which results, are reported. The former regime can be viewed as analogous to immediate write-off and the latter can be viewed as a stylised extension of selective capitalisation. This study considers narrative disclosures as informative with regard to the actual marginal cost reduction attributed to the reported investment in R&D. Management in R&D intensive companies may provide more VDIC as a measure of signalling potential and successful projects. Nevertheless, as indicated by Williams (2001, p. 201), where IC performance is too high the amount of disclosure may be reduced, suggesting that companies reduce VDIC when performance reaches a threshold level for fear of competitive losses. However, competitive costs may be exceeded by potential benefits of signalling when proprietary costs may be mitigated by barriers to entry. These barriers may be due to the complexity of IC and the requirement for additional financial resources, technical expertise and regulatory barriers.

The understanding is that innovative and technological intense companies firstly, may apply more IC in their operations and secondly, may disclose such IC in their annual reports. Such high IC in technological, innovative and R&D intense companies may be represented in a listing on a technological index (TechMARK). The first industry classification is therefore represented by the LSE TMRK that is the LSE international market for innovative technology companies and includes computer hardware, computer servicing, internet, semi-conductors, software, telecom equipment, biotechnology, specialist pharmaceuticals, drug delivery and medical technology. Following Bozzolan et al. (2003), the expectation is of a positive significant association. Listing on this exchange may be justified through signalling theory as firms promote their R&D and technological developments. The second industry classification is supported by Camfferman and Cooke (2002), Cooke (1991) and Ho and Wong (2001) who report a significant association between disclosure and manufacturing and non-manufacturing. Industries are classified into manufacturing, high value tangible assets, low profile; and into non-manufacturing, low value tangible assets, service, high tech and high profile industries. The approach in this investigation is that manufacturing companies are less likely to have higher levels of VDIC as non-manufacturing companies that are expected to utilise more IC than tangible assets in their operations. The motivations are derived from the RBV of the firm and signalling theory; non-manufacturing companies are expected to apply unique and non-replicable IA and IC in their operations. These companies disclose IC attributes due to the existence of hidden value and the lack of disclosure costs, consistent with disclosures in sectors of high entry barriers.

2. Method

2.1 Firm Characteristics and Sampling Procedures

Companies were selected from the FTSE All Share Index for the year 2003/2004 in the Financial Times with the exclusion of companies in the banks, financial, insurance, life assurance, mining, oil and gas, real estate, speciality and other finance and investment and property industries. A content analysis of the entire annual reports of a sample of listed companies was conducted by adapting the methodologies of Guthrie et al., (1999), Bozzolan et al., (2003) and Milne and Adler (1999). This involves codifying IC attributes into SC, RC and HC in order to derive patterns in the presentation and reporting of IC (Guthrie & Petty, 2000, p. 244). The intellectual capital framework (ICF) adopted by this paper encompasses twenty-three IC attributes grouped into the three IC categories of SC, RC and HC as summarised in Table 1. This paper proposes its operational definition of voluntary disclosure of an IC attribute as: 'Any IC information, financial or non-financial, illustrations, diagrams and graphical presentation contained in the annual reports that is not required to be disclosed by the Companies Act 1989, International Accounting Standards, EC Directives (Fourth and Seventh), Statement of Standard Accounting Practice, FRS (7, 10 and 11) and the disclosure rules issued by the LSE.

2.2 Disclosure Index and Research Design

A recording unit that captures all manner of IC attribute disclosure including phrases, sentences, groups of words, pictures, diagrams and graphs may be more appropriate, as individual words are deemed insufficient to meet the requirements of an IC attribute (Davison & Skerratt, 2007), sentences may contain more than one IC attribute and both words and sentences ignore non-narratives. As such with respect to narrative disclosures, consistent with the approach applied by Beattie et al., (2004, p. 32), this paper splits sentences into text units with each group of words able to meaningfully convey independently, a single IC attribute. With respect to non-narrative disclosures, consistent with the suggestions of Davison and Skerratt (2007, p. 9) and Unerman (2000), the use of narratives alone will capture only partial disclosures. This paper therefore includes other visual forms of communication that have been found to provide an immediate and effective means of corporate disclosure (Beattie & Jones, 2001; Beattie & Thompson, 2006). Davison and Skerratt (2007) provide evidence that within the top 100 UK companies, 94% of pictures communicated intangible aspects of companies businesses.

Table 1. Intellectual capital framework

Internal	Structural Capital (SC)	External	Relational Capital (RC)	Human Capital (HC)
	Patents		Brands	Know-how
	Copyrights		Customers	Education
	Trademarks		Customer loyalty	Vocational qualifications
	Management philosophy		Distribution channels	Work-related knowledge
	Corporate culture		Business collaborations	Work-related competencies
	Management processes		Licensing agreements	Entrepreneurial spirit,
	Information systems		Favourable contracts	Innovativeness, proactive and reactive abilities, changeability
	Networking systems		Franchising agreements	
	Financial relations			

Source: Adapted from Brooking (1996), Ch'ang and Yastreboff (2003, p170), Guthrie (2001, p35), Abeysekera (2001), IFAC (1998), the Australian Society of CPAs and the Society of Management Accountants of Canada (1998), Stewart (1997) and Sveiby (1997).

As illustrated in Table 1, the 23 IC attributes have been identified as representative of the spread of IC attributes that may bring comparability to existing IC studies (Guthrie et al., 2004; Bozzolan et al., 2003). To ascertain that the scoring was consistent and accurate according to the chosen scoring procedure a verification test was carried out by three researchers from the field in a similar process as that conducted by Guthrie and Petty (2000). Toms (2002) proposes that the volume of disclosures may be potentially misleading when it is the credibility or quality of disclosure that is important. Furthermore, Hasseldine, Salama, & Toms, (2005) proposes that to capture the underlying relationship, it may be important to apply a quality adjusted content analysis method in which disclosures are counted and weighted to identify their likely significance (Beattie & Thompson, 2006, p. 11). This approach minimises coding errors that may be associated with as Toms (2002) describes, rhetoric and non-verifiable disclosures that are largely without commitment as opposed to the more informative and higher quality disclosures. The competitive advantage scheme applied in this paper, accounts for the proactive identification, development, management and utilisation of IA in organisations. The coding of the disclosure

index was conducted by the researcher. Under the weighted disclosure index (WDI), disclosure illustrating a competitive advantage earned a score of “2”, disclosure earned a score of “1” and no disclosure earned a score of “0”. In this way, WDI may be described as disclosure of the IC competitive advantage attribute: ‘The competitive advantage of signalling a unique product, service, process, IP, relationship or human resource when the competitive advantage cannot be replicated due to barriers to entry, the company can sustain above normal returns that place it ahead of competitors’.

2.3 Measures and Statistical Methods

Empirical tests were applied using the statistical package, STATA. Parametric tests were used to determine the relationship between VDIC (WDI), market value (MV), technological listing (TMRK), manufacturing (MANU), employee cost (EMPC) and R&D (R&D). The Pearson coefficient and Spearman correlation tests was applied to test the association between these variables and VDIC and then the variables were entered into the multiple regression equation. Seven models were run to cater for the two models, the robust ordinary least squares regression model (OLS) (Model I) and the non-parametric quantile regression (QREG) (Model II). A further five models were run using the (QREG) model (Models III to VII), dropping one independent variable at a time in order to determine the impact of each on the regression model.

3. Results

3.1 Descriptive Statistics

The results of the descriptive statistics on WDI indicate that there is a wide range of variation in the extent of VDIC. This result indicates that the sample companies have great flexibility in their IC voluntary disclosure practices. Dichotomous variables indicate that 16% of the sample companies are members of the TechMARK listing and that 48% companies are involved in manufacturing activities. Although variables EMPC and R&D indicate large standard deviations in their distribution, data and statistical analysis indicates that of the continuous variables, only MV required transformation to achieve normal distribution. A significant correlation is found between WDI and MV, TMRK, MANUF, EMPC and R&D; in general, the direction of the relationships is consistent with the expected sign; however, the partial correlation coefficient of WDI with R&D is negative indicating that increasing R&D expenditure may result in lower VDIC. The paper attributes this trend with management’s awareness of competitive losses that may result in the disclosure of proprietary information. The benefits of signalling may be outweighed by proprietary costs resulting in R&D being insignificant in explaining the variation in VDIC. MANUF as a non-IC based industry classification is negative and significant at 1% confidence level.

3.2 Correlation Tests

Tests of association indicate that there is no significant correlation between WDI and any of the independent variables. The results of the correlation test illustrate that companies that engage in R&D expenditure make significantly more IC disclosures than those with no R&D investment. The collinearity between TMRK and MANUF (-0.32) illustrates that high-tech companies are non-manufacturing. The largest level of collinearity in Model I exists between MV and R&D (+0.37). This association indicates increasing shareholder value with increasing investment in R&D. Significant collinearity identified between the IC variables suggests that TMRK companies are generally not very large. However, these companies are associated with non-manufacturing; this finding is consistent with non-manufacturing companies being more IC intensive and consistent with evidence that suggests innovative companies are smaller. Furthermore, firms listed on the TMRK are smaller as illustrated by the partial correlation coefficient of MV with TMRK (-0.13) that is negative; these firms are relatively more non-manufacturing than manufacturing based. The partial correlation coefficient of EMPC and R&D (-0.01) is negative and insignificant; nevertheless; the direction of the sign may indicate lower remuneration for firms involved in R&D activities. Lower remuneration however is associated to a greater extent with manufacturing companies than with R&D intensive firms.

Table 2. Intellectual capital investment

Variable	Mean	SD	Min	Max	COR	SRWDI	LMNV	TMRK	MANUF	EMPC	R&D
SRWDI	0.561	0.118	0.265	0.866		1					
LMNV	5.624	2.013	0.536	11.436	0.455 ***	0.393 ***	1				
TMRK	0.164	0.371	0.000	1.000	0.225 ***	0.217 ***	-0.127 ***	1			
MANUF	0.476	0.500	0.000	1.000	-0.234 ***	-0.230 ***	0.129 ***	-0.324 ***	1		
EMPC	48.210	302.911	0.000	6323.900	0.096 **	0.112 **	0.038	0.003	-0.048	1	
R&D	66.161	386.396	0.000	3841.780	-0.084 *	0.094 **	0.366 ***	0.025	0.028	-0.013	1

The table reports the results of the descriptive statistics, the univariate analysis (COR) and the person correlation matrix of the disclosure index (WDI) and the independent variables; the annotation *** indicates results significant at a 0.01%, **, at 0.05% and * at 0.10% levels of significance; variables transformed by square roots are prefixed with SR; Variables transformed by logs are prefixed with LN;

SRWDI:	Weighted disclosure index based on disclosed IC attributes measured as a square root transformation;
LNMV:	Size being MV representing the share price multiplied by the number of ordinary shares in issue measured as a log-transformed variable;
TMRK:	dichotomous variable that scores “1” for listing on the TechMARK listing and “0” otherwise;
MANUF:	dichotomous variable that scores “1” for manufacturing and “0” for non-manufacturing;
EMPC:	staff costs including all employee benefits such as health insurance and pension plan contributions / number of employees (representing the number of both full and part time employees of the company);
R&D:	research and development expenditure.

3.3 Regression Analysis

Table 3 presents the results of the inferential models; Models I to VII present the results using non-parametric quantile regression (QREG) and the ordinary least squares (OLS) model. The results of the QREG model provide supporting results to that of the OLS model, with the exception of R&D that is insignificant in the QREG model. Although the results of the partial and Pearson correlation matrix provide inconsistent results with respect to the influence of R&D on VDIC, the multivariate analysis is consistent with respect to the predicted sign. Furthermore, analysis of the residuals in the OLS model provides assurance of their normal distribution indicating that the model is robust. The results of Models I to VII confirm that for larger companies, the benefits of signalling IC outweigh the potential disclosure costs. The expectation that large companies as measured by MV are associated with VDIC has been realised consistent with disclosure studies by Hossain et al., (1994) and Lang and Lundholm (1993). Being larger and having access to more resources, larger companies may be able to institute barriers to entry. Management behaviour is explained by signalling theory as successful management practices are advertised to inform markets of the company’s competitive advantage. Consistent with the disclosure of RC attributes that signal the IC embedded in the processes that expand markets, build and maintain customer relations and ensure adequate distribution channels.

Table 3. Intellectual Capital Investment: Regression Results

$$WDI = \beta_0 + \beta_1 LNMV + \beta_2 TMRK - \beta_3 MANUF + \beta_4 EMPC + \beta_5 R \& D + \varepsilon \quad (1)$$

Model I : INTELLECTUAL CAPITAL (WDI)

	Independent v Predicted sign	(i)		(ii)		(iii)		(iv)		(v)		(vi)		(vii)	
		OLS	QREG	QREG	QREG	QREG	QREG	QREG	QREG	QREG	QREG	QREG	QREG		
		Coef.	Sig.	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.
Constant	+	0.418 ***		0.411 ***		0.411 ***		0.441 ***		0.391 ***		0.414 ***		0.430 ***	
LNMV	+	0.028 ***		0.029 ***		0.029 ***		0.027 ***		0.027 ***		0.029 ***		0.026 ***	
TMRK	+	0.066 ***		0.073 ***		0.073 ***				0.088 ***		0.068 ***		0.056 ***	
MANUF	-	-0.051 ***		-0.063 ***		-0.063 ***		-0.077 ***				-0.072 ***		-0.067 ***	
EMPC	+	0.000 ***		0.000 ***		0.000 ***		0.000 ***		0.000 ***				0.000 ***	
R&D	+	0.000 **		0.000		0.000		0.000		0.000		0.000			
Mean VIF		1.120													
z		0.14													
F		63.62 ***													
R ²		0.28	0.16	0.16	0.13	0.13	0.15	0.15							
N		439													

Companies that have been admitted as members of the TMRK listing are associated with higher levels of IC disclosure relative to non-members as illustrated by Models I to III and V to VII. Previous industry studies by Bozzolan et al., (2003), Williams (2001) and Cooke (1989, 1991 and 1992) yielded significant positive results. The theoretical motivation is derived from signalling theory. The MANU variable indicates that disclosure of IC attributes is industry specific varying from low to high levels as sectors move from manufacturing to non-manufacturing. The results of Model I to IV and VI to VII, are consistent with the findings of Camfferman and Cooke (2002), Cooke (1991) and Ho and Wong (2001).

Although the *t*-statistic for remuneration per employee is small, the results of Models I to V and VII illustrate that EMPC positively influences management to greater levels of VDIC. Increasing salary cost per employee may be attributed to higher levels of education, more experience and highly complex professions. In an environment in which measurement of HC is complex, EMPC is a proxy for the value of HC in companies or alternatively, the rent required to maintain the HC in place. The motivation for this hypothesis is based on signalling theory. Proprietary costs are mitigated in the first instance by the perceived benefits of signalling and in the second by the disclosure of “better than the worst case scenario” that the markets would have assumed. This signalling is consistent with investment in training, health insurance and pension plans as employers signal their successful investment in HC through VDIC. The theoretical explanations are taken from signalling theory the expectation of a significant positive relationship is confirmed. Effective human resource practices are expected to lead to signals that indicate a competitive labour force to the markets.

4. Discussion

The results suggest that large companies operating in non-manufacturing, high-tech and innovative industries that are characterised by investment in employees and research and development processes have higher levels of hidden value; these companies are associated with the signalling of intellectual capital. Tests of association indicate that the partial correlation coefficient of WDI with R&D is negative indicating that increasing R&D expenditure may result in lower VDIC however, the Pearson correlation coefficient indicates a positive association for these independent variables. Models I to VII however illustrate that increasing investment in R&D is positively and significantly associated with the variation in VDIC although the relationship is weak. The results confirm the analytical framework encompassing the three disclosure outcomes; the pursuit of a maximum disclosure policy may be explained by the RBV and signalling theory. A minimal or no disclosure policy may be explained by industry membership and or proprietary cost theory and a partial disclosure outcome may be attributed to the competitive costs hypothesis, political cost hypothesis and proprietary cost hypothesis.

Although market forces may lead to IC disclosure on information demanded by external forces, the absence of a framework for IC, the necessity to disclose credible information, the threat of loss of competitive advantage and the risk of litigation has restricted the level of IC disclosure. Companies compete by erecting barriers in order to maintain their demand-side advantage or cost-side advantage (Abernathy and Clark, 1995). Generally, any advantage generated from standard and tangible asset investment is easy for competing companies to imitate (Webster, 1999). Intangible asset investment on the other hand is often company specific, making it difficult for companies to imitate. Hayton (2005) argues that IC offers a unique source of advantage that facilitates entrepreneurial activities by reducing the firm-specific risk and increasing the returns from investment in innovation and venturing (new projects). In this way, IA can achieve competitive advantage. As such, these additional disclosure costs render markets less efficient particular in risk assessment, equity valuation and resource allocation. VDIC may reduce information asymmetries that may otherwise be exploited by internal agents and external analysts. Information asymmetry provides the opportunity to generate value by moving share prices closer to their intrinsic values. These opportunities may arise in companies with higher levels of unreported IC. Minority shareholders may benefit from increased VDIC, as they may not have access to some information that major shareholders possess. Furthermore, given the existence of information asymmetry between management, shareholders, minority shareholders, analysts and investors, it may be necessary that IC information be made publicly available if markets are to remain truly competitive.

With reference to Gray and Roberts (1989) who considered the costs and benefits of disclosure and investigated these empirically, the paper acknowledges their suggestions that disclosure improves the image and reputation of the company, provides better investment decisions for stakeholders, improves accountability to shareholders, enables more accurate risk assessment by shareholders and provides a more accurate valuation of share prices. Nevertheless, despite these potential benefits, companies do not always disclose IC; constraints to voluntary disclosure take different forms, costs of competitive disadvantage, agency costs and costs of data collection and processing that may be higher for IC due to its intangible nature and inherent problems of identification, measurement and reporting. Companies with substantial resources may be able to dedicate more resources to this

function. This paper extends this work by examining the influence of investment in employees and R&D as determinants VDIC.

Future research may include advertising, marketing and public relations expenditure as determinants of VDIC in order to include all discretionary expenses that are associated with IA. In addition, due to the varying nature of R&D from one year to the next it may be appropriate to examine VDIC in a longitudinal study that may identify any relationships other than cross-sectional as researched in this paper. The results illustrate that industry is a significant determinant of the variation in VDIC. Regulators may therefore focus on an industry by industry analysis of the cost benefit of increasing disclosure of IC; not all industries have the IC to disclose. Furthermore, from a policy and regulatory perspective it is important to note that firms that have the more significant and successful investments voluntarily disclose information through other channels that exclude financial statements. These firms are conscious of the two stage disclosure game in which merely investing in IA in the first stage of the game is insufficient to meet stakeholder needs; these firms take proactive steps in the second stage of the game to inform markets of the expected returns from such investments and the expected production cost savings from the innovation and technology. As such, the expectation that these companies channel IC voluntary disclosure and sustained competitive advantage through the narratives and illustrations of the annual report have not been realised. If financial statements are to be decision useful and fairly presented, regulators should ensure that both expenditure in employees and in R&D is accompanied by a statement of expected returns on such investments to enable projections of future cash in-flows to be made by investors. Further research can be all encompassing by examining all potential disclosure channels such that management motivation may be more closely studied particularly for firms that make use of early disclosure and of alternative channels of disclosure.

Acknowledgements

I am indebted to Professor S. Toms, my PhD supervisor and mentor, for useful comments, criticisms and suggestions on an earlier draft.

References

- Abernathy, W. J., & Clarke, K. B. (1995). Innovation: Mapping the winds of creative destruction. *Research Policy*, 14, 3-22. [http://dx.doi.org/10.1016/0048-7333\(85\)90021-6](http://dx.doi.org/10.1016/0048-7333(85)90021-6)
- Abeysekera, I. (2001). A framework to audit intellectual capital. *Journal of Knowledge Management Practice*. Retrieved from <http://www.tlinc.com/jkmpv2.htm>
- Abeysekera, I. (2006). The project of intellectual capital disclosure: Researching the research. *Journal of Intellectual Capital*, 7(1), 61-77. <http://dx.doi.org/10.1108/14691930610639778>
- Abeysekera, I. (2010). Reputation building, website disclosure and the case of intellectual capital studies. *Studies in Managerial and Financial Accounting*, 21. Bingley, England, Emerald. [http://dx.doi.org/10.1108/s1479-3512\(2010\)21](http://dx.doi.org/10.1108/s1479-3512(2010)21)
- Abeysekera, I., & Guthrie, J. (2005). An empirical investigation of the annual reporting trends of intellectual capital in Sri Lanka. *Critical Perspectives on Accounting*, 16, 151-163. [http://dx.doi.org/10.1016/S1045-2354\(03\)00059-5](http://dx.doi.org/10.1016/S1045-2354(03)00059-5)
- Accounting Standards Board (ASB). (1989). *Statement of Standard Accounting Practice (SSAP) 13: Accounting for research and development*. Retrieved from <http://www.frc.org.uk/asb/technical/standards/pub0396.html>
- Akerlof, G. A. (1970). The market for "lemons": quality uncertainty and the market mechanism. *Journal of Economics*, 84(3), 488-500. <http://dx.doi.org/10.4337/9781781950005.00012>
- Amir, E., & Lev, B. (1996). Value-relevance of non-financial information: the wireless communication industry. *Journal of Accounting and Economics*, 22(1-3), 3-30. [http://dx.doi.org/10.1016/S0165-4101\(96\)00430-2](http://dx.doi.org/10.1016/S0165-4101(96)00430-2)
- ASB. (1994). *Financial Reporting Standard (FRS) 7: Fair value in acquisition accounting*. Retrieved from <http://www.frc.org.uk/images/uploaded/documents/07%20-%20Fair%20Values%20in%20Acquisition%20Accounting.pdfFR7>
- ASB. (1997). *FRS 10: Goodwill and intangible assets*. Retrieved from <http://www.frc.org.uk/images/uploaded/documents/10%20-%20Goodwill%20and%20Intangible%20Assets.pdf>
- ASB. (1998). *FRS 11: Impairment of fixed assets and goodwill*. Retrieved from <http://www.frc.org.uk/images/uploaded/documents/FRS11.pdf>
- Australian Society of Chartered Public Accountants & the Society of Management Accountants of Canada. (1999). Knowledge management: issues, practice and innovation. Melbourne, Australian society of certified

- practising accountants. In I. Abeysekera (Ed.), *Reputation building, website disclosure and the case of intellectual capital studies, studies in managerial and financial accounting, 21*, Bingley, England, Emerald. [http://dx.doi.org/10.1108/s1479-3512\(2010\)21](http://dx.doi.org/10.1108/s1479-3512(2010)21)
- Awano, G., Franklin, M., Haskel, J., & Kastrinaki, Z. (2010). Measuring investment in intangible assets in the UK: results from a new survey. *Economic and Labour Market Review, 4*(7), 66-71. <http://dx.doi.org/10.1057/elmr.2010.98>
- Ball, R. (1980). Discussion of accounting for research and development costs: the impact on research and development expenditures. *Journal of Accounting Research, 18*, 27 - 37. <http://dx.doi.org/10.2307/2490325>
- Barako, D. G., Hancock, P., & Izan, H. Y. (2006). Factors influencing voluntary corporate disclosure by Kenyan companies. *Corporate Governance, 14*(2), 107-125. <http://dx.doi.org/10.1111/j.1467-8683.2006.00491.x>
- Barney, J. B. (2001). Is the resource-based "view" a useful perspective for strategic management research? Yes. *Strategic Management Journal, 26*(1), 41-56. <http://dx.doi.org/10.5465/AMR.2001.4011938>
- Beattie, V., & Jones, M. A. (2001). A six-country comparison of the use of graphs in annual reports. *International Journal of Accounting, 36*, 195-222. [http://dx.doi.org/10.1016/S0020-7063\(01\)00094-2](http://dx.doi.org/10.1016/S0020-7063(01)00094-2)
- Beattie, V., & Thompson, S. J. (2006). *Lifting the lid on the use of content analysis to investigate intellectual capital disclosures*. Edinburg: School on Management and Languages, Herriot-Watt. <http://dx.doi.org/10.1016/j.accfor.2007.02.001>
- Beattie, V., McInnes, W., & Fearnley, S. (2004). *Through the eyes of management narrative reporting across three sectors*. London: Institute of Chartered Accountants of England and Wales. [http://dx.doi.org/10.1016/s0890-8389\(03\)00021-0](http://dx.doi.org/10.1016/s0890-8389(03)00021-0)
- Berle, A., & Means, G. (1934). *The modern corporation and private property*. Macmillan, New York. <http://dx.doi.org/10.2307/2548753>
- Botosan, C. (1997). Disclosure level and the cost of equity capital. *The Accounting Review, 72*(3), 323-350. Retrieved from <http://www.jstor.org/stable/248475>
- Bozzolan, S., Favotto, F., & Ricceri, F. (2003). Italian annual intellectual capital disclosure: An empirical analysis. *Journal of Intellectual Capital, 4*(4), 543-558. <http://dx.doi.org/10.1108/14691930310504554>
- Brooking, A. (1996). *Intellectual capital, core assets for the third millennium enterprise*. London: International Thompson Business Press.
- Camfferman, K., & Cooke, T. E. (2002). An analysis of disclosure in the annual reports of UK and Dutch companies. *Journal of International Accounting Research, 1*, 3. <http://dx.doi.org/10.2308/jiar.2002.1.1.3>
- Ch'ang, S. & Yastreboff, M. (2003). Intellectual property auditing: A road to riches. *Journal of Research and Practice in Information Technology, 35*(3), 169-177. Retrieved from <http://dblp.uni-trier.de/db/journals/acj/acj35.html#ChangY03>
- Chen, C. J., & Huang, J. W. (2009). Strategic human resource practices and innovation performance - The mediating role of knowledge management capacity. *Journal of Business Research, 62*(1), 104-114. <http://dx.doi.org/10.1016/j.jbusres.2007.11.016>
- Chen, M., Cheng, S., & Hwang, Y. (2005). An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of Intellectual Capital, 6*(2), 159-176. <http://dx.doi.org/10.1108/14691930510592771>
- Cheney, G., & Carrol, C. (1997). The person as object in discourses in and around organisations. *Communication Research, 24*(6), 593-630. <http://dx.doi.org/10.1177/0093650297024006002>
- Clinch, G. (1991). Employee compensation and firm's research and development activity. *Journal of Accounting Research, 29*(1), 59-78. <http://dx.doi.org/10.2307/2491028>
- Companies Act*. (1989). London: Her Majesty's Stationery Office.
- Cooke, T. E. (1989). Voluntary corporate disclosure by Swedish companies. *Journal of International Financial Management Accounting, 2*, 171-195. <http://dx.doi.org/10.1111/j.1467-646X.1989.tb00009.x>
- Cooke, T. E. (1991). An assessment of voluntary disclosure in annual reports of Japanese corporations. *International Journal of Accounting, 26*(3), 174-189.
- Davison, J., & Skerratt, L. (2007). *Words, pictures and intangibles in the corporate report*. Edinburg: The

- Institute of Chartered Accountants of Scotland.
- Diamond, D. W., & Verrecchia, R. (1991). Disclosure, liquidity and cost of capital. *The Journal of Finance*, 66, 1325-1355. <http://dx.doi.org/10.1111/j.1540-6261.1991.tb04620.x>
- Drucker, P. F. (1993). The rise of the knowledge society. *Wilson Quarterly*, 17(2), 52-70.
- Dye, R. A. (1985). Disclosure of non-proprietary information. *Journal of Accounting Research*, 23(1), 123-145. <http://dx.doi.org/10.2307/2490910>
- Entwistle, G. (1999). Exploring the R&D disclosure environment. *Accounting Horizons*, 13(4), 323-341. <http://dx.doi.org/10.2308/acch.1999.13.4.323>
- European Economic Community. (1978). *Fourth council directive for coordinating of national legislation regarding the annual accounts of limited liability companies*. Brussels: EEC.
- European Economic Community. (1983). *Seventh council directive on consolidated accounts*. Brussels: EEC.
- Financial Services Authority. (2000). *The listing rules*. London: FSA.
- Firth, M. A. (1979). The Impact of size, stock market listing and auditors on voluntary disclosure in corporate annual reports. *Accounting and Business Research*, 9(36), 273-280. <http://dx.doi.org/10.1080/00014788.1979.9729168>
- Garcia-Meca, E., & Martinez, I. (2005). Assessing the quality of disclosure on intangibles in the Spanish capital market. *European Business Review*, 17(4), 305-313. <http://dx.doi.org/10.1108/09555340510607352>
- Gould, J. P. (1977). Discussion of municipal accounting maze: an analysis of political incentives. *Journal of Accounting Research*, 15(Supplement), 145-150. <http://dx.doi.org/10.2307/2490638>
- Graham, J. R., Harvey, C., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40, 3-73. <http://dx.doi.org/10.1016/j.jacceco.2005.01.002>
- Grant, R. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17, 109-122. <http://dx.doi.org/10.1002/smj.4250171110>
- Gray, S. J., & Roberts, C. B. (1989). Voluntary information disclosure and the British multinationals: corporate perceptions of costs and benefits. *International Pressures for Accounting Change*, Prentice Hall, Hertfordshire.
- Gray, S. J., Meek, G. K., & Roberts, C. B. (1995). International capital market pressures and voluntary annual report disclosures by U.S. and U.K. multinationals. *Journal of International Financial Management and Accounting*, 6(1), 44-68. <http://dx.doi.org/10.1111/j.1467-646X.1995.tb00049.x>
- Guthrie, J. (2001). The Management, measurement and reporting of intellectual capital. *Journal of Intellectual Capital*, 2(1), 27-41. <http://dx.doi.org/10.1108/14691930110380473>
- Guthrie, J., & Petty, R. (2000). Intellectual capital: Australian annual reporting practices. *Journal of Intellectual Capital*, 1(3), 241-51. <http://dx.doi.org/10.1108/14691930010350800>
- Guthrie, J., Petty, R., Ferrier, F., & Well, R. (1999). *There is no accounting for intellectual capital in Australia: Review of annual reporting practices and the internal measurement of intangibles within Australian organisations*. Paper presented at the International Symposium Measuring and Reporting Intellectual Capital: Experiences, Issues and Prospects, 9-10 June, Amsterdam.
- Guthrie, J., Petty, R., Yongvanich, K., & Ricceri, F. (2004). Using content analysis as a research method to enquire into intellectual capital reporting. *Journal of Intellectual Capital*, 5(2), 282-293. <http://dx.doi.org/10.1108/14691930410533704>
- Hamberg, D. (1963). Invention in the industrial research laboratory. *Journal of Political Economy*, 71, 95-115. <http://dx.doi.org/10.1086/258747>
- Hasseldine, J., Salama, A. I., & Toms, J. S. (2005). Quantity vs. quality: the impact of environmental disclosures on the reputations of UK plcs. *The British Accounting Review*, 37, 231-248. <http://dx.doi.org/10.1016/j.bar.2004.10.003>
- Hayton, J. C. (2005). Competing in the new economy: the effect of intellectual capital on corporate entrepreneurship in high technology new ventures. *R&D Management*, 35(2), 137-155. <http://dx.doi.org/10.1111/j.1467-9310.2005.00379.x>
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure and the capital market: A

- review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31, 405-440. [http://dx.doi.org/10.1016/s0165-4101\(01\)00018-0](http://dx.doi.org/10.1016/s0165-4101(01)00018-0)
- Ho, S. S. M., & Wong, K. S. (2001). A study of corporate disclosure practice and effectiveness in Hong Kong. *Journal of International Financial Management and Accounting*, 12(1), 75-102. <http://dx.doi.org/10.1111/1467-646X.00067>
- Hossain, M., Tan, L. M., & Adams, M. (1994). Voluntary disclosure in an emerging capital market: Some empirical evidence from companies listed on the Kuala Lumpur Stock Exchange. *The International Journal of Accounting*, 29(4), 3. In S. Leventis, & P. Weetman (Eds.), *Advances in International Accounting* (Vol. 17, pp. 227-250). Voluntary disclosures in an emerging capital market: Some evidence from the Athens stock exchange. [http://dx.doi.org/10.1016/S0897-3660\(04\)17011-6](http://dx.doi.org/10.1016/S0897-3660(04)17011-6)
- Hughes, J. S., & Kao, J. L. (1991). Economic implications of alternative disclosure rules for research and development costs. *Contemporary Accounting Research*, 8(1), 152-169. <http://dx.doi.org/10.1111/j.1911-3846.1991.tb00840.x>
- Hunter, L., Webster, E., & Wyatt, A. (2012). Accounting for expenditure on intangibles. *Abacus*, 48(1), 104-145. <http://dx.doi.org/10.1111/j.1467-6281.2012.00359.x>
- Inchausti, B. G. (1997). The influence of company characteristics and accounting regulation on information disclosed by Spanish firms. *European Accounting Review*, 6(1), 45-68. <http://dx.doi.org/10.1080/096381897336863>
- Jensen, M., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360. [http://dx.doi.org/10.1016/0304-405x\(76\)90026-x](http://dx.doi.org/10.1016/0304-405x(76)90026-x)
- Joos, P. (2002). Discussion-The usefulness of biotechnology firms' drug development status in the evaluation of research and development costs. *Journal of Accounting, Auditing and Finance*, 197-205.
- Kothari, S. P., Laguess, T., & Leone, A. (1998). *Capitalisation versus expensing: Evidence on the uncertainty of future earnings from current investments in PP&E versus R&D*. Working paper. University of Rochester. <http://dx.doi.org/10.2139/ssrn.146211>
- Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research*, 31, 246-271. <http://dx.doi.org/10.2307/2491273>
- Lang, M., & Lundholm, R. (1996). Corporate disclosure policy and analyst behaviour. *Accounting Review*, 71(4), 467-492. <http://www.jstor.org/stable/248567>
- Lev, B. (2001). *Intangibles: Management, measurement and reporting*. Washington, DC: The Brookings Institution Press.
- Lev, B., & Zarowin, P. (1999). The boundaries of financial reporting and how to extend them. *Journal of Accounting Research*, 37(2), 353-385. <http://dx.doi.org/10.2307/2491413>
- M'cally, G., Eng, L. H., & Hasseldine, C. R. (1982). Corporate financial reporting in New Zealand: An analysis of user preferences, corporate characteristics and disclosure practices for discretionary information. *Accounting and Business Research*, 13, 11-20. <http://dx.doi.org/10.1080/00014788.1982.9729725>
- Meremadi, M., Musso, C., & Oxgaard, J. (2013). *Chemical innovation: An investment for the ages*. McKinsey & Company. Retrieved from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=5&ved=0CEsQFjAE&url=http%3A%2F%2Fwww.mckinsey.com%2F~%2Fmedia%2Fmckinsey%2Fdotcom%2Fclient_service%2Fchemicals%2FPDFs%2FChemical_innovation_An_investment_for_the_ages.ashx&ei=maUOUpKwDaThyQGfEw&usq=AFQjCNG2nbtcbCtj2oODUby3PyHHAWZJoQ&sig2=dqZD0CgzxUpo7x5xYF2IVA&bv=bv.50768961
- Milne, M. J., & Adler, R. W. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing and Accountability Journal*, 12(2), 237-256. <http://dx.doi.org/10.1108/09513579910270138>
- Mueller, D. C., & TILTON, J. E. (1969). Research and development costs as a barrier to entry. *Canadian Journal of Economics*, 2(4), 572-579. <http://dx.doi.org/10.2307/133844>
- National Statistics. (2003). *SIC of Economic Activities, 2003*. Retrieved from http://www.statistics.gov.uk/methods_quality/sic/contents.asp
- Schumpeter, J. M. (1950). *Capitalism, socialism and democracy* (3rd ed.). New York. <http://dx.doi.org/10.4324/>

9780203202050

- Skinner, D. (1997). Earnings disclosure and stockholder lawsuits. *Journal of Accounting and Economics*, 23, 249-283. [http://dx.doi.org/10.1016/s0165-4101\(97\)00010-4](http://dx.doi.org/10.1016/s0165-4101(97)00010-4)
- Sofian, S., Tayles, M., & Pike, R. (2005). The impact of human capital management on management accounting practices and corporate culture: A study of Malaysian companies perspective. *Paper presented at International Conference on Knowledge Management (ICKM) 7 – 9 July 2005-05-30 Putra World Trade Centre, Kuala Lumpur, Malaysia.*
- Spence, M. (1973). Job market signalling. *Quarterly Journal of Economics*, 87, 29-30. <http://www.jstor.org/stable/1882010>
- The Economist. (2006, February 11). *Economics focus beyond irrelevance* (p. 86).
- Toms, S. (2002). Firm resources, quality signals and the determination of corporate environmental reputation: some UK evidence. *The British Accounting Review*, 34(3), 257-282. <http://dx.doi.org/10.1006/bare.2002.0211>
- Trueman, B. (1986). Why do managers voluntarily release earnings forecasts? *Journal of Accounting and Economics*, 8, 53-72. [http://dx.doi.org/10.1016/0165-4101\(86\)90010-8](http://dx.doi.org/10.1016/0165-4101(86)90010-8)
- Unerman, J. (2000). Methodological issues reflections on quantification in corporate social reporting content analysis. *Accounting, Auditing and Accountability Journal*, 13(5), 667-680. <http://dx.doi.org/10.1108/09513570010353756>
- Verrecchia, R. E. (1983). Discretionary disclosure. *Journal of Accounting and Economics*, 5, 174-194. [http://dx.doi.org/10.1016/0165-4101\(83\)90011-3](http://dx.doi.org/10.1016/0165-4101(83)90011-3)
- Verrecchia, R. E. (2001). Essays in disclosure. *Journal of Accounting and Economics*, 32(1-3), 97-180. <http://dx.doi.org/10.2139/ssrn.276699>
- Wagenhofer, A. (1990). Voluntary disclosure with a strategic opponent. *Journal of Accounting and Economics*, 12(4), 341-363. [http://dx.doi.org/10.1016/0165-4101\(90\)90020-5](http://dx.doi.org/10.1016/0165-4101(90)90020-5)
- Watts, R. L., & Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. *The Accounting Review*, 53(1), 112-134. <http://www.jstor.org/stable/245729>
- Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Prentice-Hall, Englewood Cliffs, NJ.
- Webster, E. (1999). *The economics of intangible investment*. UK: Edward Elgar Publishing Limited. <http://dx.doi.org/10.1080/08109029908632122>
- Weissa, D., Falkb, H., & Zion, U. B. (2013). Earnings variability and disclosure of R&D: Evidence from press releases. *Accounting and Finance*, 53(2013), 837-865. <http://dx.doi.org/10.1111/j.1467-629x.2012.00484.x>
- Williams, S. M. (2001). Is intellectual capital performance and disclosure practices related? *Journal of Intellectual Capital*, 2(3), 192-203. <http://dx.doi.org/10.1108/14691930110399932>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Discourses of Non-Formal Pedagogy in Two Youth-Oriented Indonesian Environmental NGOs

Pam Nilan¹

¹ School of Humanities and Social Science, University of Newcastle and School of Asian Studies, University of Western Australia, Australia

Correspondence: Pam Nilan, School of Humanities and Social Science, University of Newcastle, 2308. New South Wales, Australia. Tel: 61-2-4921-5912. E-mail: Pamela.Nilan@newcastle.edu.au

Received: April 14, 2015 Accepted: June 12, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p162

URL: <http://dx.doi.org/10.5539/ass.v11n21p162>

Abstract

This article compares two youth-oriented ENGOs (Environmental Non-Government Organisations) in Indonesia. Comparative analysis focuses on how the two organisations provide discourses that configure differently the pedagogic space of experiential learning for children and young people. Despite an apparent low level of environmental awareness generally among the Indonesian population there does seem to be some enthusiasm for environmental activities among certain groups of young people. However, it seems different kinds of young people are drawn to different kinds of environmental activities. Conceptually, if we accept that there is an imagined space of the nation (Anderson, 1991) we can logically propose an imagined national space of the physical environment. Thus different agents of change will imagine and configure this space differently so that certain kinds of engagement and learning follow. Escobar (1999) points out that what we perceive in the environment as “natural” is always also cultural and social. So for example, transnational logging companies understand the Indonesian forests as a natural resource to be exploited, while student nature-lover groups – *Mahasiswa Pencinta Alam* – constitute forests as recreational places to camp and walk in nature. This paper examines two ENGOs designed to appeal to young Indonesians: *Sahabat Alam* – Friends of Nature - founded in 2008 by a 12 year old schoolgirl after Jakarta flooding, and *Tanam Untuk Kehidupan* – Planting for Life – an arts collective which aims for learning about the environment through creative practices and festivals in Salatiga.

Keywords: non-formal education, environmentalism, Indonesia, NGOs, young people

1. Introduction

1.1 Indonesia and Environmental Awareness

The Indonesian archipelago is a site of extraordinary tropical biodiversity. However, a long history of natural resource extraction has stripped forests away and damaged ecosystems, sometimes irreparably. The islands are vulnerable to rising sea levels and geothermal activity. Illegal forest burning blankets the nearby region in thick, choking smoke every year. Concerted action needs to be taken now to reverse damaging environmental trends that threaten not only the nation, but the region and the world, since Indonesia is the world’s third largest emitter of greenhouse gases that cause global climate change (Measey, 2010, p. 31). Yet relatively little is happening on the ground.

Indonesia is the largest Muslim majority country in the world, with a population of over 250 million. The median age is 28.9 years, and 44 per cent of the population lives in urban areas (BPS, 2012). Indonesia is currently ranked at only 121 of 187 countries according to the 2013 Human Development Index. There are still high levels of poverty, unemployment and corruption (World Bank, 2013). The current strong economic growth rate signals the expansion of the urban middle class, incurring higher rates of “domestic consumerism, energy usage and CO2 emissions” (Savage, 2012, p. 244), with more industry, more vehicles, larger houses, more roads and greater stress on already weak urban infrastructure such as water supply, drainage, rubbish disposal and sewerage. Urban prosperity has also seen an increase in resource-intensive shopping mall culture (Douglass et al., 2008). In other words, as the nation has grown economically, so has the negative impact on the urban environment.

The countryside has also felt the impact. 80 per cent of Indonesian greenhouse gas emissions result from changed land use following logging and forest/swamp fires, especially deforestation (World Bank, 2011). The

Kyoto Protocol was signed by Indonesia in 1998 and ratified in 2004. However, despite policies and regulations to reduce greenhouse emissions by roughly 26 per cent (World Bank, 2010), and the goal of a 41 per cent reduction with donor assistance, progress has been slow. Legal implementation and enforcement remains very weak (Measey, 2010, p. 43). Most deforestation occurs in just 10 provinces, but Riau, Central Kalimantan and South Sumatra account for over half of all forest degradation and loss (World Bank, 2009). The managed agricultural lands of traditional Indonesia were characterised by fallow-cropping cycles that preserve the land and stabilise carbon in the soil. However, global demand for food and biofuels has driven high capital agricultural development. Indonesia has experienced one of the most rapid plantation expansions worldwide (Carlson et al., 2012). Extensive company-owned farms now occupy many parts of Indonesia that were once forested, while agribusiness in other parts of the country has eclipsed traditional forms of agriculture. There is reliance on artificial fertilisers, pesticides and herbicides for continuous high-yield crop production (Setiawan, Stoetter, Sartohadi, & Christanto, 2009). Moreover, monoculture plantations in Indonesia deploy very intensive soil tillage without proper soil conservation, resulting in soil erosion and depleted soil fertility (Setiawan et al., 2009).

In settled areas, even the casual observer will find public spaces littered and polluted. Waterways are contaminated with refuse, sewerage and toxic sludge. Air pollution daily reaches dangerous levels in the major cities. There is little regulation of, or accountability for, activities that pollute the local environment, and minimal public consciousness of the consequences of littering and illegal waste disposal, or of non-approved building and industrial development. Ignorance, lack of regulation and accountability, and minimal sense of responsibility appears to extend from the bottom to the top. Pro-environment sentiments are expressed in political circles and in the press, but little happens in practice. Nevertheless, environmental groups do exist and are taking action to raise the consciousness of the population.

Yet it is only 15 years since the country emerged from authoritarian rule to embrace democracy. Environmentalism in Indonesia is therefore unlikely to resemble environmentalism in other places, especially western countries. Non-western countries bear better comparison. For example, Iran shows some similarities to Indonesia because the country experienced an authoritarian regime where environmental destruction was permitted, followed by a period in which “pro-environmental groups” emerged (Fadaee, 2011, p. 82). Similarly, in China an “active green community” emerged after the mid 1990s (Stalley & Yang, 2006). Activists were mostly under 40 years old, and more than half had university education (Xie, 2010). This matches the “environmental sympathiser” profile in both urban Iran (Fadaee, 2011, p. 82) and urban Indonesia (Sudamardi et al., 2001; Hadiniwata, 2003). In short, middle class young Indonesians are those most likely to get involved in youth-oriented environmental NGOs.

1.2 Environmentalist Views

Broadly speaking, environmentalist views in Indonesia are most often framed around conservation concerns (di Gregorio, 2012). There is much rhetoric about protecting the symbolic community of the archipelago; construed as a natural wonderland and matter of national pride on the global stage. Online and social media environmentalist discourse in Indonesia emphasises preservation of the unique flora and fauna of the archipelago, its world famous natural beauty, as yet undiscovered miracle cures from the rainforest, the potential for lucrative eco-tourism, and so on. This set of discourses approximates “the romantic gaze” of environmentalism (Macnaghten & Urry, 1998). Taking Escobar’s (1999) point that what we perceive in the environment as “natural” is always cultural and social, the romantic gaze of Indonesian conservationism expresses a middle-class, nationalist perception of nature. It is distinguishable from the pragmatic perceptions of nature among local peasant farmers in the countryside, for example, which are based on the direct experience of subsistence agriculture.

Coverage of environmental problems observed by the author in the Indonesian press in 2013/2014 included: deforestation, forest-burning haze, loss of agricultural land, expansion of monoculture plantations, mining impacts, species decline, degradation of waterways and ocean, soil erosion and depletion, air and water pollution, weather changes, lack of sewage and sanitation, reliance on fossil fuels, waste disposal, greenhouse gas emissions. Yet headlines about major disasters (floods, mud slides, fires, volcanoes) have probably stimulated greater concern among the population than some of the other environmental problems listed above. Relevant to this point, Savage (2012, p. 234) suggests that in Southeast Asian countries like Indonesia, prolonged exposure over centuries to large-scale environmental hazards may mean that people and communities still have “a resigned, fatalistic outlook” at the present time, even though environmental threats are much worse, and result much more demonstrably from human actions.

There seem to be few government-sponsored incentives or sanctions to encourage responsibility for risky behaviour, such as littering, pollution and illegal land-clearing. Environmental activist groups seek to bring issues to political debate and public attention but with little success. The Indonesian Minister for the Environment wrote in 2004, “we must acknowledge that our attention to and consciousness of environmental problems is still very low. This is caused by the fact that most people in Indonesian society have not yet awoken to a real perception of the environment” (Kementerian Lingkungan Hidup, 2004, p. ix, translated by Lyn Parker). A significant international report on Indonesia concurs, stating that “environmental values are not deeply embedded in society”. It is argued the consequence is “undervaluation of natural resources and environmental services” (World Bank, 2011). However, Bohensky, Smajgl, and Brewer (2012) did find awareness of global warming among Indonesian families, which strikes a note of optimism. The authors surveyed 6,310 households in East Kalimantan in 2007 and in Central Java in 2008. 81.9 per cent of respondents had observed climate change and 70.7 per cent perceived it as a risk. 38.9 per cent were adapting to its impacts and 28.2 per cent were taking proactive measures. Their most significant finding however, was that 31.8 per cent of people had observed climate change and perceived it as a risk but were taking no action (Bohensky, Smajgl, & Brewer, 2012, p. 349). It seems possible then that the environmental awareness of well-informed Indonesians does not often extend beyond information and perception to environmentally significant behaviour, either individual or collective.

Disseminating more information *per se* is not necessarily the answer. “Knowledge is a necessary, *however not sufficient* precondition for developing pro-environmental moral norms and attitudes” (Bamberg & Moser, 2007, p. 22, my emphasis). In other words, deep environmental learning needs to take place if entrenched social and cultural behaviours are to change. A study of student environmental awareness in the Philippines concluded that,

Paradigms are deeply ingrained in societies and are imbibed by successive generations born into them and changes in paradigms cannot be realized through intellectual discussion alone ... [but by] experiences that touch students deeply (Galang, 2010, p. 182).

As Giddens (2011, p. 3) points out, “people find it hard to give the same level of reality to the [environmental] future as they do to the present (...) one shouldn’t underestimate the sheer force of habit”. It would seem that a change in intersubjective reality is needed for young people to take themselves up as active environmentalists. It is here that hands-on experiential learning by young people in ENGOs might be significant for the future of the environment through overcoming, in a peer group context the residual “resigned, fatalistic outlooks” identified by Savage (2012, p. 234).

2. Environmental Learning: Formal and Non-Formal

2.1 School Learning

Factual information about the environment learned at school may have little effect on children’s pro-environmental behaviour (Wray-Lake, Flanagan, & Osgood, 2010). Kollmuss and Agyeman (2002) argue that the belief that it does follows the naïve assumption of a linear progression from gaining information about the environment to developing pro-environmental awareness and subsequent pro-environmental behaviour. This cannot be assumed. As Galang (2010, p. 177) points out, it is not “axiomatic that once awareness sets in, people do the right thing by the environment”. Something deeper than individual awareness of facts has to develop before group behaviour will change.

Indonesia has introduced environmental components to both the primary and secondary school curriculum. However, although these units of learning are supposed to cover not just environmental knowledge, but how human behaviour affects sustainability (Parus, 2005), in practice they do not. Most teaching in school about the environment remains confined to traditional science subjects (Kollmuss & Agyeman, 2002). Moreover, there is emphasis in the primary school syllabus on Indonesia’s rich natural resources and their potential exploitation (Parker, 2011). Furthermore, traditional teacher-focused pedagogy in Indonesian schools has long used rote learning tested by examination using multiple choice questions and short answers, which does not encourage critical enquiry or reflection. Despite reforms, much teaching still follows this model (Parker & Nilan, 2013, p. 85). So with little exposure to anything but rote learning of environmental facts in school, Indonesian pupils’ community-engrained habits and habitual ways of regarding the natural world seem unlikely to change. One cannot ignore the impact of the media, of “how television teaches us to be green” (Inthorn & Reder, 2011, p. 37), for example. But here, once again, it cannot be assumed that nature programs, nationalist boasting, sensational headlines or gloomy predictions will be followed by any kind of behavioural change.

2.2 Extra-Curricular Learning

In Indonesia, extra-curricular engagement of young people with the natural environment often happens through Scouts or nature clubs. *Mahasiswa Pencinta Alam* (Student Nature Lovers) are possibly “the most well-known form of environmentalism in Indonesia” (Crosby, 2013). The clubs are present on most university campuses and in many secondary schools, offering bushwalking, mountaineering, rafting and climbing trips, for example. However, it has been argued that such activities centre on conquering wilderness rather than appreciating and comprehending it. Cochrane reports that in a popular Indonesian national park at peak times, “crowds of young people dressed in militaristic clothing” hike noisily along the trails. They are “evidently seeking neither solitude nor tranquility”. The researcher concludes that enjoyment by Indonesians of natural beauty spots is rooted in an anthropocentric relationship with nature rather than a biocentric one (Cochrane, 2006, pp. 989-991). Given the colonial history of the nation this should not be surprising (see Tsao, 2013).

In a western context, Riemer, Lynes, and Hickman (2014) studied the role of non-formal education in how young people become activists. They point out that although formal environmental education may directly engage environmental awareness and practice among young people, non-formal learning programs are also important,

While some of these youth were engaged by educators in formal settings, there are also many who became engaged because they participated in youth-focused environmental programmes outside the formal sector. Many such programmes exist and seem to make a difference (Riemer et al., 2014, p. 554).

If direct experience of the environment carries most capacity to change thinking and precipitate action (Kusmawan, 2007), then youth-oriented environmental NGOs are important. Nomura (2009, p. 622) maintains that “NGOs are very active providers of environmental education in Indonesia”. Through non-formal education they encourage young people to learn about the environment by doing things in groups to save and preserve the natural world. Accordingly, this article compares two non-formal environmental learning contexts for children and young people. The two NGOs featured here both attempt the “conscientization” (Freire, 1997, p. 27) of the young people who learn by doing in their offered activities. Conscientization in this context means attaining a deep awareness of the value of the natural world and their own capacity to protect and nurture it. Through examining what the two NGOs offer young people, we can see how they differ in their implicit pedagogical drive to produce particular kinds of environmentally active citizens in the next generation.

3. Method

As stated above, the concern here is with what the two NGO websites and linked pages can tell us about what kind of non-formal learning experiences are promised young people, and how the two NGOs differ in their implicit pedagogical drive to produce particular kinds of environmentally active citizens in the next generation of Indonesians. The two NGOs were selected because they both have considerable web presence. Both are keen to attract international sponsorship, so the websites are attractive, well-developed and list impressive numbers of hits. Careful reading by the author identified quite different representations of pedagogic discourse in what young people were invited to do if they became actively involved in the organisation. A comparative analysis was undertaken to unpack these representations and the ideal future environmental citizen which might be produced.

Treating the the two websites as texts, the analysis proceeded first by content analysis. That is, simple counting of the most frequent words/phrases and images (Babbie, 2010). This allowed the categorisation of common and dissimilar elements in the two NGO sites. The second stage was discourse analysis (see Gee, 2014), which made use of the earlier content analysis to derive categories of a deeper, constitutive nature. Here the term discourse refers to a set of ideas, concepts and beliefs that represent a body of influential knowledge in the social world. For example, the discourse of pedagogy includes ideas about learning and teaching. Within the broad discursive field of education, learning and having fun might be seen as antithetical practices for youth in the formal context of schooling, but not in the informal educational context where alternative pedagogical discourses often prevail. Once the comparative analysis was completed, it was summarised in a table, which is included below.

4. Results

4.1 Sahabat Alam

Sahabat Alam (Friends of Nature) offers non-formal environmental education for children and young people through activities offered on a colourful bilingual website. *Sahabat Alam* was founded in 2008 by 12 year old schoolgirl Adeline Tiffanie Suwana after extensive flooding in Jakarta. With her friends she re-planted coastal

mangroves. Subsequent conservation programs earned *Sahabat Alam* international recognition and financial support. The website (www.sahabat-alam.com) states (in English): “nature and all its elements are precious treasures for the young generations as they are the world's successors in the future”. The aim is to “bring young generations back to nature” by taking “environmental actions”. In her 2011 speech to the Malaysia-China Chamber of Commerce on receiving the Golden Green Award, young director Adeline said, “with our small hands, we can make a difference”.

Apart from the listed program of activities, the bilingual website itself expresses a specific discourse of learning about the environment, and thereby implies an ideal learner as subject. Designed to appeal to children and early teens, it features bright colours and cartoon-like graphics of ribbons, flowers, stems, leaves, butterflies and stars. In photos everyone is smiling and having fun. Visual imagery depicts two key figures with whom children and young teens might identify. The first is young Adeline herself, still only 18 years old at the time of writing. She dominates the photo gallery on the website; demonstrating replanting activities to children and early teens, leading school groups through the forest, meeting members wearing identical teeshirts, and shaking hands with visiting dignitaries. A caption states that *Sahabat Alam* members are/will be “international environment ambassadors”.

The second figure is an anthropomorphic rabbit of indeterminate gender who tells a simple, heroic story in a sliding sequence of six naïvely-styled coloured pencil drawings. It is titled SAVE THE PLANET. In the first slide, an orange-tinted earth is being cooked in a frypan. The rabbit says in a speech bubble, “WOW ... The earth is on fire!!!”. In the next slide the rabbit is wearing a space suit and asking “Do we have to move to another planet?”. In the third slide the rabbit firmly wags a finger, “NO! With our small hands, WE can SAVE the Earth”. In the fourth slide the rabbit is planting a tree and depositing trash in a bin, “STOP littering” and “PLANT some trees”. In the fifth slide the rabbit is riding a bicycle – “USE Eco-friendly vehicles”; “SAVE the energy”; and “CONSERVE the water”. In the final slide the rabbit is happy. There is a bright green and blue earth in the background: “Let’s SAVE our Earth A.S.A.P (As Soon As Possible)”.

4.1.1 Discussion

Dimitriadis (2009) makes the argument that the multi-media texts of popular culture have a pedagogical effect on the young people who engage with them. Similarly, the text of the *Sahabat Alam* website provides a pedagogical discourse for young Indonesians interested in the environment. A common optimistic phrase in Indonesia is “agent of change” – always written in English (see for example Samartan, 2009; Ifham & Helmi, 2002). Both director Adeline and the rabbit match this ideal of agent of change; they are saving the environment through their conscious actions. Therefore, young Indonesians are implicitly invited to understand themselves as potential agents of change through constituting themselves as *sahabat alam* – friends of nature, manifested through participating in the listed activities. The ideal learner-as-doer then, is already not only constituted as a nascent environmentalist, but is able to read English, and would like to become a cosmopolitan citizen - an international environmental ambassador. So to save the natural environment and become an important agent of change in the world like Adeline, they can pay to join the non-formal educational activities and have fun at the same time.

The promise of learning by doing is everywhere. Advertised activities include: planting trees, coral reef and mangrove re-planting, fish breeding, cleaning marine debris from beaches, protecting Hawksbill Turtle hatchlings and butterfly conservation. The website also offers another form of learning: “the existence of a program that allows children to go back to nature is very important”. So expeditions are organised to national parks so that “young generations help protect the natural environment; understand the value of Indonesian flora and fauna’s richness; observe and study the undisturbed natural environment; protect species from human activity; enjoy and appreciate the natural environment; promote eco-tourism” (www.sahabat-alam.com). Listed workshops in 2013 included Using Natural Dyes and Plants for Medicine. Seminars included Save the Planet, Eco-Tourism and Water for Life. All of the activities, workshops and seminars cost money. In a developing country like Indonesia with high levels of poverty, it would only be children and young teens from higher income families who could afford to participate. Even school groups would have to come from elite private or academic selective schools. For example, the listed cost of a *Sahabat Alam* national park excursion per pupil in 2013 was Rp. 250,000.00 – about US\$23. Given that the average household income per annum in Indonesia is estimated at only around 12 million rupiah – about US\$1,195 (Sambok, 2012), such excursions would be beyond the financial reach of all but the children of higher income earners. Moreover, reading the *Sahabat Alam* website would depend on access to the internet and English language competence. These are both middle class capacities of children and young teens in Indonesia. It is notable that participation in the listed activities requires permission and payment from parents even though it is aimed at a youth demographic. It seems the *Sahabat*

Alam website sets out to attract youth who will then put pressure on their parents to purchase for them the environmental learning activities on offer.

One section of the *Sahabat Alam* website describes a project that supplies free sustainable power to villages through installation of a waterwheel device that uses waterfall energy. The given formula is: Power = Head x Flow x Gravity,

The potential electricity we will supply is based on surveys and research on the location combined with our school knowledge of Science, Electricity, Mathematics and Physics. This knowledge will definitely help us in providing a new source of energy that is environment-friendly without damaging mother nature (in English).

Readers are thus invited to assist in this “green” science project helps the poor. The use of the third person plural – we, our – encodes the idea that both *Sahabat Alam* organisers and potential project participants are all well-educated children together. With their shared knowledge of science and technology they can provide sustainable power and thereby function as friends for the poor village children – who are not like them. They will “help them fulfil their dreams”. With electric light the poor children will be able to study at night, and so can better themselves. Green science and philanthropy form an attractive learning package in this project brief. Notably, the cost of participation is quite high given that it involves chaperoned travel and accommodation.

The *Sahabat Alam* website carries little on environmental destruction and degradation, climate change or lack of regulation. Rather, the emphasis is on the beauties of nature, environmental conservation and habitat improvement, encoding the romantic gaze of Indonesian conservationism. This is the focus of the rather limited environmental conscientization attempted by *Sahabat Alam*. Difficult issues are sidelined. Both the imagery on the website and the voice of the accompanying text is upbeat and inviting; promising fun, with simple messages and heroic stories that convey optimism. As we shall see, the second ENGO - *Tanam Untuk Kehidupan* or TUK – also faces the challenge of avoiding pessimistic environmental discourse and promising fun, but does so in a different way, by emphasising creativity.

4.2 TUK – *Tanam Untuk Kehidupan*

While *Sahabat Alam* claims to be a nation-wide organisation that speaks to children and young teens, *Tanam Untuk Kehidupan* – literally Planting for Life – works in a local community. The symbolism of *Tanam untuk Kehidupan* dedicates a project of environmental conscientization to be nurtured (grown) through collective artistry and activism. TUK aficionados are linked by mutual arts practice and local fund-raising endeavours. TUK was formed in 2005 when an artist and his Australian partner returned to the Javanese city of Salatiga. An activist arts collective grew up around them. TUK is now a non-profit organisation (lembaga) linked to a large network of art and environmental communities and organizations, local and international. TUK originally campaigned to protect water sources in Salatiga neighbourhoods where ancient springs were facing depletion and contamination. They began by holding a water festival (Festival Mata Air) in July 2006 over three days of art, music and education. It was co-sponsored by Indonesian cigarette company Djarum and local government. TUK today continues to build environmental awareness and action through creative practice, festivals and art events. The workshops and annual festivals are advertised by local radio, posters and flyers, so knowledge about them does not depend on young people’s internet access and grasp of English.

Like *Sahabat Alam*, most of the official website is in English. However, there is an alternative blogsite, much less sophisticated, in Indonesian and a Facebook page in Indonesian. On the home page of the official TUK website the following statements appear:

TUK’s Vision: To help protect a sustainable environment for future generations.

TUK’s Mission: To plant sustainable environmental awareness and education in the community through art and cultural practice.

Further upbeat explanation is offered:

TUK (Planting for Life) believes that to plant an environmental ideology is as important as planting trees itself. We use art and creative practice as a medium to provide basic information and knowledge about our local and global environment and what we can all do to make changes on a daily basis. Our campaign aims to make people start THINKING! This is where the process of change begins.

4.2.1 Environmental Conscientization

This is a statement about experiential pedagogy towards environmental conscientization. It implies the ideal of ‘agent of change’ and directly refers to both “ideology” and “our campaign”, implying grassroots political

activism. Once again there is plenty of learning by doing on offer. According to press coverage – in Indonesian (Vistika, 2013), TUK has three divisions. First, the Community Services Division engages social activities such as planting trees and local capacity-building. Second, the Campaign and Publication Division organises the annual arts and culture festival. Third, the Division of Merchandising organises the making of recycled products. Plastic waste and paper is recycled by volunteers into bags, wallets, key chains, jewellery, and magnets. Shoes and slippers are made from water hyacinth harvested sustainably from a local swamp. Products are sold under the brand name Green, Creative, Smart. In other words TUK offers informal education for young people to be community workers, event organisers or craft workers, as well as facilitating their creative expression, all relevant to environmental sustainability. However, unlike Sahabat Alam, membership and participation are not limited by economic status. Readers are assured that if interested in joining, “you just have to be aware of and concerned about the environment” (Vistika, 2013). There are no fees as such.

TUK members commit to regularly attend meetings once every two weeks. However, “if you really want to be a member of the community but cannot follow the meeting schedule you can register as a volunteer”, according to Eric, current chair of TUK (Vistika, 2013). From the photos and online reports, it seems that numerous young volunteers do register, especially to assist with the annual festival. So although the local community of Salatiga is the intended target of awareness-raising, the TUK collective includes young Indonesians from further afield who care about the environment and express themselves in the arts. It is notable that there are more young men than women apparently involved in TUK, whereas Sahabat Alam would seem to have far more young women involved. A subtly gendered pedagogic discourse can be observed in each.

In terms of who young people might identify with, TUK website photos in 2013 depicted young men playing music, creating artworks and having meetings. While smiling children and young women did feature in shots from the festivals, they do not seem to be much involved in the organisation itself. Many of the young men with their scruffy clothes, tattoos and long hair seem to be both indie artists/musicians and environmental activists. Their dominance on the TUK website, on the TUK blogsite and on the TUK Facebook page appears to confirm the claim of “macho environmentalism that appeared in the 1990s in Central Java and elsewhere in Indonesia” (Crosby, 2013, p. 68). Young male environmental activists with creative talents are specific agents of change who might well imagine the space of Indonesian environmentalism in terms of political reform. This would in turn shape and configure the environmental conscientization they experience through learning as creative doing. In that sense, TUK is engaging an informal pedagogy on two or more levels. First, the TUK members and volunteers learn by collectively organising and making art and music with environmental themes. Second, the wider public of Salatiga learns about local sustainability through enjoyable participation in children’s activities, mural painting, exhibitions, forums, reforestation, Clean Up events and environmental film screenings as well as the annual festival. Third, artists and green activists in the region can gather where the action is. For example, *Kafé Olé* in Salatiga regularly offers live music and art shows. It is an informal meeting place for TUK members and others who might want to get involved. The café is publicised on the TUK Facebook page (Indonesian language).

Finally, international artists and activists come in for residencies at TUK to learn about environmentalism in Indonesia. For example, the 2012 TUK program theme was “CATCH WATER - PLANT TREES”. Apart from the annual arts festival, there were workshops, international artist residencies, tree-planting and a recycled trash craft program. TUK has attracted some significant international sponsorship. It seems clear that the TUK collective encourages a kind of local tribalism among creative conservationists from an older demographic of young people – the majority male and artistic, who are not constrained from participation by household income. They learn by doing as a collaborative endeavour.

5. Discussion of Findings

The simple and straightforward message of environmentalism could be stated as: “The natural world is being destroyed and it is a moral imperative to preserve and reconstitute as much of it as possible as soon as possible” (Lakoff, 2010, p. 80). Yet as Giddens (2011, p. 1) points out, environmentalism is not just about “nightmares” and “catastrophes”, but “dreams”. Both *Sahabat Alam* and *Tanam Untuk Kehidupan* avoid the catastrophic and sideline the factual in favour of dreams as a pedagogic medium. Optimistic visions of saving the environment are offered to young Indonesians within a broadly reformist political frame. Yet the two organisations provide discourses of enjoyable praxis that configure quite differently the pedagogic space of experiential learning for children and young people. Table 1 formally compares the two groups.

Table 1. Comparing key features

Features	<i>Sahabat Alam</i>	<i>Tanam Untuk Kehidupan</i>
Based in	Jakarta, the national capital and the most climate-change sensitive mega-city in Southeast Asia (Savage, 2012, p. 230).	Salatiga, a small city in a mountainous region of Central Java.
Governance structure	Top down hierarchy.	Collective with rotated chair.
Leadership	Sole young female founder and director, leads directly, high profile.	Married international couple as founders, leadership now rotates.
Members	Young people, both sexes	Young creative artists, musicians, activists, majority male
Pedagogic mode of engagement	Experiential learning through structured activities, exposure to national parks	Experiential learning informed by a creative DIY ethos, intensive learning in the local community
Educational target	Indonesian children, young teens, both sexes	Local community members and regional citizens, all ages, both sexes
Cost of involvement	Relatively high	None
Focus on nature	Trees, species protection, coastal regeneration, national parks	Trees, water, human-nature relationship
Visual imagery on website	Simple, child-like, cartoon genre, bright colours, stylised plants, animals	Expressionist art, sculpture, earthy colours, natural materials, political symbols, caricature and satire
Photo gallery	Young female leader with: groups of school children, international dignitaries; engaged in conservation activities, expeditions to national parks	Young male groups (musical, artistic, activist), community participation, art works, musical performances, water sources
Language	Same website offers English and Indonesian	Different websites for Indonesian and English
Litter removal actions	Collect and dispose	Collect and re-use
International links	Awards, competitions, conferences, regional business and industry sponsorship	Aid donors, artistic and philanthropic organisations
Number of Facebook members in December 2013	214	913
YouTube postings	Yes	Yes
Regular television presence	Yes	No

Based on the table above, we can see many points of dissimilarity between the two organisations in constituting the discursive space of non-formal pedagogy. On its website, *Sahabat Alam* uses top-down, vertical discourses to mobilize young Indonesians as consumers of ideas who learn about conservation of the natural world through structured activities and thus become environmental ambassadors for the future. Fun and socialising are emphasised. The strongly positive and cheerful tone of the website suggests that the organisation is aware young people may be turned off by environmental messages that make them feel worried and guilty. Conversely, while there are plenty of ideas to be consumed on the TUK website, environmental discourses are channelled laterally; mobilizing young artists and activists to create art, craft and events that will educate the local community and visitors to festivals and residencies. Fun and socialising are emphasised here also, especially at festivals. The strong emphasis on creativity, self-expression and enjoyment on the two TUK websites and the TUK Facebook page similarly indicate awareness that young people may avoid environmental learning events that make them feel concerned yet powerless.

Sahabat Alam and TUK also differ in what they teach about the stewardship of nature. In the discourse of *Sahabat Alam*, the natural world is “out there”, beyond the cities and the everyday experience of people’s lives. It is to be learned about through structured activities, then assisted for preservation. In contrast, the discourse of TUK advances the idea that the natural world is right here and now in the local community and its constituencies. So environmental learning does not take place in structured activities and programs, but in local artistic creation and subsequent appreciative engagement. The natural world and conservation concerns are mediated through

creative representation so that ordinary local people will take up responsibility for preserving their immediate environment.

A further point of difference is the celebrity factor. The cult of celebrity is big business in Indonesia (Coutas, 2006). It can be argued that celebrities are the new “charismatic megafauna” of the environmental movement (Boyokoff, Goodman, & Littler, 2010, p. 1). The authority of the celebrity creates the permissible, the normal and the desirable in environmentalist discourse. Celebrities are thus an important ‘branding tool’ for environmental causes because of the increasing sophistication of branding and social marketing elsewhere in the social fabric (Boyokoff, Goodman, & Littler, 2010, p. 6). In pedagogic terms, the celebrity environmentalist functions as a kind of teacher. Adeline identifiably occupies this position in *Sahabat Alam*. Conversely, there is no single celebrity leader as teacher in TUK. Rather the artists and activists learn from each other and the community learns from them. This explains why children and young teens who are still at school might be drawn to *Sahabat Alam*. The overall pedagogic discourse resembles the teacher-driven transactions of learning with which they are familiar in the classroom. TUK on the other hand constitutes a lateral and collaborative pedagogic discourse of environmental learning that matches grassroots artistic praxis. Maffesoli (1996, pp. 1-2) identifies this social movement praxis as a space where transformative potential, “is characterised by *puissance* – the ‘energy and vital force of the people’ rather than *pouvoir* – top-down institutionalised power”. A very different constitution of learning prevails in the two organisations. They differ significantly in terms of pedagogic style.

First, the educative orientation of *Sahabat Alam* is small to big in that a limited number of members travel out to facilitate the experiential learning of children and young teens across the nation (in theory), while TUK proffers a big to small orientation – national and international visitors are brought into the local community for experiential learning. Second, while *Sahabat Alam* offers a more or less traditional transactional model of learning, shaped by the commodifying influence of financial cost, TUK offers a free, carnivalesque learning experience. For Bakhtin (1941, p. 199), carnival is “the feast of time, the feast of becoming, change and renewal”. It is associated with the sense of collectivity among those who gather in “the town square”, since all are considered equal during carnival. Free contact takes place among people who are usually divided by “caste, property, profession, and age” (Bakhtin, 1941, p. 10). Carnival constitutes a challenge to the dominant order, enabling access to “the below, the underworld, and the march of the uncrowned gods” (Hall, 1997, p. 291). Visual imagery of large grotesque figures and confronting installations attest to the carnival nature of the annual TUK water festival. Third, by further comparison, the activities offered by *Sahabat Alam* promise a clean, smooth and predictable learning experience, while TUK activities provide messy and unpredictable experiences of a creative and therefore more risky nature. Finally, the nature of the implicit subject produced by the pedagogic style of the two ENGOs demonstrates a contrast. The drive of *Sahabat Alam* is to give experiential knowledge to produce young people who will help preserve the natural environment and represent it as ambassadors. The drive of TUK is to encourage people to live in harmony with nature at close quarters. Here humans are linked to their environment through deep knowledge gained through the carnivalesque celebration of the natural world and creative interrogation of the human-nature relationship.

6. Conclusion

Conscientization - in Freire’s terms – is an active process that comes from intensive learning as doing. In the contemporary socio-cultural context of Indonesia, the two ENGOs examined here offer contrasting pathways to transform young people into stimulating agents of change. Yet non-formal environmental learning cannot afford to be dull, so both ENGOs visually emphasise young people having fun together on their websites and Facebook pages. They also offer different discursive resources.

Sahabat Alam invites the participation of children and young teens who constitute themselves as rather conservative learners about the natural world. It carries on the historical tradition of student nature lover clubs. TUK however, invites the participation of young people, young men in particular, who want to take a challenging, radical approach to raising environmental awareness through creativity, art and celebration. TUK is therefore a more active politically reformist organisation. As for pedagogic discourse, the local tribalism of TUK provides collective learning about the environment by doing creative things together and inspiring others to re-imagine their relationship with nature. *Sahabat Alam* on the other hand, offers a model of non-formal learning that is much more like school, with emphasis on the leader/teacher and a standardised set of activities to bring about specific learning outcomes. These two discourses of pedagogy are even further distanced from each in the matter of financial costs. *Sahabat Alam* charges relatively high fees for learning activities, while TUK is free. So TUK potentially reaches a much broader demographic of young people, including those from poor families, yet is constrained by local boundaries.

In summary, comparison of these two youth-oriented ENGOs allows us to see not only how they differ pedagogically, but differ in the kind of human-nature relationship each hopes to produce in the coming generation of Indonesians. The environmentalists of the future will make active decisions about conservation and sustainability behaviour. In the implied discourse of *Sahabat Alam* they will save the natural environment of the nation through conservation efforts and the application of science and technology. In the implied discourse of TUK they will live closely with the local natural environment and express this relationship creatively. The first seems highly anthropocentric and the latter less so. Yet beyond their differences, at a deeper level both the lateral carnivalesque pedagogy of TUK and the top-down transactional pedagogy of *Sahabat Alam* favour the romantic gaze of environmentalism, foregrounding heroic dreams and fun rather than facts and looming catastrophic scenarios. The implication for the Indonesian environmental movement is that informal environmental education at the micro level matters as much as international agreements at the macro level. Informal environmental education sensitises ordinary young people to key environmental problems and provides opportunities for pro-active engagement that points the way to transformative ethical action in the future.

Acknowledgments

This research was carried out with the support of the Australian Research Council. Grant Number: ARCDP DP130100051.

References

- Anderson, B. (1991). *Imagined communities: Reflections on the origin and spread of nationalism*. London & New York: Verso.
- Babbie, E. R. (2010). *The practice of social research* (12th ed.). Wadsworth: Cengage Learning.
- Bakhtin, M. (1941). *Rabelais and his world*. Bloomington: Indiana University Press.
- Bohensky, E. L., Smajgl, A., & Brewer, T. (2012). Patterns in household-level engagement with climate change in Indonesia. *Nature Climate Change*, 3, 348-351. <http://dx.doi.org/10.1038/NCLIMATE1762>
- Boyokoff, M., Goodman, M., & Littler, J. (2010). "Charismatic megafauna": *The growing power of celebrities and pop culture in climate change campaigns*. Paper # 28, Environment, Politics and Development Working Paper Series. London: Department of Geography, King's College, 1-12. <http://dx.doi.org/10.1177/1075547008329201>
- BPS. (2012). *Statistik Indonesia 2012*. Jakarta: Badan Pusat Statistik (Online). Retrieved June 9, 2013, from <http://www.bps.go.id>
- Carlson, K., Curran, L., Ratnasari, D., Pittman, A., Soares-Filhof, B., Asner, G., & Rodrigues, H. (2012). Committed carbon emissions, deforestation, and community land conversion from oil palm plantation expansion in West Kalimantan, Indonesia. *PNAS – Proceedings of the National Academy of Sciences*, 109(19), 7559-7564. <http://dx.doi.org/10.1073/pnas.1200452109>
- Cochrane, J. (2006). Indonesian national parks: Understanding leisure users. *Annals of Tourism Research*, 33(4), 979-997. <http://dx.doi.org/10.1016/j.annals.2006.03.018>
- Coutas, P. (2006). Fame, fortune, fantasi: Indonesian Idol and the new celebrity. *Asian Journal of Communication*, 16(4), 371-392. <http://dx.doi.org/10.1080/01292980601012410>
- Crosby, A. (2013). Remixing environmentalism in Blora, Central Java 2005–10. *International Journal of Cultural Studies*, 16(3), 257-269. <http://dx.doi.org/10.1177/1367877912474535>
- Escobar, A. (1999). After nature: Steps to an anti-essentialist political ecology. *Current Anthropology*, 40(1), 1-30. <http://dx.doi.org/10.1086/515799>
- di Gregorio, M. (2012). Networking in environmental movement organisation coalitions: interest, values or discourse? *Environmental Politics*, 21(1), 1-25. <http://dx.doi.org/10.1080/09644016.2011.643366>
- Dimitriadis, G. (2009). *Performing identity, performing culture: Hip hop as text, pedagogy and lived practice* (Revised ed.). New York: Peter Lang.
- Douglass, M., Le, T.Q., Lowry, C. K., Nguyen, H. T., Pham, A. N., & Thai, N. D. (2008). The liveability of mega-urban regions in Southeast Asia – Bangkok, Ho Chi Minh City, Jakarta and Manila compared. In G. W. Jones, & M. Douglass (Eds.), *Mega urban regions in Pacific Asia* (pp. 45-56). Singapore: NUS Press.
- Fadaee, S. (2011). Environmental movements in Iran: application of the new social movement theory in the non-European context. *Social Change*, 41(1), 79-96. <http://dx.doi.org/10.1177/004908571104100104>

- Freire, P. (1997). *Pedagogy of the oppressed*. New York: Continuum
- Galang, A. P. (2010). Environmental education for sustainability in higher education institutions in the Philippines. *International Journal of Sustainability in Higher Education*, 11(2), 173-183. <http://dx.doi.org/10.1108/14676370210434741>
- Gee, J. P. (2014). *An introduction to discourse analysis: Theory and method* (4th ed.). New York: Routledge.
- Giddens, A. (2011). *The politics of climate change* (2nd ed.). London: Polity Press.
- Hadiwinata, B. (2003). *The politics of NGOs in Indonesia: developing democracy and managing a movement*. London: Routledge Curzon.
- Hall, S. (1997). *Representations*. London: Sage.
- Ifham, A., & Helmi, A. (2002). Hubungan kecerdasan emosi dengan kewirausahaan pada mahasiswa. *Jurnal psikologi*. Yogyakarta: Universitas Gadjah Mada. Retrieved January 18, 2014, from http://www.avin.staff.ugm.ac.id/data/jurnal/kecerdasanemosi_avin.pdf
- Inthorn, S., & Reder, M. (2011). Discourses of environmental citizenship: How television teaches us to be green. *International Journal of Media and Cultural Politics*, 7(1), 37-54. http://dx.doi.org/10.1386/mcp.7.1.37_1
- Kementerian Lingkungan Hidup. (2004). *Kebijakan pendidikan lingkungan hidup*. Jakarta: Republik Indonesia Press. Retrieved April 3, 2013, from <http://www.blhmuaraenim.com/wp-content/uploads/2012/11/02-Sambutan.pdf>
- Kusmawan, U. (2007). *An analysis of student environmental attitudes and their impact on promoting sustainable environmental citizenship: a multi-site study in Indonesian secondary schools* (PhD thesis). University of Newcastle, Australia.
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260. <http://dx.doi.org/10.1080/13504620220145401>
- Lakoff, G. (2010). Why it matters how we frame the environment. *Environmental Communication: A Journal of Nature and Culture*, 4(1), 70-81. <http://dx.doi.org/10.1080/17524030903529749>
- Macnaghten, P., & Urry, J. (1998). *Contested natures*. London: Sage.
- Maffesoli, M. (1996). *The time of the tribes*. London: Sage.
- Measey, M. (2010). Indonesia: a vulnerable country in the face of climate change. *Global Majority E-Journal*, 1(1), 31-45. Retrieved April 4, 2013, from https://www.american.edu/cas/economics/ejournal/upload/Global_Majority_e_Journal_1-1_Measey.pdf
- Nomura, K. (2009). A perspective on education for sustainable development: historical development of environmental education in Indonesia. *International Journal of Educational Development*, 29, 621-627. <http://dx.doi.org/10.1016/j.ijedudev.2008.12.002>
- Parker, L. (2011). *Teaching environmental citizenship in Indonesia*. Paper presented at Indonesia Council Open Conference, University of Western Australia, Perth 26-28, September 2011.
- Parker, L., & Nilan, P. (2013). *Adolescents in contemporary Indonesia*. London & New York: Routledge.
- Parus. (2005). Department of National Education: partnership for environmental education in primary and secondary education. In K. Nomura, & L. Hendarti (Eds.), *Environmental education and NGOs in Indonesia* (pp. 65-76). Jakarta: Yayasan Obor Indonesia.
- Riemer, M., Lynes, J., & Hickman, G. (2014). A model for developing and assessing youth-based environmental engagement programmes. *Environmental Education Research*, 20(4), 552-574. <http://dx.doi.org/10.1080/13504622.2013.812721>
- Samartan, N. (2009). Strategi pengembangan media: Antara bisnis dan ideologi. *Jurnal Ekonomi Bisnis*, 3(14), 190-199. Retrieved April 4, 2013, from <http://ejournal.gunadarma.ac.id/index.php/ekbis/article/view/366>
- Savage, V. R. (2012). Climate change and Southeast Asian urbanization: mitigation and adaptation considerations. In Y. K. Sheng, & M. Thuzar (Eds.), *Urbanization in Southeast Asia: Issues and impacts* (pp. 229-261). Singapore: Institute of Southeast Asian Studies. <http://dx.doi.org/10.1080/00074918.2014.896312>
- Setiawan, M., Stoetter, J., Sartohadi, & Christanto, N. (2009). The integrated soil erosion risk management model of Central Java, Indonesia. *Geophysical Research Abstracts*, 11, 6802. Retrieved December 31, 2012,

from <http://adsabs.harvard.edu/abs/2009EGUGA..11.6802S>

- Stalley, P., & Yang, D. (2006). An emerging environmental movement in China? *The China Quarterly*. <http://dx.doi.org/10.1017/S030574100600018X>
- Sudamardi, S., Suzuki, S., Kawada, T., Netti, H., Soemantri, S., & Tugawati, A.T. (2001). A survey of perception, knowledge, awareness and attitude in regard to environmental problems in a sample of two different social groups in Jakarta, Indonesia. *Environment, Development and Sustainability*, 3(2), 169-183. <http://dx.doi.org/10.1023/A:1011633729185>
- Tsao, T. (2013). Environmentalism and civilisational development in the colonial British histories of the Indian archipelago (1783-1820). *Journal of the History of Ideas*, 74(3), 449-471. <http://dx.doi.org/10.1353/jhi.2013.0027>
- Vistika, F. B. (2013). Komunitas tanam untuk kehidupan [TUK: nature through the arts]. *Kontan Online 4 June 2013*. Retrieved January 19, 2014, from <http://lifestyle.kontan.co.id/news/tuk-alam-lestari-lewat-seni>
- World Bank. (2009). *Indonesia rising: mainstreaming climate change for sustainability*. Jakarta: World Bank. Online. Retrieved December 30, 2012, from <http://go.worldbank.org/JIGX6UTVJ0>
- World Bank. (2010). *Indonesia: climate change*. Washington: World Bank. Online. Retrieved December 30, 2012, from <http://go.worldbank.org/HQQFW5MV70>
- World Bank. (2011). *World Bank and environment in Indonesia*. Online. Retrieved December 30, 2012, from <http://go.worldbank.org/QQE3DLKB20>
- World Bank. (2013). *Indonesia overview*. Retrieved August 26, 2013, from <http://www.worldbank.org/en/country/indonesia/overview>
- Wray-Lake, L., Flanagan, C., & Osgood, W. (2010). Examining trends in adolescent environmental attitudes, beliefs and behaviors across three decades. *Environmental Behavior*, 42(1), 61-85. <http://dx.doi.org/10.1177/0013916509335163>
- Xie, L. (2010). China's environmental activism in the age of globalization. *Asian Politics & Policy*, 3(2), 207-224. <http://dx.doi.org/10.1111/j.1943-0787.2011.01256.x>

Note

Note 1. In Indonesia tobacco companies are major sponsors of sport and and the arts. In many other countries this is not permitted. There is admittedly some irony in a cigarette company sponsoring a festival to raise environmental awareness.

Copyright

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Influence of Job Satisfaction, Job Motivation & Perceived Organizational Support towards Organizational Citizenship Behavior (OCB): A Perspective of American-Based Organization in Kulim, Malaysia

Abdullah Osman¹, Yusuf Haji Othman², S M Sohel Rana¹, Mohammad Solaiman¹ & Bharat Lal¹

¹ School of Business Innovation and Technopreneurship, University Malaysia Perlis, Malaysia

² Kolej University Insaniah, Alor Setar, Kedah, Malaysia

Correspondence: S M Sohel Rana, School of Business Innovation and Technopreneurship, University Malaysia Perlis, Malaysia. E-mail: smsohelrana@ymail.com

Received: April 14, 2015 Accepted: June 9, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p174

URL: <http://dx.doi.org/10.5539/ass.v11n21p174>

Abstract

In today's competitive world, every individual is striving to be ahead of others and create a better future for themselves. This research is designed to focus on manufacturing based industry in Kulim, Malaysia. The aim of present study is to investigate how job satisfaction, job motivation and perceived organizational support affect the OCB in American-Based Organization in Kulim. Data were collected from 300 employees of three different organizations. For collecting the data, survey method was used with a structured questionnaire. It is found in the study that job satisfaction, job motivation and perceived organizational support have highly positive correlation with organizational citizenship behavior. However, Perceived Organizational Support has the highest correlation with OCB. It happens because when the employees receive support from the organization, they will be elevated to perform better for the organization. Support in terms of rewards and incentives can further increase the motivation level of employees. So foreign companies should emphasize on these issues to increase OCB among the employees so that they can be devoted for the organizations.

Keywords: organizational citizenship behavior (OCB), job satisfaction, job motivation and perceived organizational support (POS)

1. Introduction

In today's competitive world, every individual is striving to be ahead of the other and create a better future for themselves. Based on that, individuals choose a career path that is faster and creates better opportunity for them to improve their lives. Besides that, all organizations are mostly looking for methods to become more efficient which includes the help of the employees. Even though in current era where people are dependent on technology, innovation and heavy machinery, the employee aspects play a critical role in making sure the organization is productive and profitable. Hence, the OCB concept introduced by Organ (1988) refers to an extra-role that allows employees to engage and to aid the organization achieve its goals. Based on the countless research done on the aspect of OCB, it has become a key element in organizations around the world as a factor in determining promotions, rewarding employees and also retrenching employees (Castro, Barroso, Armario, & Ruiz, 2010). Organizations intentions are to have employees with high levels of OCB to allow the company to have better experienced employee whereby they can handle issues related to work as well as provide further enhancement of the processes in the organization. Furthermore, organizations will also be able to save a large amount of training cost which will be required to train new employees due to the fact that experience employees leave the organization for better offers from other companies. Organizations nowadays implement methods such as agreements to bound employees to work in an organization for specific period of time which is an inappropriate method to enforce OCB among employees which does not lead to high level of OCB, in fact it creates an opposite impact towards employees (Podsakoff, 2009). Employees who serve for a long period in an organization generates skills which can be highly useful to the organization in the productivity flow to increase profits. Employees become familiar with others as there is a bond created among employees allowing them to solve issue or get things done in a faster manner without dealing with new employees who usually face problems

in identifying the individuals and also problems in getting information from the particular employees. The aspects of OCB here allow the formation of bonds among different employees allowing decision making and also analyzing a particular problem to be faster and more effectively. Organizations with low turnover rates further attract more business as they are aware of the level of commitment by the employees. It gives an upper hand to gain more business as well as allies to further contribute to the organization such as creating employee collaboration from different organizations allowing a bond created in the process chain of a particular organization. Based on that, OCB among employees is ideal for a particular organization to be segregated from its competitors and further put the company in a competitive edge in obtaining business and creating allies to increase the profitability of the organization (Celep & Yilmazturk, 2012).

Apart from the organization point of view towards the OCB, OCB also can benefit employees. Employees who practice or engage in OCB tend to receive better performance ratings from managers (Podsakoff, 2009), thus allowing the particular being appreciated and given rewards from the organization. Furthermore, employees who engage in OCB are simply liked or perceived as more favorable which is also known as the "halo effect". Employees who tend to engage in OCB tend to get the upper edge in promotions, rewards and other benefits. As mentioned early, employees who take the extra mile in persuading a particular innovation or implementation that can benefit the organization by reducing the production cost or increasing the efficiency is given higher benefits or allowances as an appreciation to allow them feel being part of the organization in a more in-depth perspective. Conclusively, successful organizations need employees who will do more than their usual duties and provide performance that is beyond expectations which directly relates to the OCB. Furthermore, the organization will also benefit from the OCB level among employees which will lead to high profitability and innovation. Though studies have been done on OCB in different countries, the lack of importance given to employees and the cultural implications in Malaysia creates lack of Job Satisfaction, Job Motivation and Perceived Organizational Support towards the industry. Previous research mainly focused on specific sectors which include the banking industry, teaching sector and nursing sector (Chien, 2011; Fatimah, Amiraa, & Halim, 2011; Marzoughi & Choopani, 2011; Mohammad, Habib, & Alias, 2011; Ozturk, 2010). This research is designed to focus on manufacturing based industry in Kulim as there is no significant research done in this particular area. The aim of present study is to further investigate how job satisfaction, job motivation and perceived organizational support affect the OCB in American-Based Organization in Kulim. Conclusively, based on the research done in aspects of OCB around the world further proves the significance of the study of OCB to understand the different elements that affect it. Based on that, the problem statement of the research intends to understand the effect of job satisfaction, job motivation and perceived organizational support towards OCB in American-Based Organizations in Kulim. Besides that, the present research intends to understand the implications and the spread of OCB in American-Based Organization in Kulim, Malaysia.

2. Literature Review

It is proven that OCB has been an ideal and important aspects in understanding the employee behavior, turnover rate and a variety of aspects in different fields of study (Amiraa & Halim, 2011; Antony, 2013; Chien, 2011; Fatimah, Marzoughi, & Choopani, 2011; Ghanbari & Eskandari, 2012; Mohammad, Habib, & Alias, 2011; Ozturk, 2010; Petrella, 2013; Schroeder, 2003; Vondey, 2010). However in this research, the main variables selected to be the base of the research includes three main aspects which has been repeated and highlighted by different researches in different areas of the globe which includes Job Satisfaction (Chien, 2011; Fatimah, Amiraa, & Halim, 2011; Marzoughi & Choopani, 2011; Mohammad, Habib, & Alias, 2011; Ozturk, 2010), Job Motivation (Chien, 2011; Fatimah, Amiraa, & Halim, 2011; Marzoughi & Choopani, 2011; Mohammad, Habib, & Alias, 2011; Ozturk, 2010) and Perceived Organization Support (Antony, 2013; Chien, 2011; Ghanbari & Eskandari, 2012; Ozturk, 2010). The variables are able to provide an analytical aspects towards the research being done. By using previous researcher's findings, it allows a better understanding on the framework required to further investigate the scope of OCB.

2.1 Job Satisfaction

Job satisfaction is a general reaction that an individual has towards a particular job. Hopkins (2002), defines job satisfaction as the fulfillment and gratification of particular needs that are related to one's work. Traditionally job satisfaction includes co-workers, pay, job conditions, supervision of work and benefits. Apart from that, another popular definition of job satisfaction is the positive emotional state resulting from the appraisal of the job experience (Locke, 1983). Furthermore, the definition combines cognitive and affective emotional elements which illustrate the individuals' feelings such as positive or negative about the jobs. The positively related relationship between OCB and job satisfaction has been proven in many researcher (Bateman & Organ, 1983; Lee & Allen, 2002; MacKenzie, Podsakoff, & Ahearne, 1998; Moorman, 1993; Morrison, 1994; Organ &

Konovsky, 1989; Smith, 1983; William & Anderson, 1991). Among the main research that had an in-depth research on the relationship of contextual job satisfaction and OCB is by Becker and Billings (1993). In the research, each employee received two OCB scores which include one self-reported rating and one score generated by the supervisor. The research found that there were no significant differences between the two OCB ratings, both scores were combined to produce an overall score that yield a positive relationship between OCB and job satisfaction. There are considerable evidences that OCB and job satisfaction are positively related (Bateman & Organ, 1983; Lee & Allen, 2002; MacKenzie, Podsakoff, & Ahearne, 1998; Moorman, 1993; Morrison, 1994; Organ & Konovsky, 1989; Smith, 1983; William & Anderson, 1991). Bateman and Organ (1983) conducted a longitudinal, cross-lagged study in which they compared "supervisory ratings of OCB" and "employee self-reported levels of job satisfaction." They found a strong and positive relationship between overall OCB and contextual job satisfaction. The most consistent and strongest relationships were between OCB and satisfaction with supervision and promotions. So it can be hypothesized that;

H1: Job satisfaction positively influences the organizational citizenship behavior.

2.2 Job Motivation

Motivation is an important aspects in any field and it is associated with the spirit of being determined to perform a certain task or commitment. Job motivation usually associated with employee motivation has been a key research area on Human Resource Management and organizational psychological over the last century. The ideal definition for job motivation refers to the ability or desire to adopt higher levels of personal effort justified by the achievement of the organizational goals, objectives which leads to the satisfaction of a particular individual need (Gomes, Asseiro, & Ribeiro, 2013). Motivation is the real effort and energy employees put into the daily work to complete the task or work. The recognition between extrinsic and intrinsic motivation has been deduced a long time ago, whereby the intrinsic motivation is present when individuals do something for pleasure or enjoyment, whereas extrinsic motivation occurs when individuals do something because of external forces (Deci & Ryan, 2000). In the context of job motivation, it is related to being highly determined to perform the assigned duties. Organizations nowadays are considering this factor a major element within the company. Organizations use methods such as incentives, events and talk to motivate the employees to perform and feel committed to the organizations. The effect of job motivation is directly proportional to the organization performance (Gomes, Asseiro, & Ribeiro, 2013). Apart from that, job motivation can also be associated to the desire to adopt high levels of personal effort justified by the achievement of organizational goals and objectives leading to the satisfaction of a particular individual need (Gomes, Asseiro, & Ribeiro, 2013). Many researches have been done in different fields where job motivation has become an important element in the study such as the job motivation level among teachers, among nurses and many more significant areas (Bentea & Anghelache, 2011; Griva, Panitsidou, & Chostelidou, 2012; Machado, Soares, Brites, Ferreira, & Gouveia, 2011; Majid, Jelas, Azman, & Rahman, 2010). Therefore, Job Motivation is an important aspect in this particular research to allow further examination on the aspect of job motivation towards OCB in American-Based Organization in Kulim. Previous research on job motivation has evaluated that employee OCB is rated by the leader's perception of the followers' motivation, due to this fact there is a significant relationship between employee OCB and the source of motivation that drives the employees (Allen & Rush, 1998). Based on that, research also shows significant relationship between sources of motivational behavior towards the OCB concept. Research done by Neuman and Kickul (1998) depicts the positive relationship between self-concept internal motivation and OCB. These research was further strengthened by a study done on determining the strong relation between OCB and motives such as organizational concern and pro-social values (Finkelstein & Penner, 2004). According to the study done, organizational concern which is the desire to help organization that stems from pride and identification that the individual has towards the organization depicts a positive relationship with OCB (Corina, 2012; Dumitru, Chraif & Anitei, 2013; Griva, Panitsidou & Chostelidou, 2012; Machado, Soares, Brites, Ferreira & Gouveia, 2011; Majid, Jelas, Azman & Rahman, 2010; Khalatbari, Ghorbanshiroudi, & Firouzbakhsh, 2013; Recepoglu, 2013). Thus it is hypothesized that;

H2: Job motivation positively influences the organizational citizenship behavior.

2.3 Perceived Organizational Support (POS)

Perceived Organizational Support (POS) has been an important aspect and mainly researched in the field of psychology and management since the early 80's (Allen et al., 2008; Fuller et al., 2003; Rhodes & Eisenberger, 2002; Stamper et al., 2003). Perceived Organizational Support can be defined as how much the organization values its employees (Allen et al., 2008). Employees nowadays prefer to work in organizations which values its employees and contribution rather than just working for a particular company only for a pay. Related to that,

POS has been a key element focused in many organization to attract employees and reduce the turnover rate of employees therefore creating an ideal work place which will lead to the prosperity of the organization in the long term. Perceived Organizational Support includes the aspects of fair treatment, supervisory support, rewards and favorable job conditions. In today's world, such element has become a key aspects considered by employees to contribute services and develop themselves. On the other hand, POS strengthens the employees' effort in the organization which helps to achieve its goals and objectives apart from increasing productivity. Perceived Organizational Behavior has been a crucial aspect of understanding OCB in various researchers in different fields (Buchanan, 1974; Tansky & Cohen, 2001; Riggle, 2009; Yoon & Thye, 2002). Besides that, over the duration of time many researchers have proven a positive and significant relationship between Perceived Organization Support and OCB among employees in an organization (Eisenberger et al., 1986; Eisenberger et al., 1990; Hutchison, 1997; Randall et al., 1999; O'Driscoll & Randall, 1999; LaMastro, 2008). Furthermore, the findings of the research determines that when the organization values its employee's, the tendency of the employees is to be loyal to the organization that results in dedication, high job satisfaction and determination to perform task which is in-line with the organization's goals and objectives as mentioned by Arshadi and Hayavi (2011). Therefore it can be hypothesized that;

H3: Perceived organizational support positively influences the organizational citizenship behavior.

3. Methodology

The present study is exploratory in nature and data were collected from primary sources with a structured questionnaire. The respondents of the study were the employees of three American-Based Organization in Kulim, Malaysia. Data were collected with a questionnaire survey from 300 employees of those organizations. After collecting data, the researchers entered all the data into the database and used SPSS software package 22 to analyze the data. All missing and incomplete data from questionnaires were removed from the analysis. This was followed by data sweeping and testing the normality using Skewness and Kurtosis. Reliability analysis was done with Cronbach alpha to see the internal consistency of the data. Descriptive statistics were used to determine the characteristics of the respondents. To see the relationship between independent and dependent variables, correlation analysis was done and multiple regression analysis was applied to test the impact of independent variables on dependent variables.

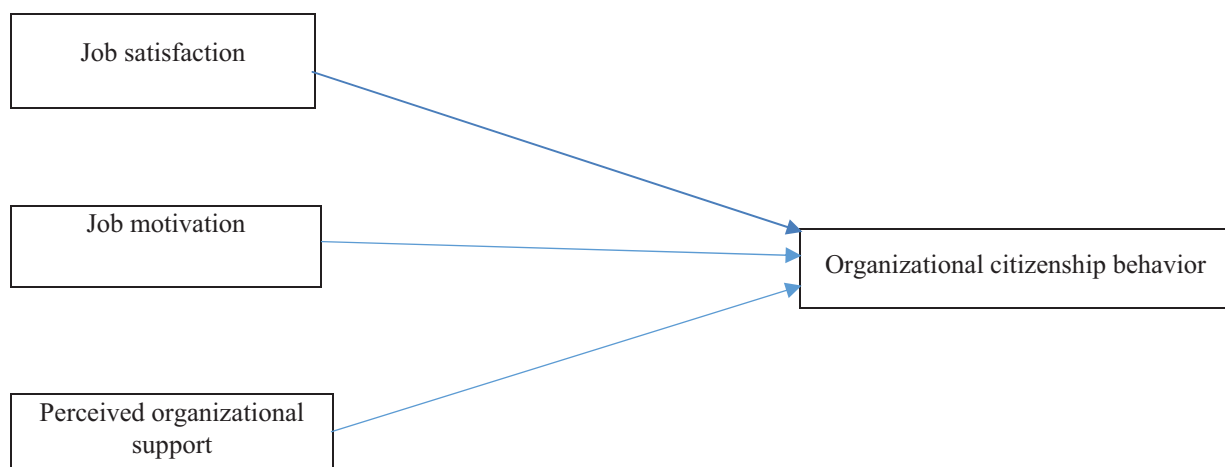


Figure 1. Research framework

3.1 Respondents' Profile

The number of respondents in the research is 300 employees. In the research, a higher distribution of male is noticed with a percentage of 75.7%. The male percentage is higher than female because of the nature of job. In the aspect of age, the majority of the respondents are between 25 – 35 years old representing 40.3%. The race is dominated by the Chinese respondents, which represents 61% of the total sample. This is mainly due to the top management which consists of a majority of Chinese employees which will influence the hiring decision in the organization. In terms of the education level, majority of the respondents are Degree level representing 69% of total employees. In terms of the organization, even number of respondents were taken from three different organization with the each carrying 33.33%. Most of the respondents have worked in the organization from 4 to 7 years with a percentage of 39.3%. The majority of the respondents includes engineers with 62.7% as the

research focused on American-Based Manufacturing Organization in Kulim. As mentioned in the earlier part, the American-Based Organization believes in engineers handling operations rather than technician and operators.

3.2 Reliability of the Data

Reliability test is used to measure the consistency and stability of variables (Sekaran, 2009). Reliability analysis allows the study of the properties of measurement scales and items in the study. The Cronbach alpha value closer to 1 represents better instruments in general. According to Sekaran (2009), values less than 0.6 are considered to be poor and above 0.7 are good. The Table 1, shows that all the variables have Cronbach alpha values more than 0.7 which indicates that the items represent the variables quite well.

Table 1. Results of Reliability for the constructs

Variables	No of items	Cronbach alpha
Job satisfaction	5	0.776
Job motivation	5	0.787
Perceived organizational support	5	0.828
Organizational citizenship behavior	5	0.784

3.3 Correlation Analysis

Pearson's correlation is basically used to determine the relationship between at least two continuous variables. Davis (1997) proposed the rule of thumb which stated that correlation values from 0.7 and above indicates very strong relationship, values from 0.5 to 0.69 indicates strong relationship, values form 0.3 to 0.49 indicates moderate relationship, 0.1 to 0.29 indicates low relationship and values below that indicates very low relationship. Table 2 shows the correlation among the variables.

Table 2. Correlation matrix

Variables	Satisfaction	Motivation	POS	OCB
Satisfaction	1			
Motivation	0.635	1		
POS	0.562	0.685	1	
OCB	0.573	0.690	0.724	1

The relationship of the first independent variable, Job Satisfaction and dependent variable OCB is 0.573 or 57.3% which according to Davis (1997) represents a strong relationship. The relationship between the second independent variable, Job Motivation and dependent variable OCB is 0.69 or 69% which further depicts that there is a strong relationship. The third independent variable which is Perceived Organizational Support and dependent variable OCB represents a correlation of 0.724 or 72.4% which according to Davis (1997) represents a very strong relationship between the variables. Perceived Organizational Support has the highest correlation value which is 0.724, which depicted that it has the highest correlation with OCB. This is mainly due to the fact when the organization provides support to the employees, it brings parallel effect such as self-motivation and dedication towards the organization. Perceived Organizational Support also allows the employees to be empowered allowing the employees to feel as part of the organization.

3.4 Regression Analysis

Table 3. Regression analysis output

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	1.084	.129		8.389	.000	
1	MeanJS	.100	.037	.132	2.726	.007
	MeanJM	.263	.048	.303	5.492	.000
	MeanPOS	.376	.044	.443	8.603	.000

R square = .605

It is clear from the above table that three independent variables namely job satisfaction, job motivation and perceived organizational support can explain the dependent variable, organizational citizenship behavior, by 60%. It indicates that there are some other variables that are responsible for the remaining 40% variation of the dependent variable. SPSS output also shows that job satisfaction is statistically significant at 1% significance level (Sig $p = .007$) with a positive beta. It means that job satisfaction has significant positive effect on organizational citizenship behavior. The next independent variable, motivation, also has significant positive effect on organizational citizenship behavior. The SPSS output shows that it is highly significant (Sig $p = .000$) with a positive beta that supports previous studies. The perceived organizational support is also statistically significant at 0% significance level (Sig $p = .000$) and it has a positive beta value.

5. Discussion and Conclusion

Based on the research framework and the problem statement identified, three hypotheses were constructed to be further proven in the study which includes H1: Job Satisfaction has a positive relationship with OCB, H2: Job Motivation has a positive relationship with OCB and H3: Perceived Organizational Support has a positive relationship with OCB in American-Based Organization in Kulim. All the hypotheses have been supported on the basis of the research findings. Pearson Correlation illustrates that Perceived Organizational Support has the highest correlation with OCB. It happens because when the employees receive support from the organization, they will be elevated to perform better for the organization. Support in terms of rewards and incentives can further increase the motivation level of employees. This is further proven in the regression analysis where Perceived Organizational Support has the highest value. And it indicates that POS has significantly positive effect on OCB. In the present study, job motivation variable has high relevance in understanding the OCB. A high correlation level which is 0.690 also depicts that job motivation has strong relationship with OCB. It indicates that when the organization provides motivational elements such as higher pay, good environment and so on, it will influence the level of OCB among the employees. Besides that, the promotional chances as motivation for the employees allow the employees to work harder and be dedicated to organization that consequently leads to better or higher OCB among the employees. By providing support such as training and room for learning, firms can motivate the employees and they feel more secure to work there. Especially fresh graduates are expected to learn and apply their knowledge as soon as they start working in an organization. At the beginning they need more supports from the organization otherwise this will create insecurity or stress for the employees, leading to low self-esteem and creating an unhealthy working environment. Supports in terms of how to work properly and deal with new situations will allow the employees to be more loyal to the organization and which will further increase the level of OCB among the employees.

This study supports the Social Exchange Theory and Pro-Social Behavior Theory whereby both the theories can show the relationship between the independent variables which include Job Satisfaction, Job Motivation and Perceived Organizational Support towards the dependent variable which in this study is OCB. The Social Exchange Theory explains the relationship between employees and the organization including subordinates and their supervisors when particular action revolves around mutuality. The obligations imposed by the mutuality may vary with the status of participants within a society. The present research depicts that managers have higher OCB because of the added social exchange whereby they have the authority and hence allowing them to have satisfaction in terms of job due to the responsibility of leading others. Apart from that, the Pro-Social Behavior Theory also associates OCB with the aspects of understanding the different elements of the employee behaviors related to pro-social behavior such as volunteering or making an extra effort to achieve a particular task. Alongside that, the theory elaborates that the more a person identifies with a role, such as the role of volunteer or good organizational citizenship, the more willing he or she is to continue in the particular behavior. The research also indicates that the self-gratification or job motivation without the expectation of receiving anything in return also impacts the OCB. On the basis of the theories used in the research and the results obtained, it can be concluded that Job Satisfaction, Job Motivation and Perceived Organizational Support are able to predict a reliable and valid relationship with OCB. However the present study is not without any limitations. The major limitation of this study is that it is mainly concentrated on American-Based organization in Kulim, Malaysia. Due to time limitation, organizations based on other countries were not included in the study. Apart from that, the research is limited to Kulim though many foreign companies are in operation in different parts of Malaysia. This is due to the limitation of time given to persuade the research and also the limitation to collect data across different organizations. Taking into consideration the limitations in this study, the future researchers are suggested to address the issue in their research.

References

Allen, D. K. (2008). Organizational climate and strategic change in higher education: Organizational insecurity.

- Higher Education*, 46(1), 61-92. <http://dx.doi.org/10.1023/A:1024445024385>
- Allen, T. D., & Rush, M. C. (1998). The Effects of OCB on Performance Judgments: A Field Study and Laboratory Experiment. *Journal of Applied Psychology*, 83(2), 247-260. <http://dx.doi.org/10.1037/0021-9010.83.2.247>
- Antony, J. M. (2013). The Influence of Emotional Intelligence on Organizational Commitment and OCB. *International Journal of Social Science & Interdisciplinary Research*, 2(3).
- Arshadi, N., & Hayavi, G. (2011). The Effect of Perceived Organizational Support on Affective Commitment and Job Performance: Mediating role of OBSE. *Procedia - Social and Behavioral Sciences*, 84, 739-743. <http://dx.doi.org/10.1016/j.sbspro.2013.06.637>
- Bateman, T. S., & Organ, D. W. (1983). Job Satisfaction and the good Soldier: The Relationship between Affect and Employee Citizenship. *Academy of Management Journal*, 26, 587-595. <http://dx.doi.org/10.2307/255908>
- Becker, T. E., & Billings, R. S. (1993). Profiles of commitment: An empirical test. *Journal of Organizational Behavior*, 14, 177-190. <http://dx.doi.org/10.1002/job.4030140207>
- Bentea, C., & Anghelache, V. (2011). Teachers' motivation and satisfaction for professional activity. *Procedia - Social and Behavioral Sciences*, 33, 563-567. <http://dx.doi.org/10.1016/j.sbspro.2012.01.184>
- Buchanan, B. (1974). Building organizational commitment: the socialization of managers in work organizations. *Administrative Science Quarterly*, 19, 533-546. <http://dx.doi.org/10.2307/2391809>
- Castro, C., Barroso, E., Armario, M., & Ruiz, D. M. (2010). The influence of employee OCB on customer loyalty. *International Journal of Service Industry Management*, 15(1), 27-53. <http://dx.doi.org/10.1108/09564230410523321>
- Celep, C., & Yilmazturk, O. E. (2012). The relationship among organizational trust, multidimensional organizational commitment and perceived organizational support in educational organizations. *Procedia - Social and Behavioral Sciences*, 46, 5763-5776. <http://dx.doi.org/10.1016/j.sbspro.2012.06.512>
- Chien, M. H. (2011). *A Study to Improve OCBs*.
- Corina, B. C. (2012). Some determinative factors for teachers job motivation. *Procedia - Social and Behavioral Sciences*, 47, 1638-1642. <http://dx.doi.org/10.1016/j.sbspro.2012.06.876>
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. http://dx.doi.org/10.1207/S15327965PLI1104_01
- Dumitru, D., Chraif, M., & Anitei M. (2013). Motivation and cognitive tasks. Correlative study between genders. *Procedia - Social and Behavioral Sciences*, 127, 828-833. <http://dx.doi.org/10.1016/j.sbspro.2014.03.363>
- Fatimah, O., Amiraa, A. M., & Halim, F. W. (2011). The Relationships between Organizational Justice, OCB and Job Satisfaction. *Pertanika J. Soc. Sci. & Hum.*, 19(S), 115-121.
- Finkelstein, M. A., & Penner, L. A. (2004). Predicting OCB: Integrating the Functional and Role Identity Approaches. *Social Behavior and Personality*, 32, 383-398. <http://dx.doi.org/10.2224/sbp.2004.32.4.383>
- Gomes, D. R., Asseiro, V., & Ribeiro, N. (2013). Triggering Employee Motivation in Adverse Organizational Contexts: "Going the Extra Mile" while Holding Hands with Uncertainty? *Business and Management Research*, 2(1), 41-54. <http://dx.doi.org/10.2224/sbp.2004.32.4.383>
- Griva, E., Panitsidou, E., & Chostelidou, D. (2012). Identifying factors of job motivation and satisfaction of foreign language teachers: research project design. *Procedia - Social and Behavioral Sciences*, 46, 543-547. <http://dx.doi.org/10.1016/j.sbspro.2012.05.157>
- Hopkins, K. M. (2002). Organizational citizenship in social service agencies. *Administration in Social Work*, 26(2), 11-15. http://dx.doi.org/10.1300/J147v26n02_01
- Hutchinson, J. M. C. (1997). The Algorithmic Beauty of Seashells [Book review]. *Journal of Conchology*, 36(1), 83-85.
- Khalatbari, J., Ghorbanshiroudi, S., & Firouzbakhsh, M. (2013). Correlation of Job Stress, Job Satisfaction, Job Motivation and Burnout and Feeling Stress. *Procedia - Social and Behavioral Sciences*, 84, 860-863. <http://dx.doi.org/10.1016/j.sbspro.2013.06.662>

- Lee, K., & Allen, N. J. (2002). OCB and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology*, 87(1), 131-142. <http://dx.doi.org/10.1037/0021-9010.87.1.131>
- Locke, E. A. (1983). What is job satisfaction? *Organ. Behav. Hum. Perform.*, 4, 309-366. [http://dx.doi.org/10.1016/0030-5073\(69\)90013-0](http://dx.doi.org/10.1016/0030-5073(69)90013-0)
- Machado, M. L., Soares, V. M., Brites, R., Ferreira, J. B., & Gouveia, O. M. R. (2011). A look to academics job satisfaction and motivation in Portuguese higher education institutions. *Procedia - Social and Behavioral Sciences*, 29, 1715-1724. <http://dx.doi.org/10.1016/j.sbspro.2011.11.417>
- MacKenzie, S. B., Podsakoff, P. M., & Ahearne, M. (1998). Some possible antecedents and consequences of in-role and extra-role salesperson performance. *Journal of Marketing*, 62(3), 69-86. <http://dx.doi.org/10.2307/1251745>
- Majid, N. A., Jelas, M. Z., Azman N., & Rahman, S. (2010). Communication Skills and Work Motivation amongst Expert Teachers. *Procedia Social and Behavioral Sciences*, 7(C), 565-567. <http://dx.doi.org/10.2307/1251745>
- Marzoughi, R., & Choopani, H. (2011). Evaluation of Relationship between Job Satisfactions with OCB of Tehran University Personnels. *Studies in Learning & Instruction*, 2(2).
- Mohammad, J., Habib, F. Q., & Alias, M. A. (2011). Job Satisfaction and Organizational Citizenship Behaviour: An Empirical Study at Higher Learning Institutions. *Asian Academy of Management Journal*, 16(2), 149-165.
- Moorman, R. H., & Blakely, G. L. (1995). Individualism - collectivism as an individual difference predictor of OCB. *Journal of Organizational Behavior*, 6(2), 127-142. <http://dx.doi.org/10.1002/job.4030160204>
- Morrison, E. W. (1994). Role definitions and OCB: The importance of the employee's perspective. *Academy of Management Journal*, 37. <http://dx.doi.org/10.2307/256798>
- Mossholder, K. W. (1999). A multilevel analysis of procedural justice context. *J. Organiz. Behav.*, 19, 131-141. [http://dx.doi.org/10.1002/\(SICI\)1099-1379\(199803\)19:2<131::AID-JOB878>3.0.CO;2-P](http://dx.doi.org/10.1002/(SICI)1099-1379(199803)19:2<131::AID-JOB878>3.0.CO;2-P)
- Öztürk, H. (2002). *Motivational Performance with regard to OCB*. İstanbul Üniversitesi Sağlık Bilimleri Enstitüsü, İstanbul.
- Petrella, M. V. (2013). *The Effects of Trust on OCBs: A Meta-Analysis*. Online Theses and Dissertations. Paper 199.
- Podsakoff, N. P. (2009). Individual-level and organizational-level consequences of OCBs: A meta-analysis. *Journal of Applied Psychology*, 94, 122-141. <http://dx.doi.org/10.1037/a0013079>
- Randall, M. L., Cropanzano, R., Bormann, C. A., & Birjulin, A. (1999). Organizational politics and organizational support as predictors of work attitudes, job performance, and organizational citizenship behaviour. *Journal of Organizational Behavior*, 20, 159-174. [http://dx.doi.org/10.1002/\(SICI\)1099-1379\(199903\)20:2<159::AID-JOB881>3.0.CO;2-7](http://dx.doi.org/10.1002/(SICI)1099-1379(199903)20:2<159::AID-JOB881>3.0.CO;2-7)
- Recepoğlu, E. (2013). Analyzing job motivation level of high school teachers in Turkey. *Procedia - Social and Behavioral Sciences*, 116, 2220-2225. <http://dx.doi.org/10.1016/j.sbspro.2014.01.547>
- Rhoades, L., & Eisenberger, R., (2002). Perceived organizational support: a review of the literature. *Journal of Applied Psychology*, 87(4), 698-714. <http://dx.doi.org/10.1037/0021-9010.87.4.698>
- Riggle, R. J. (2009). A Meta-Analysis of the Relationship between Perceived Organizational Support and Front-Line Employee Job Outcomes: 20 Years of Research. *Journal of Business Research*, 62(10). <http://dx.doi.org/10.1016/j.jbusres.2008.05.003>
- Schroeder, D. A. (2003). Prosocial Behavior: Multilevel Perspectives. *Annu. Rev. Psychol.*, 56, 1-28.
- Sekaran, U. (2009). *Research Method for Business* (5th ed.). UK: John Wiley & Sons, Ltd.
- Stamper, C. L. (2003). Work status and OCB: A field of restaurant employees. *Journal of Organizational Behavior*, 22, 517-536. <http://dx.doi.org/10.1002/job.100>
- Tansky, J. W., & Cohen, W. H. (2001). Justice and OCB: what is the relationship? *Employee Responsibilities and Rights Journal*, 6, 195-207. <http://dx.doi.org/10.1007/BF01419444>
- Vondey, M. (2010). The Relationships among Servant Leadership, OCB, Person-Organization Fit, and Organizational Identification. *International Journal of Leadership Studies*, 6(1).

Williams, L. J., & Anderson, S. E. (1991). Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and In-Role Behaviors. *Journal of Management*, 17, 601-617. <http://dx.doi.org/10.1007/BF01419444>

Yoon, J., & Thye, S. (2002). Supervisor support in the work place: Legitimacy and positive affectivity. *Journal of Social Psychology*, 140, 295-316. <http://dx.doi.org/10.1007/BF01419444>

Copyright

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Role of Microfinance in Poverty Alleviation: Empirical Evidence from South-West Nigeria

Taofeek Aremu Kasali¹, Siti Aznor Ahmad¹ & Hock Eam Lim¹

¹ Department of Economics & Agribusiness, School of Economics, Finance & Banking, UUM-COB, Malaysia

Correspondence: Taofeek Aremu Kasali, Department of Economics and Agribusiness, School of Economics, Finance and Banking, UUM-COB, Malaysia. Tel: 60-16-214-7461. E-mail: taofeekkasali2012@gmail.com

Received: April 15, 2015 Accepted: May 13, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p183

URL: <http://dx.doi.org/10.5539/ass.v11n21p183>

Abstract

Microfinance programme has been generally regarded as a development strategy that can enhance the economic performance of the poor. The government of Nigeria has made concerted efforts to alleviate poverty in the country. One of such efforts is Poverty alleviation through Microfinance loan but poverty still remains pervasive and widespread in the country especially in the rural communities. This study examines the role of microfinance vis-à-vis poverty reduction particularly in the South- West Zone of Nigeria. Data were collected through survey questionnaire in the study area. Descriptive Statistics together with Binary Logit Regression Model were employed to analyse the data collected. The result of the analyses revealed that microfinance loan made significant impact on the loan beneficiaries in the study area which lead to poverty reduction. The government is advised to provide more enabling environment to make Microfinance operations more effective in the country particularly in the rural areas. Microfinance Institutions are implored to create more awareness on their operations and make less stringent conditions for the loan accessibility.

Keywords: economic development, poverty, microfinance, survey, Nigeria

1. Introduction

In the past two decades, microfinance programmes have been considered by the development economists as one of the foremost strategies for poverty reduction. Although some researchers argue that Microfinance has not really succeeded in its role as grassroots economic developer in the sense that it has not been effective in reaching the poorest (Hulme & Mosley, 1977). But others opine that the programme is capable of bringing the poor into the lime light if properly implemented. This debate creates the gap for independent researchers to further examine the impact of Microfinance on poverty alleviation as donors and practitioners may be biased in their assessment. It is therefore believed that this study will contribute to literature and further make clarification on this debate by examining the impact of microcredit on poverty alleviation using Nigeria, the most populous black nation in the world as a case study.

Poverty contributes to underdevelopment and its reduction leads to economic development. To be poor connotes deprivation from the basic necessities of life. In fact, poverty engenders inability to afford the minimum basic essentials like food, children education, good housing, healthcare and good clothing to mention few (Todaro & Smith, 2011, p. 2). Suffice to say that the poor are being denied their share of the nation's resources and other necessities that are generally available in the society for their comfort.

Poverty is a worldwide socio-economic problem. Hence, its awareness is much more favored at the international level of finance and governance. For example, the World Bank, United Nations (UN) and International Monetary Fund (IMF) have developed various programmes and projects that would improve the life of the poor, ensure health improvement and sustainable growth and development (Ssewamala, Sperber, Zimmerman, & Karimli, 2010).

Records have shown that about half of the world's population (about three billion people) lives on income of less than two dollars a day (Goel & Rishi, 2012). It is also disheartening that one child out of five living in these poor communities does not live to see his or her fifth birthday! No wonder that the United Nations declared Millennium Development Goals (MDGs) in September 2000 to ensure global development. The major policy thrust of this program is to make life more meaningful to the poor and downtrodden. In essence, reduction of

poverty and hunger constitute the basic root of all other problem issues focused on MDGs (Kalirajan & Singh, 2009). Ironically, in Sub-Saharan Africa which is considered as the World's poorest region, the concept of poverty is relatively understudied and has attracted less attention in academic literature (Ssewamala, Sperber, Zimmerman, & Karimli, 2010). To this effect, little efforts have been made to critically analyse the impact of microfinance programmes on poverty reduction, particularly in Sub-Saharan Africa.

This paper examines the contributions of microfinance towards the poverty reduction. It has been argued that the impoverished poor exist because of lack of access to finance which can engender their capability to develop their entrepreneurship skill and establish their enterprises. Developing finance that will be accessible to the poor would enhance their productivity and capability to procure assets and necessary facilities that can encourage productive investment. This will therefore reduce poverty as it is clear that the poor does not lack initiative but only constrained by finance.

It has also been asserted that the major constraint of the poor is lack of adequate capital from financial institutions because of high risk of inadequate collateral. This constraint hampers growth, increases the poverty level and leads to slow economic development. Provision of microcredit to the poor will therefore improve the financial capital that will increase their productivity, reduce unemployment, enhance income and savings; and eventually reduce poverty and inequality.

During the past three decades in Nigeria, efforts have been made by the Government, Non-Governmental Organisations and International Organisations to reduce poverty. To this end, the Nigerian government established several programmes to alleviate poverty. In 1972, the National Accelerated Food Production Programme was inaugurated to boost the food production through an on lending fund from the Nigeria Agricultural and Cooperative Bank. In 1976, Operation Feed the Nation was established to provide extension services to farmers in the rural areas. While The Green revolution programme of 1979 was to put an end to food importation and encourage the production of more crops and fiber. Others are: The Directorate of Food Road and Rural Infrastructure (DFRRI) in 1986, The Community Banks of Nigeria, The Peoples Bank, The Family Economic Advancement Programme (FEAP), The Mass Mobilization for Self-Reliance (MAMSER), the Better Life Programme (BLP), The Family Support Programme (FSP) in 1993, The National Directorate of Employment (NDE), The Petroleum Special Trust Fund (PTF), The Mass Transit Programme (MTP), The Agency for Mass Literacy, National Economic Empowerment and Development Strategy (NEEDS); and the Microfinance Banks.

Microfinance has been used on several occasions to reduce poverty, in rural areas in particular which are believed to harbour the poorest people in the world. It is an important aid that can improve the economic performance of the poor. The poor people need microfinance to improve their entrepreneurial skill and socio economic needs. But despite these efforts, the level of unemployment continued to rise, while poverty conditions remain unabated in the country.

In Nigeria, the proportion of the people living in poverty has increased tremendously. For instance in 1980, the magnitude of Nigerians living below the poverty line increased from 17.1m (27.2% of 65m total population) to 34.7m in 1985 (46.3 % of the total population of 75m). The people living in poverty in 1992 were 39.2m (42.7% of the total population of 91.5m). This figure increased to 67.1m in 1996 (65.6% of the total population of 102.3m). In 2004, the people in poverty were 68.7m (54.4% of the total population of 126.3m), the proportion of people living below property line rose sharply in 2010 to 112.47m (69% of the estimated population of 163m) (National Bureau of Statistics, 2012).

It is against the backdrop of the above enumerated problems that this study is set to evaluate the contribution of microfinance to poverty alleviation in the study area and by extension in the entire Nigeria country. This study is also aimed at determining the impact of the microfinance loan on the beneficiaries against non-beneficiaries. It is also expected that this study will fill gap in literature as little efforts have been advanced to study the effect of microfinance loan on poverty alleviation as it affects the rural poor particularly in the study area. The justifications of this study therefore are to contribute to literature and proffer necessary policy implications for the Government, Microfinance Operators and other stakeholders. This is expected to contribute to the reduction of poverty and enhance economic development.

The rest of this study is divided into five sections. Following the introduction, section 2 reviews the past literature on the subject matter. Methodology of the study is discussed in section 3 while the results of the analysis are discussed in section 4. The conclusion of the study is treated in Section 5 and policy recommendations are also enumerated.

2. Review of Past Literature

The concept of poverty reduction has attracted the attention of some scholars. Empirical studies have identified some variables like inflation, age, household size, health problem, lack of savings and inadequate assets as the major causes of poverty (Chaudhry, 2009; Roslan & Abd Karim, 2009; Taylor & Xiaoyun, 2012; Yusuf, Shirazi, & MatGhani, 2013).

Microfinance has its antecedent in Bangladesh with the commencement of Grameen Bank project in 1974. Grameen Bank, usually referred to as Rural Bank was started by Muhammad Yunus, a Professor of the University of Chittagong (Bangladesh) in 1976. The bank mainly targeted rural women for its credit programmes. It introduced group lending strategy called social security to make credit available to the poor, usually denied by traditional banks due to the lack of physical collateral. Group lending operates through the principle of joint liability whereby the members of the group monitor the loan disbursement and payment. Default of a member implicates other members and the later pay from the joint resources to avoid future denial of loan to other members. This system especially aims to empower women and give them the opportunity to participate in household decisions. With the latter's success, several developed and developing countries adopted the concept of micro financing. For instance, on September 17 1987, Amanah Ikhtiar Malaysia (AIM) was inaugurated with the main aim of reducing poverty and increasing income of Bumiputera and Malays in particular, through microcredit called Ikhtiar financing scheme for poor households in rural areas.

It is also on record that the Microcredit Summit launched in 1997 the global campaign to expand the coverage of microfinance to 100 million of the world's poorest micro entrepreneurs by 2005. Hence, the United Nations declared year 2005 as the International Year of Microcredit (El-Komi, 2010).

The concept of Microfinance is based on economic development strategy that aims at poverty reduction by providing financial services to the poor, low income earners households and micro-entrepreneurs that are deprived of getting the same services from the formal financial market. These services include savings, credit, insurance and other development services like health, education, human empowerment, skills, training and environmental protection.

Microfinance can also be described as the process of advancing small loans to the poor with the aim of financing cottage and small scale businesses that would provide adequate income to take care of the recipients' responsibilities. Microfinance Institutions which were originally designed to assist the poor households and advance credits to entrepreneurs also provide services like savings, rural credit, Agricultural credit, consumer credit and other financial services (Duku, 2002). Microfinance also connotes the procedure of making available very small range of financial services to the poor with the purpose of making them take up new opportunities and participate in productive activities. It is a development tool that makes possible the rendering of services like money transfers, savings opportunities, and credit and insurance services. Microfinance entails both financial and social intermediation. It is therefore an economic phenomenon that enhances the potentials of low income group.

Microcredit is a subset of microfinance. It finances microenterprises and poorest people that cannot afford to pledge collateral security to obtain loan from conventional banks. Therefore microcredit assists the poor to increase their standard of living and their family welfare through short term credit facility that can generate revenue activity.

Studies have revealed that countries with well-organized and efficient financial intermediaries recover faster from poverty and inequality than their counterpart with moribund financial development and uncoordinated microfinance services (Kalirajan & Smith, 2009; Yang et al., 2011). Microfinance involves the rendering of financial services to the poor and low income earners together with their micro businesses. It is widely acclaimed that Microfinance can serve as an effective tool to solve poverty problem worldwide. It is an essential aid for increase in productivity of the poor and essential ingredient for economic development (Comim, 2007; Dowla & Barna, 2006; Wright, 2000; Islam, 2007) cited in (El-Komi, 2010). However, Microfinance enhances standard of living if properly managed (Bashir et al., 2010; Muller & Bibi, 2010).

The operation of Microfinance can only thrive if the repayment schedule is met promptly by the customers. Empirical studies have shown that loan repayment is determined by the quality of the beneficiaries and other factors like education, distance of the lender to the customer's business, amount of loan, duration of the loan, gender and sanction threat to the borrowers (Roslan & Abd Karim, 2009; Smith, 2010; Tang & Bhatt, 2002).

Studies have affirmed that the development of financial sector will go a long way to contribute to economic growth and development. Suffice to say that the development of viral and efficient financial instrument like

microfinance to fund micro and small enterprises will generate more employment, improve the standard of living, health, education, savings and serve as a formidable measure to reduce poverty (Green, Kirkpatrick, & Murinde, 2006). Also, in his study of the impact of microfinance on rural Area in Pakistan, Asghar (2012) affirms that Microfinance can serve as a strong tool to increase the income of the poor and education of his household. He concludes that income generated from the credit of microfinance will reduce poverty and increase both economic and social well beings.

Having identified Microfinance Institutions and programmes as the necessary development strategies to alleviate poverty and assist the growth of micro and small enterprises; the financial institutions, the donor agencies, the Non- government organizations and policy makers have shown considerable interests to know the impact assessments of these institutions in order to justify whether the funds are well spent or not. This background has made it expedient for the authors of this study to probe into the issues of impact assessment of microfinance with a view to contributing to the hitherto partial treatment of the subject matter in the literature.

3. Methodology

Data used for this study were the primary data collected between July and September, 2014 from the study area: South-West Nigeria. South-West Nigeria is one of the six geo-political zones of Nigeria. South-West geo-political zones has a population of 27,722,432 people out of the Nation's total population of 140,431,790 (National Population Census, 2006). The zone has six states comprising Ekiti, Lagos, Ogun, Ondo, Osun and Oyo states. The typical vegetation of South-West Nigeria is rainforest with about 12% (114, 271km²) of Nigeria's coverage space of 923, 768 square kilometers. The zone has the highest concentration of Microfinance Institutions in Nigeria. It accommodates 346 (about 40%) of the total 870 Microfinance Institutions in six geopolitical zones in Nigeria, while the balance of sixty percent is shared among the remaining five Geo-political zones.

This study used cross-sectional data collected through the structured questionnaire. Purposive survey was used to select three out of six states from the Geographical zone namely Ogun, Oyo and Osun states. 1,145 Questionnaires were distributed to the respondents out of which 1,136 were collected from the sampled respondents. 1,134 were effectively used for the analyses; comprising 594 loan beneficiaries and 540 non-beneficiaries. The loan beneficiaries are those individuals who obtained microfinance loan in at least previous three years. Non-Beneficiaries are those who have similar characteristics with the latter and applied for microfinance loan in the previous three years but could not obtain approval for the loan. Being an individual beneficiary of microfinance loan is regarded as a derived one from the household perspective. In essence, if one or more members of a household obtain microfinance loan, the entire household is classified as beneficiary (Ashraf & Ibrahim, 2014).

Data collected included the demographic characteristics of the respondents, business and owner's profile, consumption expenditure, loan procurement procedure, assets and business management among others. In addition, operators of Microfinance Institutions in the study area were also interviewed on their mode of operations, problems faced on the clientele and the assistance required from the Government.

4. Empirical Results

Demographics and socio-economic characteristics of the rural poor collected from the study area through the surveyed questionnaire are depicted in Table 1. From the total sample size of 1,134 household heads, 594 (52.4%) are microfinance loan beneficiaries and the remaining 540 (47.6%) are non-beneficiaries. In terms of gender, the sample comprises 53% males and 47% females. About 51% of microfinance loan beneficiaries are males while almost 49% are females; whereas about 56% of non-beneficiaries are males with around 44% females. This shows that both loan beneficiaries and non-beneficiaries have similar gender characteristics.

With respect to Education level, the sampled respondents are grouped into five categories. This consists of those with no formal education, those with primary education, those who attended High School, Graduates of National Diploma and those who are degree holders. As depicted in Table 1, majority of the respondents have obtained education in one form or the other; about 14% of the total respondents reported no formal education. The proportion of no formal education for the microfinance loan beneficiaries is 12.5%, lower than that for the non-beneficiaries (15.4%). About 87.5% of the microfinance loan beneficiaries and 84.6% of non-beneficiaries have acquired primary education or more (including High School, National Diploma and Higher Diploma/University degree). Moreover, the proportion of microfinance loan beneficiaries with post High School education (Diploma and Degree) is higher than that of non-beneficiaries (38.7% against 30.9%).

With regards to age, the respondents have age range of between 20 and above 60 years old. The overall mean age for the sample is around 39 years. This shows that most of the respondents are still active and young enough to exhibit their entrepreneurship. When grouped into different age categories, the vast majority of both microfinance loan beneficiaries and non-beneficiaries fall into similar age bracket of 31-40 years old (46.7% and 49.5% respectively).

The field survey revealed that a large proportion of the respondents are married (75.6% of microfinance loan beneficiaries and 80.2% of non-beneficiaries). This shows that most of the sampled respondents are responsible to their families and have the tendency to cater for them.

The distribution of the respondents to religion categories is similar for both Islam and Christianity. Only 2.4% of microfinance loan beneficiaries have Traditional belief while that of non-beneficiaries is 7.6%.

The skill/Experience in business entrepreneurship is grouped into four categories. The vast majority of the respondents have acquired less than 10 years business experience. While the proportion of the microfinance loan beneficiaries that belong to this category is almost 80% that of non-beneficiaries is 68%.

As shown in Table 1, monthly income for the household head is grouped into five levels. The monthly income for most of the microfinance loan beneficiaries reported is above 30,000 Nigerian Naira (28.3%) while that of the non-beneficiaries group respondents is between 21,000 – 30,000 Nigerian Naira. Also the household head monthly expenditure of microfinance loan beneficiary group respondents is mainly less than 5,000 Nigerian Naira (41.1%); most of the household heads' monthly expenditure in the non-beneficiary respondents group falls between 5,000-10,000 Nigerian Naira (33.2%).

The proportion of the household size is similar in the sampled survey. About 44% of microfinance loan beneficiaries have 2-4 persons as members of the household while almost 68% of non-beneficiaries have 2-4 persons as members of their households. The survey also revealed that mostly less than 2 persons work and earn income (49.1%) in the microfinance loan beneficiary respondents group; while from 2-4 members of the non-beneficiary respondents group mostly work and earn income (64.9%).

Table 1. Characteristics of Sample (Beneficiaries and Non Beneficiaries)

	Non-Beneficiary N ₀ =540 (47.6%) % to N ₀	Beneficiary N ₁ =594 (52.4%) % to N ₁	Total Sample N ₃ =1134 (100%) Subtotal % to N ₄ N ₄ = N ₀ + N ₁
Demography			
Gender			
Male	55.6	50.7	53
Female	44.4	49.3	47
Total	100	100	100
Education Level			
No formal education	15.4	12.5	13.8
Primary education	28.1	19.5	23.6
High school	25.6	29.3	27.5
National Diploma	18.7	20.2	19.5
Higher Diploma/University			
degree	12.2	18.5	15.5
Total	100	100	100
Age (in years)			
20 - 30	14.3	17.1	16.1
31 - 40	49.5	46.7	48
41 - 50	27.3	25.1	26.2
51 - 60	6.5	8.7	7.6
>60	2.4	2.6	2.7
Total	100	100	100
Mean Age	39.25	39.19	19.22

Marital Status			
Single	11.3	17.0	14.3
Married	80.2	75.6	77.8
Divorced	5.9	3.9	4.9
Widow	1.9	3.2	2.6
Widower	.7	.3	.5
Total	100	100	100
Religion			
Islam	44.2	40.8	42.5
Christianity	48.2	56.8	52.7
Traditional	7.6	2.4	4.8
Total	100	100	100

Table 2. Characteristics of Sample (Beneficiaries and Non Beneficiaries) contd

Total Sample	Non-Beneficiary		Beneficiary
	N ₀ =540 (47.6%) % to N ₀	N ₁ =594 (52.4%) % to N ₁	N ₃ =1134 (100%) Subtotal % to N ₄ N ₄ = N ₀ + N ₁
Household Profile			
Skill/Experience in Business (in years)			
≤ 10	68.1	80.	74.3
11 - 20	29	18.4	23.5
21 - 30	2.3	1.7	2.
> 30	.8	.2	.5
Total	100	100	100
Mean Experience in Business	9.40	7.81	8.57
Household Monthly Income in Naira(Head)			
Less than N5000	13.1	14.1	13.7
N5000 - N10000	11.7	21.0	16.6
N11000 - N20000	24.4	19.2	21.7
N21000 - N30000	27.2	17.3	22.0
Above N30000	23.5	28.3	26.0
Total	100	100	100
Household expenditure (Head)			
Less than N5000	24.9	41.1	33.4
N5000 - N10000	33.2	24.5	28.6
N11000 - N20000	30.6	18.5	24.3
N21000 - N30000	5.8	7.3	6.5
Above N30000	5.6	8.6	7.2
Total	100	100	100
Household Size (members)			
Less than 2 persons	13.5	28.5	21.4
2 - 4 persons	67.5	44.3	55.3
5 - 7 persons	17.4	23.6	20.7
8 - 10 persons	1.1	3.4	2.3
Above 10 persons	.4	.3	.4
Total	100	100	100
Number of Income Earners (members)			
Less than 2 persons	27.5	49.1	38.8
2 - 4 persons	64.9	42.2	53.0
5 - 7 persons	7.4	7.8	7.6
8 - 10 persons	.2	1.0	.6
Total	100	100	100

Source: Field Survey Data (2014)

Model Specification: The main hypothesis for the study is that microfinance loan contributes to poverty alleviation in the study area.

In order to evaluate the variables that determine Poverty Alleviation together with microfinance loan in the study area, the Binary logistic regression model was explored. Following Gujarati and Porter (2009:555) in the estimation of Logit model, we find the natural log of the equation as follows:

$$\begin{aligned} L_i &= \ln\left(\frac{P_i}{1-P_i}\right) = Z_i \\ &= \beta_1 + \beta_2 X_i \end{aligned}$$

This implies that L , the log of the odds ratio, is linear in both X and the parameters.

It should also be noted that as P varies from 0 to 1, Z goes from $-\infty$ to $+\infty$.

In the same vein, model for this study can be specified as follows:

$$P_i = \left(\frac{P_i}{1-P_i}\right) = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8)$$

where,

P_i is a binary Dependent variable. $P_i=1$; if the person is not poor and $P_i=0$; if the person is poor. The World Bank's Poverty line Index set at \$1.25 per day was used as a benchmark to measure the level of poverty. That is, those whose income per day is below the Index were regarded as poor and those people that earn \$1.25 and above per day were categorized as non-poor.

X_1 = Microfinance

X_2 = Male

X_3 = Age

X_4 = Marital

X_5 = Education level

X_6 = Living Standard

X_7 = Health Standard

X_8 = Household size

In this model, Poverty Alleviation is considered as Dependent variable, while Microfinance, Male, Age, Marital, Education level, Living Standard, Health Standard and Household size are considered as explanatory or independent variables.

Table 2 shows the empirical results of microfinance loan and Poverty Alleviation model through the estimated logistic regression analysis. The results identify the explanatory variables determining the Poverty Alleviation with microfinance loan as a focus variable. In the overall results, the logistic model correctly classified almost 80 percent of the sample cases as the percentage accuracy in classification (PAC); and six out of the eight explanatory variables are found to be statistically significant. It is therefore safe to conclude that the explanatory power of the logit regression model can be satisfactorily used to explain the likelihood of evaluating the role of microfinance loan in alleviating poverty in the study area. The full model comprising all the independent variables (predictors) was statistically significant; the χ^2 is 558.9 with 8 degrees of freedom.

The model, which has Poverty Alleviation as its dependent variable aims at predicting the variables that determine the reduction of poverty with microfinance as a variable of interest in South-West Nigeria. To this end, specific characteristic variables of the respondents like Male, Age, Marital, education level and household size were included in the explanatory variables. This goes in line with some previous literature on the subject matter that included such social demographic variables to explain the dependent variable (for example, Arun et al., 2006; Ifelunini & Wosowei, 2012; Joseph & Imhanlahimi, 2011).

In Table 2, results of the model predicts that only six of the independent variables (microfinance loan, Male, Living Standard, Health Standard, Marital and household size) are statistically significant and made reliable contributions to predict the poverty alleviation level. The remaining two (Age and Education) did not make significant contribution to the model; hence, they were not reported in the model. The model predicts that being a microfinance beneficiary may likely reduce the odd ratio of poverty alleviation by 45 percent other factors remain the same. This can be explained in the situation of new beneficiaries who are still facing teething problems in operating their enterprises. It is therefore expedient for Microfinance operators to establish enough training on entrepreneurship for beneficiaries of their loan. The odds ratio increases the likely reduction in

poverty of male microfinance beneficiary by almost 84 percent than that of female counterpart other factors remain same. This is consistent with the views of Okojie et al. (2009) who confirm in their research that women are constrained to access microfinance loan because they lack collateral like land and other property which their male counterparts possess; and have no freedom to obtain loan without the consent of their husband. However, the odds ratio increases the likely poverty alleviation of married household of microfinance beneficiary by 30 percent than that of single beneficiary other factors remain unchanged. In the same vein, for a proportionate increase in the living standard of microfinance loan beneficiary, the odd ratio increases the poverty alleviation by 92 percent other factors remain constant. This confirms the direct relationship between poverty alleviation and living standard. Moreover, for a likely increase in the health standard of microfinance loan beneficiary, there is likelihood of odd ratio of poverty alleviation to reduce by 47 percent and vice-versa, other factors held constant. This can be explained by the fact that the stress and challenges of the well to do entrepreneurs always have negative impact on their health status as little or no time would be left for leisure and sports. However, for a proportionate increase in household size, there is probability that the odds ratio increases by 68 percent the likelihood of increasing the poverty alleviation, other things remain the same. This can be explained by the fact that increase in household size can generate cheap labour for the household and increase the future per capital income. Above findings suggest that microfinance makes significant contributions to poverty alleviation. This assertion is consistent with the findings of Khandker (2005) and Okpara (2010) to mention just two.

The Model estimates shown in Table 2 confirm high significance of the explanatory variables of Microfinance, Male, Living Standard, Health Standard and Household size with the overall significance level at 0.000. This confirms the fact that the model rejects the null hypothesis that the estimates of the parameters of the model equal to zero at 1 percent level of significance. In other words, there is more than 99 percent chance that the parameters of the variable estimates are not zero.

Explanatory Variables	Estimated Coefficients	Odds Ratio	Standard Error	Marginal^a Effect
Microfinance	-0.603^{***}	0.547	0.098	-0.120
Male	0.607^{***}	1.835	0.306	0.122
Age	-0.005	0.995	0.011	-.081
Marital	0.265[*]	1.303	0.209	0.199
Education	0.075	1.078	0.076	0.090
Living Standard	0.653^{***}	1.922	0.085	4.598
Health Standard	- 0.630^{***}	0.532	0.057	-1.178
Household size	0.519^{***}	1.681	0.216	0.423
McFadden R-Squared (Pseudo R ²)		0.364		
Correctly Predicted (%)		79.79		
Log Likelihood		-487.945		
LR statistics: Chi-Squares (Sig.)		558.90(000)		
Degree of Freedom		8		

Note

^aMarginal effect is estimated at mean value

***=significant at 1%; **=significant at 5% level; *=significant at 10% level

Source: Result of Data analysed (2014)

Figure 2. Result of logit estimates on evaluation of role of microfinance on poverty alleviation

5. Conclusion

With the enumeration of the important role of microfinance in poverty reduction, the study projected into the factors that evaluate poverty alleviation of the poor in the South-West Nigeria. Eight explanatory variables were explored in the model and Binary Logistic regression Model was used to analyse the model. Six of the explanatory variables (microfinance loan, Male, Living Standard, Health Standard, Marital and household size) were found to be statistically significant in determining the Poverty Alleviation of the microfinance loan beneficiaries in Nigeria.

In the final analysis, it is postulated that in order to enable microfinance to achieve the objective of poverty reduction, the Government must create an enabling environment and establish regulatory laws that will guide the efficiency of Microfinance Institutions (MFIs). Concerted efforts should be made towards the provision of supportive services like education and training on entrepreneurship, increase in health facilities and provision of other social services for unemployed, poor and those who are vulnerable to poverty. It is also important for the MFIs to create public enlightenment programmes that would spread their role as development agents for poverty reduction and encourage the poor people who are supposed to be their target audience.

References

- Arun, T., Imai, K., & Sinha, F. (2006). *Does the Microfinance Reduce Poverty in India? Propensity Score Matching based on a National-level Household Data*. The University of Manchester Economics Discussion Paper: EDP-0625, September.
- Asghar, N. (2012). Microfinancing for Poverty Reduction: An Empirical Study of Rural Areas of Tehsil Gujrat-Pakistan. *International Journal of Advances in Management and Economics*, 1(4), 14-19. Retrieved from <http://www.managementjournal.info>
- Ashraf, M. A., & Ibrahim, Y. B. (2014). Poverty Alleviation and Identifying the Barriers to the Rural Poor Participation in MFIs: A Case Study in Bangladesh. *Journal of Economic Cooperation and Development*, 35(3), 99-132.
- Basir, M. K., Amin, A., & Naeem, M. K. (2010). Micro-credit and Poverty Alleviation in Pakistan. *World Applied Sciences Journal*, 8(11), 1381-1386.
- Chaudhry, I. S. (2009). Poverty Alleviation in Southern Punjab (Pakistan): An Empirical Evidence from the Project Area of Asian Development Bank. *International Research Journal of Finance and Economics*, 23(23), 23-32.
- Duku, O. P. (2002). A critical assessment of Jamaica's national poverty eradication programme. *Journal of International Development*, 14(6), 773-788. <http://dx.doi.org/10.1002/jid.923>
- El-Komi, M. S. (2010). *Poverty Alleviation Through Microfinance and Implications on Education*. Dissertation Publishing UMI13421471, ProQuest.
- Goel, G., & Rishi, M. (2012). Promoting Entrepreneurship to Alleviate Poverty in India: An Overview of Government Schemes, Private-Sector Programs, and Initiatives in the Citizens' Sector. *Thunderbird International Business Review*, 54(1), 45-57. <http://dx.doi.org/10.1002/tie.21437>
- Green, C. J., Kirkpatrick, C. H., & Murinde, V. (2006). Policy Arena Finance for Small Enterprise Growth and Poverty Reduction in Developing countries. *Journal of International Development*, 18, 1017-1030. <http://dx.doi.org/10.1002/tie.21437>
- Gujarati, N., & Porter, D. C. (2009). *Basic Econometrics*. Singapore: McGraw-Hill.
- Hulme, D., & Mosley, P. (1997). *Finance for the Poor or the Poorest? Financial Innovation, Poverty and Vulnerability*. Cited in Role of Microcredit in Rural Poverty Alleviation: A Case study of Grameen Bikas Bank in Eastern Development Region, Nepal, A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at George Mason, University by Hari Bansha Dulal 2007.
- Ifelunini, I. A., & Wosowei, E. C. (2012). Does Micro Finance Reduce Poverty among Women Entrepreneurs in South-South Nigeria? Evidence from Propensity Score Matching Technique. *European Journal of Business and Management*, 4(21), 76-87.
- Joseph, I. E., & Imhanlahimi, J. E. (2011) Access and impact assessment of micro finance banks on rural poor in Nigeria: a case study of Edo state. *Indian Journal of Economics and Business*, 10, 327-359.
- Kalirajan, K., & Singh, K. (2009). The pace of poverty reduction across the globe: an exploratory analysis.

- International Journal of Social Economics*, 36(6), 692-705. <http://dx.doi.org/10.1108/03068290910956921>
- Khandker, S. R. (2005). Microfinance and Poverty: Evidence Using Panel Data from Bangladesh. *The World Bank Economic Review*, 19(2), 263-286. <http://dx.doi.org/10.1093/wber/lhi008>
- Muller, C., & Bibi, S. (2010). Refining Targeting against Poverty. Evidence from Tunisia. *Oxford Bulletin of Economics and Statistics*, 72(3), 381-410. <http://dx.doi.org/10.1111/j.1468-0084.2010.00583.x>
- National Bureau of Statistics. (2012). *Nigeria Poverty Profile 2010*. Retrieved from <http://reliefweb.int/report/nigeria/nigeria-poverty-profile-2010-report>
- National Planning Commission. (2010). *2010 Performance Monitoring and Evaluation Report* (pp. 1-161).
- Okojie, C. E. E., Eghafona, K., Osaghae, G., Monye-Emina, A., & Ehiakhamen, J. O. (2009). *Institutional Environment and Access to Microfinance By Self-employed Women in the Rural Areas of Edo State*. Nigeria, Nigeria Strategy Support Program (NSSP) Background Paper No. NSSP 003, September.
- Okpara, G. C. (2010). Microfinance Banks and Poverty Alleviation in Nigeria. *Journal of Sustainable Development in Africa*, 19(6), 177-191.
- Roslan, A., & AbdKarim, M. Z. (2009). Determinants of Microcredit Repayment in Malaysia: The Case of Agrobank. *Humanity and Social Sciences Journal*, 4(1), 45-52.
- Smith, N. (2010). Economic inequality and poverty: where do we go from here? *International Journal of Sociology and Social Policy*, 30(3/4), 127-139. <http://dx.doi.org/10.1108/01443331011033328>
- Ssewamala, F. M., Sperber, E., Zimmerman, J. M., & Karimli, L. (2010). The potential of asset-based development strategies for poverty alleviation in Sub-Saharan Africa. *International Journal of Social Welfare*, 19(4), 433-443. <http://dx.doi.org/10.1111/j.1468-2397.2010.00738.x>
- Tang, S., & Bhatt, N. (2002). Determinants of Repayment in Microcredit: Evidence from Programmes in the United States. *International Journal of Urban and Regional Research*, 26(2), 360-376. <http://dx.doi.org/10.1111/1468-2427.00384>
- Taylor, J. G., & Xiaoyun, L. (2012). China's Changing Poverty: A Middle Income Country Case Study. *Journal of International Development*, 24, 696-713. <http://dx.doi.org/10.1002/jid.2862>
- Todaro, P. T., & Smith, S. C. (2011). *Economic Development*. England: Pearson.
- Yang, B., Jialali, P., & Wei, X. (2011). Microfinance in China's Poor Area and Its Impact to Loan Type - Evidence from Xinjiang Uygur Autonomous Region. *2011 Fourth International Conference on Business Intelligence and Financial Engineering*, 486-490. <http://dx.doi.org/10.1109/BIFE.2011.82>
- Yusuf, M. B. O., Shirazi, N. S., & MatGhani, G. (2013). The impact of Pakistan Poverty Alleviation Fund on Poverty in Pakistan: an empirical analysis. *Middle-East Journal of Scientific Research*, 13(10), 1335-1344.

Copyright

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Low Self-Control, Peer Delinquency and Aggression among Adolescents in Malaysia

Pit-Wan Pung¹, Siti Nor Yaacob², Rozumah Baharudin² & Syuhaily Osman¹

¹ Faculty of Human Ecology, Universiti Putra Malaysia, Serdang, Malaysia

² Family, Adolescent and Child Research Centre of Excellence, Universiti Putra Malaysia, Serdang, Malaysia

Correspondence: Pit-Wan Pung, Faculty of Human Ecology, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia. Tel: 60-17-613-6606. E-mail: carinepung@hotmail.com

Received: April 16, 2015 Accepted: May 7, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p193

URL: <http://dx.doi.org/10.5539/ass.v11n21p193>

Abstract

The purpose of this study was to examine the relationships between low self-control, peer delinquency and aggression among adolescents. This cross-sectional study was conducted in Selangor, Malaysia among 413 adolescents. The participants were selected from 12 secondary schools by using Multistage Cluster Sampling Technique. Self-Control Scale (Grasmick, Tittle, Bursik, & Arneklev, 1993), The Peer Delinquency Scale (Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998) and Aggression Questionnaire (Buss & Perry, 1992) were used to examine the relationships between adolescents' low self-control, peer delinquency, and aggression. Results showed that there were significant positive relationships between low self-control, peer delinquency and aggression among adolescents. The result also indicated that low self-control has an indirect effect on aggression through peer delinquency. Peer delinquency served as a partial mediator. Low self-control and peer delinquency are important factors in the development of aggression among adolescents.

Keywords: low self-control, peer delinquency, aggression, adolescents

1. Introduction

Aggression can be defined as any action that intends to harm or injure another living being who intends to avoid such treatment (Shaffer, 2005). Aggression among adolescents is seen as a serious social problem in many societies and it has gained the attention of those in the field of mental health, prevention experts, media and school authorities. Most of the aggression cases occur in school setting (Chapman, 2010; Sagayam & Wong, 2010; Veera Pandiyan, 2010). The instances of aggression among adolescents include bullying, spreading rumours, hitting and hurting (Michaud, 2009; Sullivan, Farrell, & Kliewer, 2006; Gottfredson & Hirschi, 1990).

Social Welfare Department of Malaysia (2013) reported that the number of crimes involving juveniles has increased 30.8% throughout 2009 to 2013. These figures may indicate that adolescents are becoming more aggressive. Among the crimes committed include possession of weapons, flouting traffic rules, truancy, being involved in criminal activities related to the property of others, gambling, substance abuse, and trespassing prohibited areas.

Past studies (Proctor, 2006; Moretti, Obsuth, Odgers, & Reebye, 2006; Sheehan & Watson, 2008) had explored the negative impacts of aggression. Aggression among adolescents might lead to serious negative consequences both to the victims and the aggressors. The victims might experience social rejection as peers might refrain from interacting with them to avoid being threatened by the aggressors. In addition, the victims may develop psychological and personality disorder, experience physical injury and death, show poor academic performance and have bleak future career (Chee-Leong, 2006). Majority of the aggressors are also involved in vandalism, smoking, drinking and fighting (Olweus, 1993 as cited in Chee-Leong, 2006) which clearly violate school rules and regulations, resulting in the aggressors being terminated from school.

Self-control plays a crucial role in influencing the behaviours of adolescents. Past studies (Winstok, 2009; Stuart, 2005; Ezinga, Weerman, Westenberg & Bijleveld, 2008; Kim, Namkoong, Ku, & Kim, 2008) found that low level of self-control among adolescents was linked to aggressive behaviour. According to Arneklev, Grasmick, Title and Bursik (1993), people with low level of self-control tend to be impulsive, seek risky activities, and self-centred. Self-control theory claims that low self-control people have characteristics such as impulsive, show

temper, prefer simpler tasks, engage in risky activities, and are self-centred. These characteristics may lead to involvement in aggression. Conversely, having a high self-control is seen to reduce the probability for adolescents to act aggressively (Gottfredson & Hirschi, 1990). In short, self-control serves as a mechanism that inhibits formation of negative behaviour as it assists adolescents to resist temptations (Ezinga, Weerman, Westenberg & Bijleveld, 2008).

The function and importance of peer group are crucial throughout the adolescence period (Harris, 2000; Espelage, 2010). Peers become important for adolescents in terms of socializing with the world outside home (Harris, 2000). Adolescents who experience peer delinquency may behave in an aggressive way (Espelage, Holt, & Henkel, 2003; Padilla-Walker & Bean, 2009; Faris & Ennett, 2012). This is because they tend to behave similar to their delinquent peers in order to gain acceptance and appreciation from them (Eldeleklioglu, 2007). Peer delinquency was also noted to have a major impact on the development of adolescents (Deptula & Cohen, 2004) as it increases the production of aggressive solutions among adolescents. Adolescents learn to value aggressive solutions positively and they will behave aggressively.

Previous studies found that peer delinquency significantly contributed to adolescents' aggression and peer delinquency is generated by the low self-control. According to Chapper (2005), the role of peer delinquency as a mediator on the relationship between self-control and aggression illustrates that self-control influence adolescents' aggression through peer delinquency. According to the Gottfredson and Hirschi's Self-Control Theory (1990), adolescents with low self-control tend to be more associated with delinquent peers. This is because they are less able to build-up a stable relationship with friends and therefore, they choose to befriend with each other. According to Olson and Hoza (1993), adolescents who have low self-control may have higher chances to experience peer rejection and in turn, they are more likely to associate with the negative peers. Undoubtedly, association with delinquent peers causes adolescents to behave in a negative way such as becoming aggressive (Longshore, Chang, Hsieh, & Messina, 2004).

Based on this brief overview, this study examined the relationships between low self-control, peer delinquency and aggression among adolescents. In addition, this study examined the mediating role of peer delinquency on the relationship between low self-control and aggression.

2. Literature Reviews

2.1 Self-Control and Aggression

According to Buker (2011), self-control is treated as a crucial concept in explaining people's behaviour. Baumeister, Heatherton, and Tice (1994) defined self-control as an ability to override and inhibit the undesirable impulse, regulate negative thoughts, emotions and behaviours. Self-control is a conscious effort that could inhibit people from behaving in unacceptable manner (Muraven & Baumeister, 2000; Eisenberg, Zhou, Spinrad, Valiente, Fabes, & Liew, 2005; Tangney, Baumeister, & Boone, 2004). According to Gyurak and Ayduk (2008), individual with high level of self-control could postpone the urge to gain immediate satisfaction and lower the chance to engage in aggressive behaviour.

Gottfredson and Hirschi (1990) claimed that self-control serves as a vital role in the development of negative behaviour among adolescents such as aggression and criminal behaviour. Accordingly, those with low level of self-control have high tendency to behave impulsively and therefore, they are easily engaged in negative behaviour. They are self-centred and prefer simple task. These characteristics may push adolescents toward negative behaviour.

A study of Cheung and Cheung (2008) reported that self-control significantly linked with aggression. Ezinga, Weerman, Westenberg and Bijleveld (2008) aimed to determine the link between self-control (temper, impulsive and adventure) and adolescents' problem behaviours (bullying, finding, and vandalising). The findings revealed that there were significant positive relationships between temper, impulsiveness and adventure with adolescents' problem behaviours. A study conducted in 2010 by Archer, Ferna-Fuertes and Thanzami to examine the correlation between self-control and physical aggression among Indian men revealed that those with high self-control reported lower level of aggression.

Winstok (2009) conducted a study to examine the influence of different types of self-control (adolescents' self-control, urge to control others) on different types of aggression (reactive and proactive aggression). The findings of the study revealed that adolescents with high self-control possessed low level of reactive aggression and adolescents with high level of the need to control others possessed high level of proactive aggression. Denson, Capper, Oaten, Friese and Schofield (2011) conducted a study to examine whether a self-control training session could help adolescents decrease their involvement in aggressive activities. The results revealed

that adolescents who participated in the training session reported lower level of aggression compared to the other participants who were not involved in the training.

2.2 Peer Delinquency and Aggression

According to Steketee (2012), high association with delinquent peers is significantly linked to problem behaviour. The problem behaviours include aggressive behaviour, robbery, dishonesty, and crime (West & Farrington, 1977). Peer delinquent influences aggression among adolescents can be explained through peer pressure (Pardini, Loeber, & Stouthamer-Loeber, 2005; Eldeleklioglu, 2007; Padilla-Walker & Bean, 2009).

Phaik-Gaik, Maria Chong, Habibah and Jegak (2010) found that peer factor significantly influenced antisocial behaviour of adolescents. This study utilized Hirschi's Control Theory to explain how peer factor influences adolescents' antisocial behaviour. During the transition period, adolescents tend to seek social and emotional supports from their peers. Thus, high association with delinquent peers encouraged adolescents to engage in aggressive behaviour. They internalize the negative belief system and attitudes of delinquent peers.

A longitudinal study was conducted by Simons-Morton, Hartos and Haynie (2004) to examine the link between peer delinquency and aggression among adolescents. The findings showed that Time 1 delinquent peers were significantly correlated with Time 1 aggression. In addition, contact with delinquent peers at Time 1 was associated with aggression at Time 2. The result also showed that peer delinquency at time 2 was linked with aggression at Time 2. The findings indicated that association with delinquent peers significantly influence adolescents' aggression.

According to Platje, Vermeiren, Raine, Doreleijers, Keijsers, Branje, Popma, Van Lier, Koot, Meeus and Jansen (2013), peer delinquency is significantly correlated with adolescents' aggression. The result showed that both of the rule-breaking and aggressive peers had significant correlations with adolescents' aggression.

2.3 Peer Delinquency as a Mediator

Chapple (2005) examined the indirect effect of self-control on delinquency through the mediator of peer delinquency. In this study, adolescents' delinquency was measured by combining two components which were violence and property crime. The result reported that adolescents' self-control contributed to peer delinquency affiliation. The study also found that low self-control and peer delinquency significantly contributed to adolescents' delinquency. In addition, the study also noted a partial mediation of peer delinquency on the relationship between self-control and delinquency among adolescents. The study by Chapple (2005) utilized a general theory of crime (Gottfredson & Hirschi, 1990) to explain how low self-control influences adolescents' association with delinquent peers. This theory claims that children and adolescents with low self-control have difficulties in building healthy friendships. Thus, they tend to find the similar peers with low self-control as their companion.

A study conducted by McGloin and Shermer (2009) aimed to examine the relationships between self-control, peer delinquency, and delinquency among adolescents. In this study, delinquent behaviour was measured by 13 deviant activities which include damage property, run away from home, weapon used and involved in group fight. The findings showed that peer delinquency and self-control independently contributed to delinquency among adolescents. In this study, low self-control was found to have impact on peer delinquency. In addition, this study revealed an important finding that low self-control has indirect influence on adolescents' delinquency through peer delinquency.

Longshore, Chang, Hsieh and Messina (2004) found that adolescents' peer selection was related to self-control, and low self-control has indirect influence on adolescents' deviant behaviour through the deviant peers. In the study of Pulkkinen, Lyyra, and Kokko (2011), the findings showed that high self-control capability positively influences adolescents' social relationship and aggression. Moreover, the result showed that the relationship between high self-control and aggression was partially mediated by positive social relationship. This may indicate that people with high self-control tend to establish positive relationship with others and in turn, they have less involvement in aggressive behaviour. People who have positive social bonding may be less involve in negative behaviours as they do not want to disappoint others.

3. Methods

3.1 Design and the Subjects of the Study

Correlational research design was utilised in the present study. Structured questions and standardized instruments were used to collect data. The subjects of this study were 413 school-going adolescents aged between 13 and 17 years old in Selangor, Malaysia. The subjects consisted of 186 (45%) males and 227 (55%)

females adolescents. Multistage cluster sampling technique was utilised in this study. This technique has several steps. Step 1) State of Selangor was divided into three zones (North, Centre, and South). Each of these three zones has few districts. 2) Only one district was randomly selected in each zone. The three selected districts were Hulu Selangor, Petaling Utama, and Hulu Langat. 3) From the district, four secondary schools were randomly selected from each district. 4) Only one form was selected from each school. 5) The last step was to randomly select one class from one form. All of the students in the selected class participated in the present study.

3.2 Instrument

3.2.1 Aggression

Aggression among adolescents was measured by The Aggression Questionnaire developed by Buss and Perry (1992). This questionnaire consists of four subscales with a total of 29 items, rated by a 5-point scale (1=strongly disagree, 2=disagree, 3=somewhere agree and disagree, 4=agree, and 5=strongly agree). The four subscales are physical aggression, verbal aggression, anger, and hostility. There were two reversed score items. Scores for items were combined to represent aggression scores. The scale score ranged from 29 to 125. The high scores on aggression questionnaire indicate high aggression among adolescents. In this study, the reliability of this questionnaire was 0.87.

3.2.2 Low Self-Control

Self-control among adolescents was measured by Self-Control Scale which was developed by Grasmick, Tittle, Bursik and Arneklev (1993). This scale has six components with a total of 24 items and rated with a 4-point likert type scale (4=strongly agree, 3=agree somewhat, 2=disagree somewhat, 1=strongly disagree). The six components are impulsivity, simple task, risk-seeking, physical activities, self-centered and temper. The score for low self-control was calculated by summing up the scores for the 24 items. The total scale score ranged from 24 to 96. High scores reported on this scale indicate low level of self-control among adolescents. The Cronbach alpha for this scale in the present study was 0.76.

3.2.3 Peer Delinquency

Peer delinquency was measured by Peer Delinquency Scale (PDS) developed by Loeber, Farrington, Stouthamer-Loeber, and Van Kammen (1998). This scale comprised of two components which are delinquency and substance abuse. The present study combined these two components to represent the general scale of peer delinquency. The scale has 15 items and each item can be rated by a 5-point likert type scale (4=all of them, 3=most of them, 2=half of them, 1= few of them, 0=none of them). The score for peer delinquency was calculated by summing up the scores for the 15 items. The total scale score ranged from 0 to 60. High scores on peer delinquency indicate high affiliation with delinquent peers among adolescents. The reliability for PDS in the present study was 0.88.

3.3 Data Analysis

SPSS version 16 was used to analyse data in this study. Descriptive statistic was conducted to analyse respondents' background information. Pearson correlation test was conducted to study the relationships between low self-control, peer delinquency and aggression. A series of simple linear regression was used to test the mediating role of peer delinquency on the relationship between low self-control and aggression.

4. Results

4.1 Personal Background of Respondents

Table 1 presents the personal background information of respondents which include gender, ethnic, and age. There were 186 (45%) male and 227 (55%) female adolescents participated in this study. More than half (59.6%) of the respondents were Malays, followed by Chinese (25.9%) and Indian (13.1%). The mean age of respondents was 14.97 (S.D=1.04) and ranged from 13-17 years old.

4.2 Low Self-Control, Peer Delinquency and Aggression

Table 2 displays the correlational results for adolescents' low self-control, peer delinquency and aggression. The result showed that there was a significant positive relationship between low self-control ($r = .530, p \leq .001$) and peer delinquency ($r = .216, p \leq .001$) with aggression. This indicated that adolescents with low self-control tend to be more aggressive. Similarly, those who reported higher affiliation with delinquent peers had higher aggression scores. The result also revealed that there was a significant positive relationship of low self-control with adolescents' peer delinquency ($r = .229, p \leq .001$). The finding implies that adolescents who possessed lower self-control had higher affiliation with delinquent peers.

4.3 Peer Delinquency as a Mediator

Multiple regression analysis was carried out to examine the effect of low self-control on aggression through the mediator of peer delinquency. Then, Sobel test was conducted to confirm the mediating effect of peer delinquency on the relationship. According to Baron and Kenny (1986), few steps must be established before conducting the mediation analysis. The steps are (1) Independent variable (IV) has significant relationship with dependent variable (DV), (2) IV has significantly relationship with mediator, (3) Mediator has significant relationship with DV, (4) Both IV and mediator serves as predictors of the DV. These steps were clearly displayed in Table 3.

Table 1. Personal background information of respondents

Variable	n	%
Gender		
Male	186	45
Female	227	55
Ethnic		
Malay	246	59.6
Chinese	107	25.9
Indian	54	13.1
Other	6	1.5
Age		
13	12	2.9
14	190	46
15	9	2.2
16	201	48.7
17	1	0.2
<i>Mean =14.97</i>		
<i>S.D =1.04</i>		
<i>Minimum =13</i>		
<i>Maximum =17</i>		

Note: S.D = Standard Deviation

Multiple regression analysis showed that the low self-control (Beta= .530, SE=.078, $t= 12.664$, $p\leq .001$) and peer delinquency (Beta = .120, SE=1.704, $t= 2.830$, $p\leq .01$) independently predicted aggression. Low self-control also significantly predicted peer delinquency (Beta = .216, SE=.002, $t= 4.478$, $p\leq .001$) (Table 3). Step 4 showed that the beta value for low self-control on aggression (c') after controlling peer delinquency become weaker yet remain significant (Beta = .504, SE=.079, $t= 11.860$, $p\leq .001$). This indicated that both of the low self-control and peer delinquency predicted adolescents' aggression. The result also implied that peer delinquency partially mediated the relationship between low self-control and aggression.

There was $0.216 \times 0.120 = 0.026$ indirect size effect found in this mediation result. This implies that aggression is expected to increase by 0.026 units for every one-unit increase in low self-control via peer delinquency. Sobel test supported the partial mediation effect of peer delinquency on this relationship ($z=2.462$, $p\leq .01$).

Table 2. Relationships between low self-control, peer delinquency and aggression

	r	
	Aggression	Peer Delinquency
Low Self-Control	.530***	.229***
Peer Delinquency	.216***	

Note. *** $p\leq .001$

5. Discussion and Conclusion

The finding of this study found that low self-control was significantly correlated with aggression among adolescents. The finding is consistent with the previous studies (Gottfredson & Hirschi, 1990; Pratt & Cullen, 2000; Yarbrough, Jones, Sullivan, Sellers, & Cochran, 2012). According to Kemp, Vermulst, Finkenauer, Scholte, Overbeek, Rommes, and Engels (2009), low self-control has consistent association with aggression

among adolescents. This finding was supported by the self-control theory (Gottfredson & Hirschi, 1990). This is because adolescents possess the characteristics (simple tasks preference, seek risky activity, prefer physical tasks, and self-centred, impulsive) that prevent them from delaying immediate gratification. A high self-control individual tends to have the strength of inhibition that prevents them from behaving aggressively (Denson, Wall, & Finkel, 2012).

Table 3. Mediation analysis

Step	IV	DV	B	S.E	Beta	t
1	Low Self-Control	Aggression	0.984	0.078	0.530***	12.664
2	Low Self-Control	Peer Delinquency	0.010	0.002	0.216***	4.478
3	Peer Delinquency	Aggression	9.178	1.925	0.229***	4.767
4	Low Self-Control	Aggression	0.936	0.079	0.504***	11.860
	Peer Delinquency	Aggression	4.820	1.704	0.120**	2.830

Note: B= Unstandardized coefficient; Beta= Standardized coefficient

** $p \leq .01$; *** $p \leq .001$

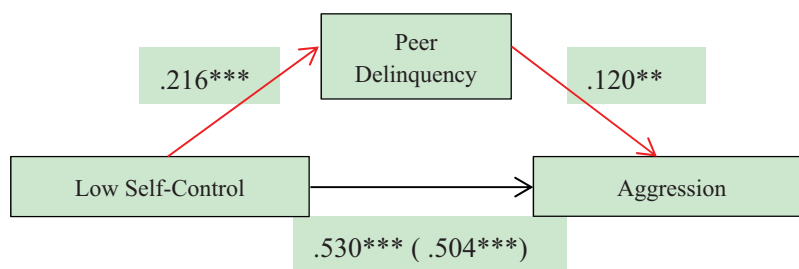


Figure 1. Mediation Model

Peer delinquency had significant correlation with aggression among adolescents. This finding is consistent with the past study of Benson, Tech and Buehler (2012) which found that association with delinquent peer is linked to aggression among adolescents. Association with delinquent peer might cause adolescents to value the negative belief system and eventually involve in behaviour unacceptable by the society (Brechwald & Prinstein, 2011; Brauer & Coster, 2015). According to the previous studies (Miller, 2010; Steinberg & Monahan, 2007; Regnerus, 2002), high peer delinquency will lead to aggressive behaviour because adolescents will act in similar ways to their delinquent peer. These adolescents may experience peer pressure. Peer influence is characterized by the effect of peer-adolescent socialization (Brechwald & Prinstein, 2011). This view is supported by the Bandura's social learning theory (1986) which suggests that adolescents adopt aggressive behaviours via modelling, social reward and reinforcement from peers. The identity-based theories proposed that adolescents tend to have affiliation with the delinquent peers who have high status. In the process of crystalizing their identity, adolescents might learn to act in similar behaviour as the delinquent peers (Brechwald & Prinstein, 2011).

According to Baron (2003), the main cause of people's negative problem and social relationship was due to low self-control. The result of correlation analysis in the present study revealed that adolescents' low self-control significantly correlated with peer delinquency. This finding is supported by the past study conducted by McGloin and Shermer (2009) and Hay, Meldrum and Piquero (2013) which found that adolescents' low self-control significantly predicted their peer delinquency experiences. Adolescents with high self-control tend to select peers with similar level of self-control and this friendship is more stable compared to those who adopted low level of self-control (Gottfredson & Hirschi, 1990).

Self-control theory proposed that the main contributor of people negative behaviour was low self-control. However, other researchers argued that peer factor has similar influence as self-control to the people's negative behaviour (McGloin & Shermer, 2009). In the study of McGloin and Shermer (2009), it was found that self-control and peer delinquency predicted respondents' delinquency which included aggression activities. Besides, it also revealed that self-control has indirect influence on delinquency through peer delinquency. This indicated that adolescents with low self-control tend to have higher association with delinquent peers and in turn adopted delinquent behaviour. This finding is also supported by Boman and Gibson (2011). The study of Chapple (2015) found that peer delinquency was a partial mediator between self-control and delinquency. Adolescents who are less able to control themselves will choose the similar peer groups.

The findings of this study demonstrate that low self-control and peer influence are correlated with aggression among adolescents. A conclusion can be made that peer delinquency serves as a mediating variable in explaining how low self-control influence on aggression among adolescents. As discussed earlier, aggression may bring negative consequences on adolescents' various aspects of development. Therefore, the understanding of parents, teachers and community on the causes of aggression become important as it helps to prevent adolescents from engaging in aggressive behaviour. In school, teachers can assist adolescents to identify aggressive behaviour and peer delinquency. Since self-control is treated as a vital factor in adolescents' aggression, school authority is advised to provide better school environment in order to enhance the self-control ability among adolescents. In sum, aggression is treated as a social problem. Therefore, the effective prevention and intervention programme for adolescents' aggression such as counselling, workshops, seminars, and conferences may be implemented to reduce the possibility of adolescents to involve in aggression activities. These prevention and intervention programmes help adolescents to improve their coping skill while facing negative conditions. Besides, the capability of adolescents to regulate their negative emotions and affection will be strengthened and thus prevent them from engaging in aggressive behaviour.

References

- Baron, S. W. (2003). Self-control, social consequences, and criminal behavior: Street youth and the general theory of crime. *Journal of Research in Crime and Delinquency*, 40(4), 403-425. <http://dx.doi.org/10.1177/0022427803256071>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). *Losing control: How and why people fail at self-regulation*. San Diego: Academic.
- Benson, M. J., Tech, V., & Buehler, C. (2012). Family process and peer deviance influences on adolescent aggression: Longitudinal effects across early and middle adolescence. *Child Development*, 83(4), 1213-1228. <http://dx.doi.org/10.1111/j.1467-8624.2012.01763.x>
- Boman, J. H., & Gibson, C. L. (2011). Does the measurement of peer deviance change the relationship between self-control and deviant behavior? An analysis of friendship pairs. *Journal of Criminal Justice*, 39, 521-530. <http://dx.doi.org/10.1016/j.jcrimjus.2011.10.001>
- Brauer, J. R., & Coster, S. D. (2015). Social relationships and delinquency: Revisiting parent and peer influenceduring adolescence. *Youth & Society*, 47(3), 374-394. <http://dx.doi.org/10.1177/0044118X12467655>
- Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence processes. *Journal of Research on Adolescence*, 21(1), 166-179. <http://dx.doi.org/10.1111/j.1532-7795.2010.00721.x>
- Buker, H. (2011). Formation of self-control: Gottfredson and Hirschi's general theory of crime and beyond. *Aggressive behaviour and Violent Behaviour*, 16, 265-276. <http://dx.doi.org/10.1016/j.avb.2011.03.005>
- Buss, A. H., & Perry, M. (1992). The aggression questionnaire. *Journal of Personality and Psychology*, 63(3), 452-459. <http://dx.doi.org/10.1037/0022-3514.63.3.452>
- Chapple, C. L. (2005). Self-control, peer relations, and delinquency. *Justice Quarterly*, 22(1), 89-106. <http://dx.doi.org/10.1080/0741882042000333654>
- Chapman, K. (2010, May 25). Probe on Rawang school with schoolboy gang. *The Star*. Retrieved from <http://thestar.com.my/news/story.asp?file=/2010/5/25/nation/20100525155802&sec=nation>
- Chee-Leong, G. (2006). *The psychosocial impact of violence against children*. Retrieved from http://www.unicef.org/malaysia/2006.10.19_-_VAC_Msia_Speech_by_Dr_Goh_Chee_Leong.pdf
- Denson, T. F., Capper, M. M., Oaten, M., Friese, M., & Schofield, T. P. (2011). Self-control training decreases aggression in response to provocation in aggressive individuals. *Journal of Research in Personality*, 45, 252-256. <http://dx.doi.org/10.1016/j.jrp.2011.02.001>
- Denson, T. F., Wall, C. N., & Finkel, E. J. (2012). Self-control and aggression. *Current Directions in Psychological Science*, 21(1), 20-25. <http://dx.doi.org/10.1177/0963721411429451>
- Deptula, D. P., & Cohen, R. (2004). Aggressive, rejected, and delinquent children and adolescents: A comparison

- of their friendships. *Aggression and Violent Behaviour*, 9, 75-104. [http://dx.doi.org/10.1016/S1359-1789\(02\)00117-9](http://dx.doi.org/10.1016/S1359-1789(02)00117-9)
- Eldeleklioglu, J. (2007). The relationships between aggressiveness, peer pressure and parental attitudes among Turkish high school students. *Social Behaviour and Personality*, 35(7), 975-986. <http://10.2224/sbp.2007.35.7.975>
- Eisenberg, N., Zhou, Q., Spinrad, T. L., Valiente, C., Fabes, R. A., & Liew, J. (2005). Relations among positive parenting, children's effortful control, and externalizing problems: A three-wave longitudinal study. *Child Development*, 76(5), 1055-1071. <http://dx.doi.org/10.1111/j.1467-8624.2005.00897.x>
- Espelage, D. L. (2010). *Bullying in early adolescence: The role of peer group*. Retrieved from <http://www.athealth.com/Consumer/disorders/bullying.html>
- Espelage, D. L., Holt, M. K., & Henkel, R.R. (2003). Examination of peer-group contextual effects on aggressive behaviour during early adolescence. *Child development*, 74(1), 205-220. <http://dx.doi.org/10.1111/1467-8624.00531>
- Ezinga, M. A. J., Weerman, F. M., Westenberg, P. M., & Bijleveld, C. C. J. H. (2008). Early adolescence and delinquency: Levels of psychosocial development and self-control as an explanation of misbehaviour and delinquency. *Psychology, Crime & Law*, 14(4), 339-356. <http://dx.doi.org/10.1080/10683160701770070>
- Faris, R., & Ennett, S. (2012). Adolescent aggression: The role of peer group status motives, peer aggression, and group characteristics. *Social Networks*, 34, 371-378. <http://dx.doi.org/10.1016/j.socnet.2010.06.003>
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. California: Stanford University Press.
- Grasmick, H. G., Title, C. R., Bursik, R. J., & Ameklev, B. J. (1993). Testing the core empirical implications of Gottfredson and Hirschi's General Theory of Crime. *Journal of Research in Crime and Delinquency*, 30, 5-29. <http://dx.doi.org/10.1177/0022427893030001002>
- Harris, J. R. (2000). Socialization, personality development, and the child's environment: A comment on Vendell (2000). *Developmental Psychology*, 36, 711-723. Retrieved from <http://judithrichharris.info/tna/devps yjh.htm>
- Hay, C., Meldrum, R. C., & Piquero, A. R. (2013). Negative cases in the nexus between self-control, social bonds, and delinquency. *Youth Violence and Juvenile Justice*, 11(1), 3-25. <http://dx.doi.org/10.1177/1541204012447959>
- Kemp, R. A. T., Vermulst, A. A., Finkenauer, C., Scholte, R. H. J., Overbeek, G., Rommes, E. W. M., & Engels, R. C. M. E. (2009). Self-control and early adolescent antisocial behaviour. *Journal of Early Adolescence*, 29(4), 497-517. <http://dx.doi.org/10.1177/0272431608324474>
- Kim, E. J., Namkoong, K., Ku, T., & Kim, S. J. (2008). The relationship between online game addiction and aggression, self-control and narcissistic personality traits. *European Psychiatry*, 23, 212-218. <http://dx.doi.org/10.1016/j.eurpsy.2007.10.010>
- Loeber, R., Farrington, D. P., Stouthamer-Loeber, M., & Van Kammen, W. B. (1998). *Antisocial behaviour and mental health problems: Explanatory factors in childhood and adolescence*. Mahwah, NJ: Lawrence Erlbaum.
- Longshore, D., Chang, E., Hsieh, S. C., & Messina, N., (2004). Self-control and social bonds: A combined control perspective on deviance. *Crime & Delinquency*, 50(4), 542-564. <http://dx.doi.org/10.1177/0011128703260684>
- McGloin, J. M., & Shermer, L. O. N (2009). Self-control and deviant peer network structure. *Journal of Research in Crime and Delinquency*, 46(1), 35-72. <http://dx.doi.org/10.1177/0022427808326585>
- Michaud, P. A. (2009). Bullying: We need to increase our efforts and broaden our focus. *Journal of Adolescent Health*, 45, 323-325. <http://dx.doi.org/10.1016/j.jadohealth.2009.07.006>
- Miller, H. V. (2010). If your friends jumped off of a bridge, would you do it too?: Delinquent peers and susceptibility to peer influence. *Justice Quarterly*, 27, 473-491. <http://dx.doi.org/10.1080/07418820903218974>
- Moretti, M. M., Obsuth, I., Odgers, C. L., & Reebye, P. (2006). Exposure to maternal vs. paternal partner violence, PTSD, and aggressive behaviour in adolescent girls and boys. *Aggressive Behaviour*, 32, 385-395. <http://dx.doi.org/10.1002/ab.20137>

- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126(2), 247-259. <http://dx.doi.org/10.1037//0033-2909.126.2.24>
- Olson, S. L., & Hoza, B. (1993). Preschool developmental antecedents of conduct problems in children beginning school. *Journal of Clinical Child Psychology*, 22, 60-67. http://dx.doi.org/10.1207/s15374424jccp2201_6
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Malden, MA: Blackwell Publishing
- Padilla-Walker, L. M., & Bean, R. A. (2009). Negative and positive peer influence: Relations to positive and negative behaviours for African American, European American, and Hispanic adolescents. *Journal of Adolescence*, 32, 323-337. <http://dx.doi.org/10.1016/j.adolescence.2008.02.003>
- Pardini, D. A., Loeber, R., & Stouthamer-Loeber, M. (2005). Developmental shifts in parent and peer influences on boys' beliefs about delinquent behavior. *Journal of Research on Adolescence*, 15(3), 299-323. <http://dx.doi.org/10.1111/j.1532-7795.2005.00098.x>
- Phaik-Gaika, L., Maria Chong, A., Habibah, E., & Jegak, U. (2010). Development of antisocial behaviour. *Procedia Social and Behavioural Sciences*, 7(C), 383-388. <http://dx.doi.org/10.1016/j.sbspro.2010.10.52>
- Platje, E., Vermeiren, R. R. J. M., Raine, A., Doreleijers, T. A. H., Keijsers, L. G. M. T., Branje, S. J. T., ... Jansen, L. M. C. (2013). A longitudinal biosocial study of cortisol and peer influence on the development of adolescent antisocial behaviour. *Psychoneuroendocrinology*, 38, 2770-2779. <http://dx.doi.org/10.1016/j.psyneuen.2013.07.006>
- Pratt, T. C., & Cullen, F. T. (2000). The empirical status of Gottfredson and Hirschi's general theory of crime: a meta-analysis. *Criminology*, 38, 931-964. <http://dx.doi.org/10.1111/j.1745-9125.2000.tb00911.x>
- Proctor, L. J. (2006). Children growing up in a violent community: The role of family. *Aggressive Behaviour and Violent Behaviour*, 11, 558-576. <http://dx.doi.org/10.1016/j.avb.2005.12.004>
- Pulkkinen, L., Lyyra, A. L., & Kokko, K. (2011). Is social capital a mediator between self-control and psychological and social functioning across 34 years? *International Journal of Behavioral Development*, 35(6), 475-481. <http://dx.doi.org/10.1177/0165025411422993>
- Regnerus, M. D. (2002). Friends' influence on adolescent theft and minor delinquency: A developmental test of peer-reported effects. *Social Science Research*, 31(4), 681-705. [http://dx.doi.org/10.1016/S0049-089X\(02\)00010-8](http://dx.doi.org/10.1016/S0049-089X(02)00010-8)
- Sagayam, A., & Wong, P. M. (2010, May 25). School gangs make it hell for all. *The Star*. Retrieved from <http://thestar.com.my/news/story.asp?file=/2010/5/25/starprobe/6332643&sec=starprobe>
- Shaffer, D. R. (2005). *Social and personality development* (5th ed.). CA: Thomson Wadsworth.
- Sheehan, M. J., & Watson, M. W. (2008). Reciprocal influence between maternal discipline technique and aggressive behaviour in children and adolescents. *Aggressive Behaviour*, 34, 245-255. <http://dx.doi.org/10.1002/ab.20241>
- Simons-Morton, B. G., Hartos, J. L., & Haynie, D. L. (2004). Prospective analysis of peer and parent influences on minor aggressive behaviour among early adolescents. *Health Education and Behaviour*, 31(1), 22-33. <http://dx.doi.org/10.1177/1090198103258850>
- Steketee, M. (2011). The lifestyles of youth and their peers. In J. Junger-Tas, I. H. Marshall, D. Enzmann, M. Killias, & B. Gruszczynska (Eds.), *The many faces of youth crime: Contrasting theoretical perspectives on juvenile delinquency across countries and cultures* (pp. 237-255). Utrecht, The Netherlands: Springer. Retrieved from <http://www.generalfiles.biz/download/gS4d1a7bf1h32i0/Chapter%209%20%20The%20Lifestyles%20of%20Youth%20and%20Their%20Peers.pdf.html>
- Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology*, 43, 1531-1543. <http://dx.doi.org/10.1037/0012-1649.43.6.1531>
- Stuart, G. L., & Holtzworth-Munroe, A. (2005). Testing a theoretical model of the relationship between impulsivity, mediating variables, and husband violence. *Journal of Family Violence*, 20, 291-303. <http://dx.doi.org/10.1007/s10896-005-6605-6>
- Sullivan, T. N., Farrell, A. D., & Kliwer, W. (2006). Peer victimization in early adolescence: Association between physical and relational victimization and drug use, aggressive behaviour, and delinquent behaviours among urban middle school students. *Development and Psychopathology*, 18, 119-137.

<http://dx.doi.org/10.10170/S095457940606007X>

- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality, 72*(2), 271-324. <http://dx.doi.org/10.1111/j.0022-3506.2004.00263.x>
- Yarbrough, A., Jones, S., Sullivan, C., Sellers, C., & Cochran, J. (2012). Social learning and self-control: assessing the moderating potential of criminal propensity. *International Journal of Offender Therapy and Comparative Criminology, 56*(2), 191-202. <http://dx.doi.org/10.1177/0306624X10396041>
- West, D. J., & Farrington, D. P. (1977). *The delinquent way of life*. London: Heinemann
- Winstok, Z. (2009). From self-control capabilities and the need to control others to proactive and reactive aggressive behaviour among adolescents. *Journal of Adolescence, 32*, 455-466. <http://dx.doi.org/1016/j.adolescence.2008.08.006>
- Veera Pandiyan, M. (2010, July 1). Get tough on bullies. *The Star*. Retrieved from <http://thestar.com.my/news/story.asp?file=/2010/7/1/focus/6580958&sec=focus>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Marital Decline in the Asian North of Russia and Generational Transition of Family Values

Anastasia S. Barashkova¹ & Svetlana A. Sukneva¹

¹ Scientific Research Institute of Regional Economy of the North, M.K. Ammosov North-Eastern Federal University, Yakutsk, Russian Federation

Corresponding author: Svetlana A. Sukneva, Scientific Research Institute of Regional Economy of the North, North-Eastern Federal University M.K. Ammosov, 2 Petrovskogo St., Yakutsk, Russian Federation. Tel: 74-11-235-1108. E-mail: sukneva@mail.ru

Received: April 19, 2015 Accepted: May 4, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p203

URL: <http://dx.doi.org/10.5539/ass.v11n21p203>

Abstract

The article discusses some questions of marital behavior of the population in the Asian North of the Russian Federation with the Republic of Sakha (Yakutia) as an example. This region is scarcely populated, yet it is the largest in the country by the occupied territory. The analysis of marital behavior revealed that on the background of some decrease in the number of marriages in the 1990s and marriage market decline, the number of divorces was growing. The attitude of the population towards the main circumstances of organizing one's private life in a marriage is shown on the materials of a sociological and demographic survey. The authors reveal the differences in the views of representatives of different generations on marriage, its forms, marriage union basic principles, causes of conflicts in a marriage and divorces. Regardless of the marital status or presence of children, there is general agreement between the respondents that a conflict situation in a marriage is caused by a complex of reasons, the impact of which, in many cases, takes the form of a chain reaction. One central problem gives birth to a chain of discord that eventually shows the vulnerability of existing relations. The authors conclude that emergence and impact of conflictogenic factors on **marital stability** are the result of change of the place of marriage in the hierarchy of an individual's life values in terms of modernization of demographic behavior as a whole.

Keywords: marital behavior, marriage, divorce, conflict, population survey, focused interview, the Republic of Sakha (Yakutia)

1. Introduction

The transformation processes in the political and economic arrangement and social system of Russia brought the problems of population's marital behavior into a new spotlight. The complexity of marital behavior analysis stems from its nature; this behavior is biosocial and accumulates, as such, all possible forms of relations between a man and a woman, relations of a married couple with the society, as well as mutual influence between the family and the state. It is precisely in the family and marriage that continuation of generations takes place, and this is what determines their significance for the society (Panteleeva, 1994; Volkov & Matskovsky, 1994).

A stable marriage guarantees a higher level of mutual understanding between the spouses; the spouses generally tend to see each other as mutually complementing personalities, a source of enrichment and balance of their family world, not as rivals in the struggle for power. Therefore, stable marriages and families are a more advanced type of a primary social organization (Gukova, 1997). However, some circumstances destabilizing the marriage union emerge at various stages of a family life cycle.

By the present time the family structure of the Sakha (Yakutia) Republic population combines the features of a modern (European) and a traditional (patriarchal) models of families (Barashkova, 2009). Around 90% of the population live in the families of one or another quantitative and qualitative composition (The Number and Composition of Households in the Republic of Sakha (Yakutia), 2013).

Continuation of generations is the most important function that belongs exclusively to the family. However, in the age of industrialization, an individual's striving for procreation has not biological, social nature (Zvereva, Veselkova, & Elizarov, 2004), changing in time in accordance with the main life goals of the spouses, but not of

the woman only. Limitation of the number of children in families is also determined by unstable marital relations, threat of a **marital dissolution**, and by divorce itself, which is regarded as a major destructive factor of the family demographic development. The scope of this article does not include such stress factors of a family life as disease, or death of some family members; worries related to a housing problem resolution; issues of unemployment and finding a job; concerns of family members addressing credit institutions, etc.

The analysis of opinions will allow the authors to reveal some existing conflictogenic factors and evaluate their impact on **marital stability**. It is suggested that those conditions of the population's marital behavior, which are from the very beginning contradictory by their nature, will under certain circumstances cause a clash of individuals' ideas regarding the marriage value, organization of life in marriage, responsibilities and rights of each spouse, as well as provoke a discord in the spouses' preferences, needs, interests, and mentality. The conflicts between the spouses can also be conditioned by the very demographic structure of the family, its quantitative and qualitative composition, joint cohabitation of several adult generations (Vdovina, 2005), their lifestyle, views, and habits.

2. Materials and Methods

A complex analysis of marriage behavior was conducted for the period from 1980 to 2013. The choice of this time period was determined by the following considerations. First, it was the time of radical changes in the socio-economic and political arrangement of Russia and its regions that affected its demographic processes as well. Second, there is no comprehensive research covering the region under study and our work partly fills this gap.

The study was conducted with the use of quantitative and qualitative methods of analysis. The authors calculated the demographic rates of marriage, divorce, and **marital stability** according to the statistical records of the population and demographic processes. A comparative analysis of divorce rates for the conventional generations of parents and children was conducted based on the data of the All-Union Population Census 1989, and the All-Russia Population Census 2010.

The use of statistical data alone is insufficient for a proper assessment of the dynamics of marital behavior processes and understanding their internal mechanisms. The sociological and demographic surveys serve as an important additional source of information on the population's marital behavior. The analysis of the place of marriage in the hierarchy of life values of the population, causes of conflict in families, and the attitudes towards divorce as a way out of the conflict is based on the results of focused group interviews and a social survey conducted by the authors in the Republic of Sakha (Yakutia).

A focused interview is a qualitative method of gathering sociological information through focused discussions with a specially selected group on a particular issue (Rotman, Danilov, & Novikova, 2001). In order to conduct focused interviews we singled out five basic types of focus groups that were of our interest in terms of the peculiarities of family lives and relationships. The "Standard Family" group (I) included members of two-parent families with children, both officially married and living in a common-law marriage. The second group was called "One-Parent Family" (II) and combined the respondents with children, who were never married, divorced or widowed. Multiple children families (III) represented the third group; it included two-parent families with three or more children. The fourth group consisted of youth (IV); it brought together teenagers, high school students and undergraduate students of higher or specialized secondary educational institutions. The fifth focus group consisted of single (not married) respondents (V).

The geography of the focused interview was represented by the capital of Yakutia – the city of Yakutsk, its industrial center – the city of Pokrovsk, and an administrative center of a rural district – the village of Namtsy. Three groups (I-III) were examined both in the city of Pokrovsk and in the village of Namtsy, while in the city of Yakutsk the study involved all the five groups (I-V). The total number of the focused interview participants was 97 people.

The totality of the questionnaire survey respondents was formed according to the purposive sampling method (Sampling, 1989). For this purpose we selected the representatives of indigenous peoples of reproductive age having different marital and family status, different educational and professional level. The total number of survey participants is 468 people living in administrative centers, industrial cities or urban settlements, as well as in typical rural settlements. Fifty one and nine tenth percent of the respondents are officially married, 16.5% live in a common-law marriage, 17.7% have never been married, while the percentage of divorced respondents constituted 9.6%, the widowed – 3.4%, and around 1% of the respondents did not indicate their marital status. The respondents from two-parent families accounted for 65.8%. Among the survey participants, 75.6% have children, of whom 31.6% have one child, 29.7% have two children, 8.5% – three children, 3.2% – four children,

and 2.6% have five or more children. On these grounds, the aggregate sample is representative and, overall, reflects the population structure of the Republic of Sakha (Yakutia).

3. Research Results

3.1 Basic Trends in Marital Behavior of the Population

The study of marital behavior of the population in Yakutia has shown that a sufficiently high and stable number of official marriages contracted in the 1980s (the peak was registered in 1987 and 1989: 12.070 and 12.132, respectively) dramatically dropped in the first half of the 1990s. Later on (in the 2000s) even the very nature of the process changed. These changes affected the dynamics of the overall marriage rate having a wave-like decreasing slope (Figure 1).

First-time marriages dominate among those who get married, the age of Yakut women at the time of their first marriage is on the verge of a threshold proposed by J. Hajnal for the late European-type marriage (23-24 years old) (Hajnal, 1965).

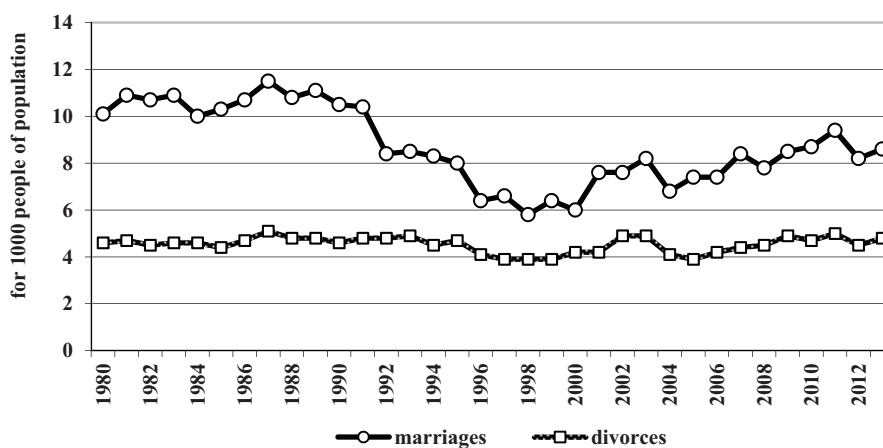


Figure 1. The dynamics of overall marriage and divorce rates, for the years of 1980-2013

In contrast to the trend of the overall marriage rate, the overall divorce rate remained almost at the same level until the second half of the 1990s. The fluctuations of the indicator (ups and downs) are particularly remarkable in the first half of the 2000s and were caused by the nature of this process in the urban settlements. Significant changes include the increase in the share of the older generation people among the divorced: the share of 50-59 year old males increased almost twice and the share of 60+ males grew more than 12 times. The share of females in the abovementioned age groups also increased 3.5 and 4.0 times (Demographic Yearbook of the Republic of Sakha (Yakutia), 2012; Natural Movement and Migration of Population in the Autonomous Soviet Republic of Yakutia in 1985, 1986).

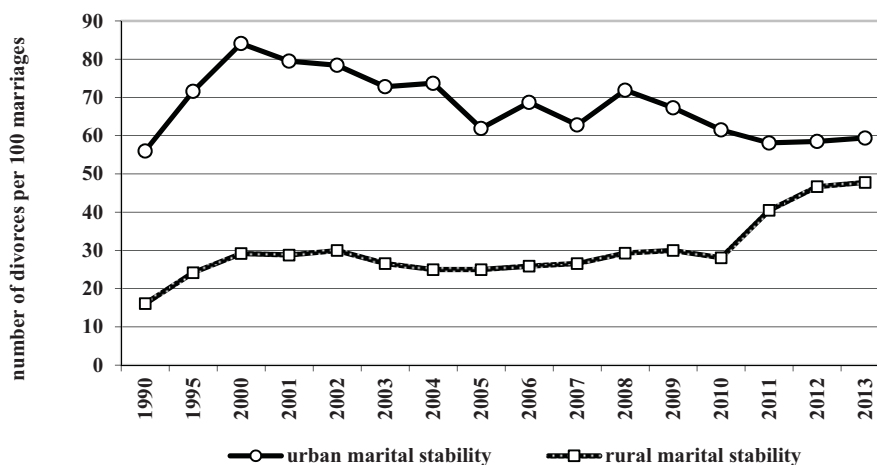


Figure 2. Dynamics of marital stability rate in the Republic of Sakha (Yakutia), 1990-2013

One of the most revealing characteristics of the divorce rate process is a **marital stability** rate, which shows the number of divorces per 100 registered marriages. We can trace the territorial differentiation of this indicator (Figure 2). In the rural areas of the Republic, marriages are traditionally more stable in comparison with the urban areas. At the same time there is a clear trend towards the increase of rural marriages instability, thus the number of divorces per 100 marriages in the period under review has increased from 16.1 to 47.8. As a consequence, the existing gap in the indicator of urban and rural **marital stability** has narrowed.

A comparative analysis of the population marital structure based on Population Censuses data for 1989 (Results of the All-Union Census as of January 12, 1989, 1990) and for 2010 (Age and Gender Composition and Marital Status in the Republic of Sakha (Yakutia), 2012), showed the situation in two demographic generations: in the conventional generations of parents and children. The research has revealed some gender differences in the indicators and a decrease in the importance of marriage institution for the generation of children. The increase in the number of divorced and separated individuals in the generation of children turned out to be noticeably higher in comparison with the generation of parents. For example, in 2010 a share of divorced individuals was 1.2 times higher for the generation of sons and 1.5 times higher for the generation of daughters. Moreover, the largest discrepancies in the preservation of marriage were observed in polar age groups (under 20 years of age and 70 years of age and older) (Figure 3). The magnitude of this differentiation was probably determined by a change in the matrimonial attitudes in each of the generations.

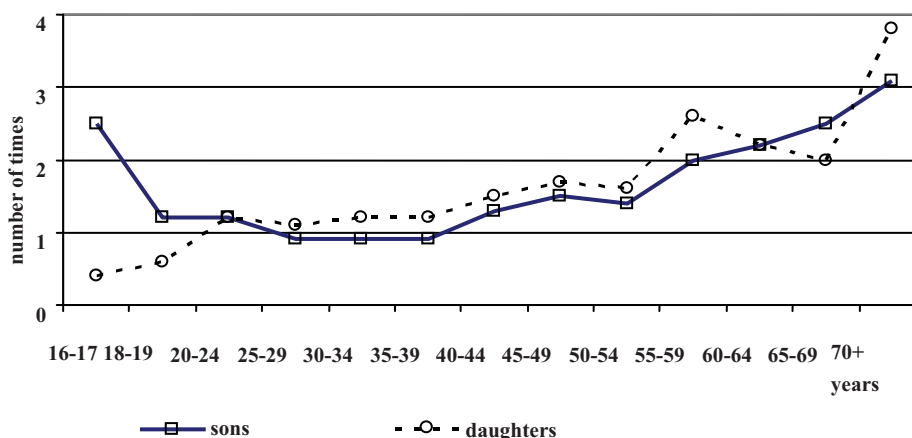


Figure 3. The ratio of the number of divorced and separated individuals in the generation of children (2010) to the generation of parents (1989), by gender and age groups, number of times

3.2 Place of Marriage in the Hierarchy of Life Values

In the opinion of the focused interview participants, a positive moment of marriage consists in the fact that marriage is a family foundation, a guarantee of the “productive life” of the family. Marriage is necessary for both men and women, as “a person feels more confident, safer,” he or she has “a warm feeling of security, of being needed to someone.” This is also, what mothers with many children and even teenagers believe in. A special significance of the lawful matrimony and its impact on the upbringing of children were emphasized in almost all focus groups. It is important that the child knows “what mother and father are,” “feel like a full-fledged member of the family and society,” “can rely on both the mother and the father.” “The child is not a toy, he or she should be brought up properly, and the role of man in such upbringing is enormous, especially when it comes to the upbringing of sons.” In reality though, “up to 80% of child-rearing lies on the woman,” as is noted not only by the representatives of families with many children, but also by single individuals. Can this be the cause of many disagreements in the family?

The respondents also expressed their views that one’s carrier, achievement of financial and material well-being, education, getting specialty and advanced training, occupies today the first place, and “only after that come family and marriage”. And this mindset is conditioned not only by the imperatives of our time, but also by the fact that “now they promote the priority of well-being, very good living conditions.”

In the course of the survey, the respondents made a quantitative assessment of the marriage value in the hierarchy of their life preferences, which emerges from the respondents’ perception of some separate elements of marriage. In the opinion of the survey participants, a positive side of marriage lies in the possibility “to

continuously have a person who is close to you in spirit” (mean evaluation – 4.6 points). The second place in terms of importance is occupied by the following answer: “you find love and cordiality in the family” (4.4 points). Married women (from older age groups) are inclined to believe so more often than others, while overall, 54.9% of the respondents rated this factor with the highest score – 5 points. Family and marriage “give a sense of security and confidence” – this factor is third in the ranking of evaluations of positive aspects as regards marriage and family (4.3 points). The lowest score was given to the answer “I do not see any benefit in marriage” (2.2 points). It is noteworthy that the material benefits of marriage lie in the background, while the foreground is occupied by the sensual and emotional moments. For example, such response option as “material benefits from joint householding” received 3.9 points, the option “gives material rights in case of a possible divorce” – 2.4 points.

When ranking the most important life values of the respondents we obtain different results (Table. 1). Here, for all the survey participants the importance of marriage is much lower than the importance of raising a child, material well-being, having one’s own comfortable modern dwelling. The value of marriage competes with such values as “success, promotion at work,” “education, continuous advanced training,” and “interesting leisure.”

Table 1. Average evaluation of life values depending on the respondent marital status (on a 5-point scale)

Life value	Marital status of the respondent				
	Officially married	Having a common-law marriage	Divorced	Widowed	Never married
Own comfortable modern dwelling	4.58	4.47	4.67	4.64	4.53
Registered marriage, own family	4.38	3.45	3.69	4.00	3.46
Child upbringing	4.81	4.72	4.79	4.92	4.27
Material well-being	4.72	4.74	4.63	4.75	4.57
Education, continuous advanced training	4.32	4.07	4.25	3.92	4.19
Own family business	3.48	3.44	3.29	4.00	3.35
Desired number of children	3.85	3.84	3.33	2.80	3.32
Success, promotion at work	4.45	4.51	4.53	4.18	4.39
Interesting leisure	4.06	4.14	4.21	4.27	4.07
Socializing with friends	3.73	3.66	3.92	4.25	3.79
Freedom, independence, opportunity to do what one wants	3.35	3.11	3.09	2.90	3.81

3.3 Causes of Conflicts in Families

The distribution of the respondents’ views on the main causes of family conflicts, depending on the family type is shown in Figure 4. According to the representatives of two-parent and single-parent simple families, two-parent complex families with children, and single respondents living with relatives, the main reason for conflicts has become **alcohol abuse** of one of the adult family members.

The same problem is also highly relevant for other respondents who have no children. Financial difficulties as a cause of conflicts were more often indicated by the respondents from single-parent and other families with children.

In the course of the focused group interviews the leading role in family conflicts was also attributed to alcoholism, excessive **alcohol abuse** of one of the spouses. When the question “Why do they drink?” was asked, the respondents gave such answers as they drink everywhere; everybody drinks; they always drink: life has become difficult, and the people, especially men, are not able to resist difficulties. The respondents referred to the lack of jobs, earnings as a cause of **heavy drinking**, particularly in the rural areas, and noted with surprise that “families of **alcohol abuse** people live in misery, but they always find money on booze.” The attitude towards such asocial behavior is primarily critical: the **heavy drinking** man’s psyche is already spoilt; it is very difficult to live with him, over time, the couple starts having sexual problems as well. But sometimes they also expressed sympathy: “He began with one glass, then fell into the habit; he cannot stop, and nobody is waiting for him at home, nobody is happy to see him.”

Adultery was also named among the causes of conflict, and according to the group interview participants, it inevitably leads to divorce. It is believed that adultery in the lawful matrimony, where “the husband is a property,” is unacceptable. Disagreement when choosing the ways of spending leisure is also recognized as a cause of conflicts. Often conflicts arise because of a financial situation in the family, with all the consequent

chain of mutual discontent and accusations. When a husband or a wife gives little time to household chores, they often face disagreement about the distribution of family responsibilities.

The focus group participants noted that “*people are not robots*” and any person becomes nervous in the situations when some of the existing problems are solved, while others remain in the background, but they tend to come forward after a while, it is difficult to keep emotions in this case. Discord in the family is possible because of misunderstanding, immoral behavior of men, their disrespectful attitude towards women. The female participants of the focused interview voiced the following position: “*The man must yield to the woman, while she is not obliged to endure.*” The divorced women who are city dwellers believe that it is better to live peacefully alone with the child than to have the child witnessing conflicts between parents. In the meantime married women call for enduring for the sake of children, for the sake of status. Consciously enduring for children’s sake is probably a manifestation of duty, responsibility, a person’s civic position evoking respect. And tolerating a promiscuous, **alcohol abuse** spouse for the sake of a married woman status is more likely a position of an individual living within the framework of a traditional norm of marital and family relations.

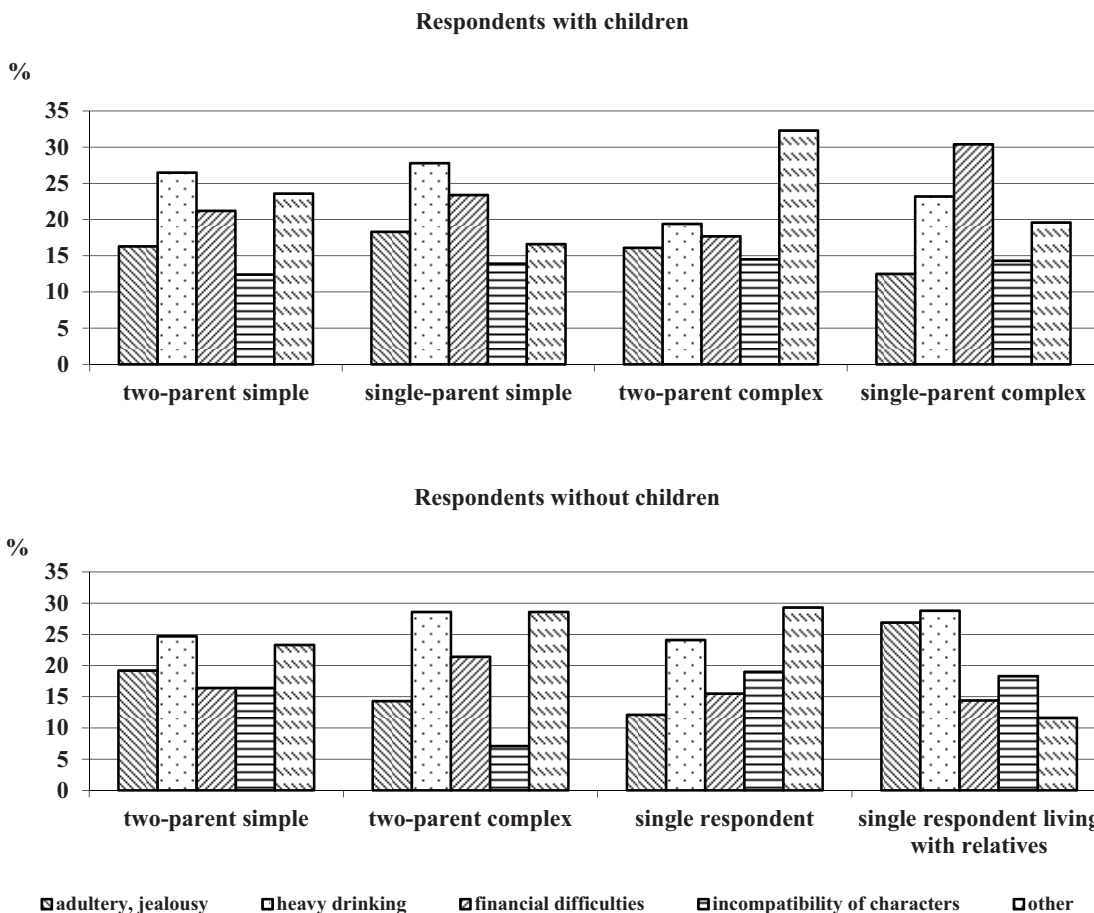


Figure 4. Distribution of the respondents’ views on the causes of family conflicts depending on the family demographic type and presence of children

The male heads of families were of the opinion that one should somehow make concessions; try to smooth a conflict situation. A woman should be wise knowing that “*anyway, the final word always rests with the husband,*” – this is the opinion of the heads of large and two-parent urban families. It is generally acknowledged that the couples need to listen carefully to each other, to negotiate, to trust each other, develop together, and have common dreams: “*everything is possible if there is mutual understanding and love, but not indifference.*”

The focused interview participants named **heavy drinking** and alcoholism, adultery, repression of emotions, the husband’s headship in the family as causes of conflicts in the family. These circumstances, together with some problems in relationships with parents, irritation by the fact that one of the spouses did better in their professional activities or achieved more public recognition, differences in questions of education and upbringing

of children, can lead to recrimination. Later, in court, the accumulation of mutual discontent is worded as a socially approved reason for divorce: “the incompatibility of characters” (Sinelnikov, 1992).

3.4 Divorce as a Way Out of Conflict Situation

The questionnaire survey attempted to clarify the respondents’ perception of divorce as a possible way of solving family problems. In addition to the above, the focus was made on identifying the differences in attitudes between different generations; for example, the opinion of 15-19 year olds was conventionally “set against” that of the 35-39 year olds (Figure 5). These generations represent families at different stages of the family life cycle. The authors have revealed some differences in their views. The young families at the stage of formation turned out to be more opinionated and more often consider divorce the best way out. The members of mature families have predominantly expressed the view that divorce “is not the best, but an acceptable way out.” The families close to the end of the reproductive cycle (45-49 year olds) believe that divorce is possible only in extreme cases.

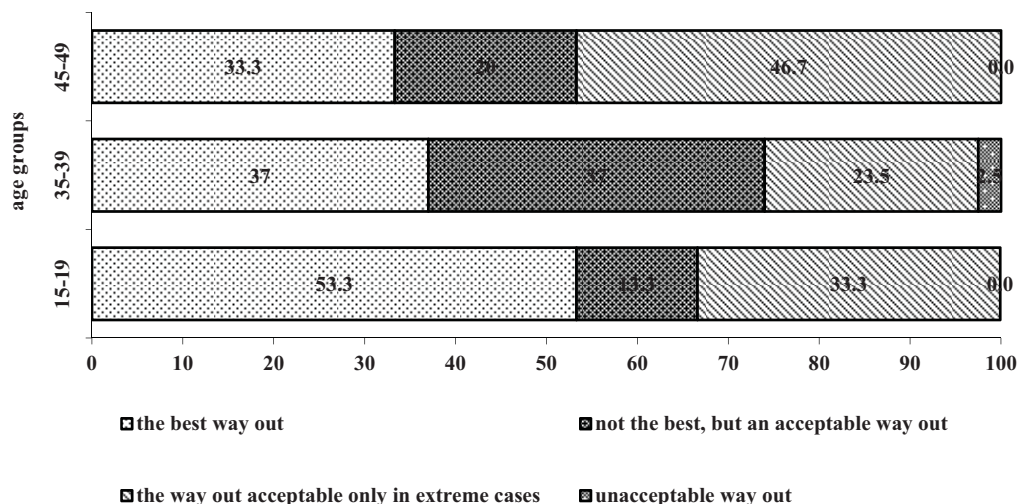


Figure 5. Attitude of different generation representatives towards divorce

The presence of children changed the attitude towards divorce in all groups of respondents regardless of their marital status. Thus, divorce as the best way to resolve family problems has been chosen by 44.5% of childless respondents and only by 33.4% of respondents with children. The respondents with children considered more reasonable the answer option that divorce “is not the best, but an acceptable way out” (36.3%). Regardless of the presence of children, those respondents who have never been married apparently are not prone to make any effort for preserving one’s marriage (Table 2).

Table 2. Distribution of respondent opinions about divorce depending on their marital status and presence (or absence) of children (100% on the column)

Answer option	Officially married		Having a common-law marriage		Divorced and separated		Widowed		Never married	
	with children	without children	with children	without children	with children	without children	with children	without children	with children	without children
The best way out	28.4	53.0	43.5	30.5	41.9	62.5	33.3	33.3	45.8	46.0
Not the best, but an acceptable way out	40.2	23.3	28.3	56.5	32.3	25.0	41.7	66.7	20.8	24.0
The way out acceptable only in extreme cases	26.5	23.5	21.7	8.7	25.8	12.5	16.7	–	29.2	28.0
Unacceptable way out	4.9	–	6.5	4.3	–	–	8.3	–	4.2	2.0

4. Discussion

The number of individuals that get married determine the wave-like dynamics of general marriage and divorce rates. The generations with relatively numerous potential grooms and brides (born in the 1980s) were succeeded with the generations of few individuals who were born in the 1990s, when a widespread decrease of the population birthrate was observed (Sukneva, 2010). This factor largely influenced the dynamics of the marriage cohort number in the urban settlements of the Republic. In the rural areas, the influence of disparities in the numbers of potential brides and grooms turned out to have a bigger significance. In addition, the transformation of marital behavior of the population should be viewed as a result of changes in the system of the population's life values that followed in response to some radical reforms in the society. These changes can be clearly traced in the **marital stability** rate dynamics. Migratory movements also influenced the general character of marriage and divorce rates. The increase in the migration of rural population contributes to the instability of marriages in rural areas of the Republic.

On the background of the population nuptiality reduction in the Republic, some growth of marriage instability is observed in every new generation, especially in the rural areas where before the 1960s there were practically no cases of marriage dissolution registered (Sukneva & Barashkova, 2013). The changes taking place in the marital behavior are confirmed by the trend towards the increase in the number of divorced and separated individuals in the generations of children compared to those of parents.

The initially low place of marriage and family in the hierarchy of the population's life values can be considered one of the conflictogenic factors in the organization of one's life in marriage. The research has revealed realization of the instability of relations, unpredictability of partners' further behavior, tacit acceptance of double standards as regards the requirements to the man and the woman in marriage and family.

The instability of basic binding principles in the modern marriage is visible in the discord over the evaluation of marriage as a necessity or a need. According to the female participants interviewed, men often get married believing that *"it is time to find a wife; the only thing that matters is presence of some feelings."* At the same time, women are more likely to perceive marriage as a need, an integral part of a woman's destiny, while the external attributes of marriage are equally important to them: a mark in one's passport, a wedding ring.

A social stereotype that a husband has the right to behave in a marriage as if he was a guest – which is supported even by mothers with many children (and the Yakuts have a corresponding saying) is in deep conflict with the ideas of a modern self-sufficient woman about the image of a husband, and the place of man in the family.

The influence of stereotypes is manifested in the opinion that *"only in marriage a woman can fulfill herself as a woman,"* and taking into account modern realities, they add *"at least for a while."* This view demonstrates the realization of marriage vulnerability, of the fact that this relationship can turn out very short, it is not supported by duty or commitments. The lawful matrimony means *"the status for women in the first place,"* as many female participants of the survey believe. Single young men express a different point of view. They are confident that now family is going through an obvious crisis, especially in the metropolitan areas, where *"people live all alone and feel lonely in the cities with a million-plus population."* It happens because it is now possible to find self-actualization without participating in any social units, today people *"do not need to form a family, or continue their kind."*

Never married women of younger age with the reasoning that marriage is a common social program, a tight pattern imposed on an individual, showed a kind of generational solidarity. They note, that after reaching a certain age and social status, many young women *"begin to run around and bustle,"* take irresponsible steps, marry hastily, struggling to execute this program, and apparently not realizing that it is outdated. In the statements of young people, we find a fundamentally different view of marriage and family from the one of the older generation, while the irresponsible steps mentioned by them are seen as a reason for the instability of modern marriages.

Although the attitude of society towards divorced women is rather democratic, a married woman has a higher status in the society. Therefore, one must strive to live in a marriage with a chosen person *"till the end of life,"* this is the opinion of the interview participants aged 40 and older, although they admit the fragility of relations in the young couples and so their statements have some anxiety, a sense of threat for the future. Moreover, these concerns of the older respondents gradually grow in almost every (urban, rural) focus group, sometimes even turning into a kind of collective opinion of the peers.

Opposite opinions have been expressed by the young participants of focused interviews. In their view, family is a fragile institution and **marital stability** is questioned by them. Divorce is not seen by the youth as something

negative or blameworthy; it is rather viewed as a certain change in one's life, an indicator of women's emancipation, the evidence that some values have changed under the influence of liberal views on marriage and family, politics, or information technologies. The young respondents also recognize the existence of a large number of people, who are not ready for marriage. The following opinions are found as well: "if there are no common children, separation is a better alternative to living in a stressful situation," then there is a chance to remarry, and build a new family. This view testifies to the existing need in marriage.

The social survey participants were sincere in expressing their opinions, defending their point of view based on their personal experience, their own ideas, attitudes, and preferences. Hence comes the objective differentiation of their opinions depending on their age, marital status, family types and presence of children.

It is generally accepted that a stressful event – specifically, divorce – reduces the achieved level of stability in a family (Kharchev & Matskovsky, 1978; Golod, 1984; Sinelnikov, 1997; Golod, 2008). Judging by the opinions prevailing in the survey, the situation has changed, and divorce is no longer the stress factor it was before. However, as a result of divorce, the family demographic type is changing; in general, the family function is being modified, and the roles of each of the family members are being redistributed (Wood, Repetti, & Roesch, 2004). The increase in the number and share of single-parent families in the family composition of the population as a result of spouses' divorce leads to enhanced demographic transformations, and reduction of the demographic potential of Russia's Asian North.

It was found that emergence and impact of conflictogenic factors on **marital stability** are a result of a change in the place that marriage occupies in the hierarchy of an individual's life values within the framework of the demographic behavior modernization process as a whole (Van de Kaa, 1987; Lesthaeghe & Van de Kaa, 1986; Vishnevskiy, 2006).

5. Conclusions

The questionnaire survey and focus group interviews were aimed at studying the attitudes of participants towards the values of family and marriage, causes of conflict in the family. This topic, very sensitive for the northern society, provoked active discussion in almost all focus groups.

In certain family life circumstances, the population's marital behavior conditions that are from the very beginning contradictory by their nature cause a clash of individuals' ideas about the value of marriage. Divorce is a result of non-performance of some family, marital duties, encroachments on the rights of one of the spouses (a parent), a discord in their preferences, needs, and interests. By its impact on the former spouses and children's psyche, divorce is without a doubt the strongest stress factor.

Overall, it can be concluded that the influence of conflictogenic factors on **marital stability** is determined by the place that marriage occupies in the hierarchy of life values of an individual. Today, not only the importance of marriage has changed, but also the people's ideas about the things that hold it together. Apparently, marriages based on love and affection are not as strong as those based on the sense of duty, responsibility, and a strict control on the part of society. A single thing, for example, **alcohol abuse** of one of the spouses or the incompatibility of characters, does not cause a conflict situation in a marriage but it is a result of a complex of causes, whose impact in many cases takes the form of a chain reaction.

Acknowledgments

This article was prepared with the financial support of the Ministry of Education and Science of the Russian Federation within the framework of a governmental assignment for research project of the M.K. Amosov North-Eastern Federal University (Project No.01201460077).

References

- The number and composition of households in the Republic of Sakha (Yakutia). *Results of All-Russia population census 2010. Stat. Book.* (2013). Yakutsk.
- Demographic yearbook of the Republic of Sakha (Yakutia).* (2012). Yakutsk.
- Natural movement and migration of population in the Autonomous Soviet Republic of Yakutia in 1985.* (1986). Yakutsk.
- Golod, S. I. (1984). *Family stability: sociological and demographic aspect.* L.: Nauka.
- Golod, S. I. (2008). Sociological and demographic analysis of family state and evolution. *Sotsiologicheskie issledovaniia, 1*, 40-49.
- Gukova, E. G. (1997). Sociological analysis of family stability in the contemporary Russia. In V. V. Elizarov, &

- N. V. Zvereva (Eds.), *Household, family and family policy* (pp. 120-131). M. Dialog- MGU.
- Hajnal, J. (1965). European marriage patterns in perspective. In D. V. Glass, & D. E. Eversley (Eds.), *Population in history: Essays in historical demography*. Chicago, Illinois, Aldine Publishing Company (pp. 101-143).
- Harchev, A. G., & Matskovsky, M. S. (1978). *Modern family and its problems (socio-demographic research)*. M.: Statistics.
- Lesthaeghe, R., & Van de Kaa, D. J. (1986). Two Demographic Transitions. In D. J. Van de Kaa, & R. Lesthaeghe (Eds.), *Population: Growth and Decline*. Deventer. Van Loghum Slaterus.
- Panteleeva, I. V. (1994). Brak [Marriage]. In G. G. Melikyan (Ed.), *Population. Encyclopedic dictionary* (pp. 28-29). M.: Bol'shaia Rossiiskaia entsiklopediia.
- Gender, age and marital status of the Yakut Autonomous Soviet Socialist Republic population. (1990). *Results of All-Union population census on January 12, 1989*. Yakutsk.
- Rotman, D. G., Danilov, A. N., & Novikova, L. G. (Eds.). (2001). *Operational sociological research: methodology and organizational experience*. Mn.: BGU.
- Sinelnikov, A. B. (1992). Socially approved causes for divorce in the past and present. *Sotsiologicheskie issledovaniia*, 2, 27-380.
- Sinelnikov, A. B. (1997). Prospects of change of marriage and divorce rate norms in the Russian Federation. *Sem'ia v Rossii*, 2, 12-17.
- Sukneva, S. A. (2010). *Demographic potential of the Northern region population development*. Novosibirsk: Nauka.
- Sukneva, S. A., & Barashkova, A. S. (2013). Social and demographic reproduction of peoples in the Republic of Sakha (Yakutia): Outlook into the future. *Natsional'nye interesy prioritety i bezopasnost'*, 47, 58-63.
- Van de Kaa, D. J. (1987). Europe's Second Demographic Transition. *Population Bulletin*, 42(1). Washington. The Population Reference Bureau.
- Vdovina, M. V. (2005). Intergenerational conflicts in modern Russian family. *Sotsiologicheskie issledovaniia*, 1, 102-104.
- Vishnevskiy, A. G. (Ed.). (2006). *Demographic Modernization in Russia 1900-2000* (pp. 549-550). M.: Novoye izd-vo.
- Volkov, A. G., & Matskovsky, M. S. (1994). Family. In G. G. Melikyan (Ed.), *Population. Encyclopedic dictionary*. M.: Bol'shaia Rossiiskaia entsiklopediia.
- Age and Gender Composition and Marital Status in the Republic of Sakha (Yakutia). (2012). *Results of All-Russia Population Census 2010*, 2, 80-81. Yakutsk.
- Vyborka [Sampling]. (1989). In D. M. Gvishiani, & N. I. Lapin (Eds.), *Concise dictionary of sociology* (pp. 36-37). M.: Politizdat.
- Wood, J. J., Repetti R. L., & Roesch, S. C. (2004). Divorce and Children's Adjustment Problems at Home and School: The Role of Depressive. Withdrawn Parenting. *Child Psychiatry and Human Development*, 35, 121-241.
- Zvereva, N. V., Veselkova, I. N., & Elizarov, V. V. (2004). *Basics of demographics. Teaching aid*. M., Vysshaya Shkola.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

TQM and Performance Linkage in the Microfinance Institutions: The Mediating Role of IT Capability

Abdo Ali Homaid¹, Mohd Sobri Minai¹ & Hamzah Abdul Rahman¹

¹ College of Business, Universiti Utara Malaysia, Kedah, Malaysia

Correspondence: Abdo Ali Homaid, College of Business, Universiti Utara Malaysia. Tel: 60-12-401-4925.
E-mail: a3hd2000@yahoo.com

Received: April 19, 2015 Accepted: May 11, 2015 Online Published: June 25, 2015

doi:10.5539/ass.v11n21p

URL: <http://dx.doi.org/10.5539/ass.v11n21p213>

Abstract

The link between Total Quality Management (TQM) and organizational performance measures has become of great interest to both researchers and practitioners alike during the last decade. However, a thorough literature review has revealed such relationship is not being studied in the microfinance institutions and, furthermore, on the effect on Information Technology (IT) capability of such relationship. This paper is written based on a study done to examine the nature of such relationship that revealed the mediating effect of IT capability in the relationship between TQM and the performance of microfinance banks in Yemen. The study was conducted in 2014 using a questionnaire survey covering 78 branch managers. Using Smart Partial Least Squares (PLS), the results provide a significant relationship between TQM and microfinance institutional performance and also a significant mediating effect of IT capability on the relationship. The elements representing the variables under study are presented and some practical suggestions and contributions are highlighted in the conclusion.

Keywords: TQM, IT Capability, Microfinance Performance, Yemen

1. Introduction

The liberalization and explosive commercialization of microfinance sector have led to a new challenging environment. Dacheva (2009) claims the fierce competition, profitability and regulations emerge as the result of such liberalization and explosive commercialization of the sector. This tendency towards commercialization of microfinance has changed the strategy of Microfinance Institutions (MFIs) to provide their services on a commercial basis rather than giving much focus on social mission (Cull, Demirguc-Kunt, & Morduch, 2009). We argue that microfinance commercialization is indispensable because MFIs can obtain necessary funding from the market and expand their financial services to the poor, and this issue has been highlighted by Zerai and Rani (2012).

In Yemen, there is a remarkable increase in microfinance commercialization markets and its related activities. Abdel Baki, Zain and Cordier (2010) suggested that this trend has made the MFIs become more competitive and gain a better position in the Yemeni financial industry. There are a number of researches in this sub-sector, however, only a few are found to discuss about the MFIs performance and the factors contributing to it. Considering this situation, this study has been conducted to establish the relationship between the Total Quality Management (TQM) and the MFIs performance, and examine the effect of Information Technology (IT) capability on such relationship.

TQM strategy has been cited as among the most important factors for survival and growth of organizations as well as for gaining competitive advantage (Nair, 2006; El Shenawy, Baker, & Lemak, 2007; Irfan & Kee, 2013). However, studies related to TQM and its relationship on the organizational performance in the service industry are limited. In the microfinance sub-sector, it is even scarcer. If there is any, particularly in Yemen, the context is envisaged by improving the loan collection performance. Khaled (2011) argued about the implementation of TQM but, still, the focus does not cover the performance of the MFIs in general. The findings related to TQM and organizational performance relationship turn out to be inconsistent (Nair, 2006) and this calls for an extensive research work to be conducted in this field. MFIs are different from business organizations or even financial institutions like banks and non-bank financial companies as they have social objectives apart from making a profit (Roy & Goswami, 2013). Thus, it is evident that there is a need to investigate on this relationship in the microfinance industry.

According to Prajogo and Hong (2008), the TQM practices have been confirmed to be effective not only for quality implementation and enhancement but to build a wide range of organizational capabilities. Yusr, Mokhtar, and Othman (2014) revealed that TQM principles affect positively and significantly technological innovation capabilities in the manufacturing sector, whilst Akgün, Ince, Imamoglu, Keskin, and Kocoglu (2014) reported the significant effect of TQM practices on learning capability as one of the organizational capabilities. Still, studies dedicated to test the effect of TQM on organizational capabilities are limited (Yusr, Othman, & Mokhtar, 2012).

The role of IT is undeniably important and its capability is considered as a key element in an organization to foster performance (Liu Zhao, Wang, & Xiao, 2013). Furthermore, it has been identified to provide a basis of obtaining a competitive advantage (Bhatt & Grover, 2005) when IT gained its ground in the early 21st century. Despite the fact that many studies reported the significant effect of IT capability on organizational performance (for examples, Yu & Xin-quan, 2011; Ong & Chen, 2013; Karimi Mazidi, Amini, & Latifi, 2014), this relationship, however, is not confirmed directly (Lee, Kim, Paulson & Park, 2008; Pérez-López & Alegre, 2012). Within the context of microfinance performance, studies on the impact of IT capability is even limited.

It is suggested that IT capability can acquire, integrate and deploy resources in a specific way that better fit the market environment opportunities and consequently a competitive advantage is obtained (Eisenhardt & Martin, 2000; Morgan, Slotegraaf, & Vorhies, 2009). It is also stated that the relationship between organizational capabilities, resources and performance is complex and capabilities can be used as mediators in the relationship between organizational resources and performance (Lu, Zhou, Bruton, & Li, 2010). It is also stated that organizational capabilities are the most likely to be mediators in the relationship between resources and performance in the current literature (Liang, You, & Liu, 2010).

The above discussions raise the issue of how IT capability contributes to the organizational performance as indicated by the TQM, in particular for the MFIs. This paper discusses the findings regarding the mediating role of IT capability from a study examining the relationship between TQM and the performance of banks practicing microfinance in Yemen.

2. Literature Review

The theory of Resource-Based View (RBV) of the firm has gained prominent attention to be the major theory in strategic management (Galbreath, 2005; Liang et al., 2010; Almarri & Gardiner, 2014). The basic argument of RBV is that firm performance is substantially determined by the key and unique resources it owns. When the firm possesses more valuable, but scarce resources, it is more likely to create a sustainable competitive advantage and achieve better performance (Barney, 1991; Fahy, 2000). It is also argued that organizations with a combination of these resources can improve special capabilities which in turn obtain a sustainable competitive advantage and achieve higher performance (Barney, 1991; Barney & Clark, 2007). However, this theory has been criticized for its inability to explain how organizational resources are integrated, developed and deployed to gain sustainable competitive advantage (Priem & Butler, 2001; Morgan, Vorhies, & Mason, 2009; Kraaijenbrink, Spender, & Groen, 2010; El Shafeey & Trott, 2014). Therefore, the resource deployment approach has been introduced in order to overcome such shortcomings (Shin & Aiken, 2012) and there has been an attempt to conceptually connect resources to capabilities, which is expected to improve the other resources in the organization (Ahn & York, 2011; Makadok, 2001). In this view, TQM practices are considered as valuable organizational resources that can enhance organizational capabilities and eventually result in higher performance.

Crook, Ketchen, Combs, and Todd (2008), who carried out a study in strategic management, argued that RBV “has emerged as a key perspective guiding inquiry into the determinants of organizational performance”. However, the dynamic capability in the form of IT capability is introduced to address the theoretical shortcomings of RBV on the issues of having continual success and sustained competitive advantage in swift changing environments (Eisenhardt & Martin, 2000; Teece, Pisano, & Shuen, 1997; Pavlous, 2004). The complementarity is also used to address the limitation of RBV on the issues of isolation of resources in generating or sustaining competitive advantage rather than on the complementarity of resources (Mueller, 1996; Powell, 1995; Melville, Kraemer, & Gurbaxani, 2004). In a nutshell, this study adopts RBV, dynamic capability and complementarity theories as underpinning theories.

2.1 Organizational Performance

Organizational performance is regarded as one of the major constructs in the area of strategic management (Combs, Crook, & Shook, 2005; Kirby, 2005; Richard, Devinney, Yip, & Johnson, 2009). This is because of the practical importance of the organizational performance concept, which has been always given much concern by

top managers being related to the long term success and competitiveness of their organizations (Jusoh, Ibrahim, & Zainuddin, 2008; Finkelstein & Hambrick, 1996). Therefore, both academicians and practitioners carried out extensive research work on organizational performance exploring the antecedents, processes, and other variables that can improve the organizational outcomes (Jing & Avery, 2008). Specifically, much focus was given to the organizational performance construct, driven by the desire to identify the determinants of superior performance (Al-Dhaafri, Yusoff, & Al-Swidi, 2013).

Shareholder theory and stakeholder theory are the most important and key ways to be used as the bases for different measurement frameworks and models (Owen, 2006; Brown & Fraser, 2006). In this regard, the organization is seen as belonging to shareholders and the shareholder return is used to measure the overall organizational performance (Hubbard, 2006). This indicates why it is a predominant organizational performance measurement system (Richard et al., 2009) beside several other financial measures to measure the organizational performance such as return on assets (ROA), Return on Investment (ROI) Return on Equity (ROE), and Earnings per Share (EPS).

On the other hand, the organization is seen as belonging to stakeholders rather than simply a shareholder (Brown & Fraser, 2006; Steurer, 2006). Based on this view, many organizations have adopted multidimensional and balanced models including non-financial measures such as Service Profit Chain (Heskett, Jones, Sasser, & EarlSchlesinger, 1994), Performance Prism (Neely, Adams, & Kennerley, 2002), Multi-Model Performance Framework (Weerakoon, 1996), and the most popular measurement model in measuring organizational performance, the balanced scorecard (Kaplan & Norton, 2008). This view considers both financial and non-financial indicators because the organizations are getting changed over time (Chenhall, 2005). Moreover, financial measures are not directly concerned with the organization's strategy and may conflict with strategic objectives (Tangen, 2004).

2.2 Microfinance Institutions Performance

The microfinance institution performance, the prime issue under investigation in this study is regarded as a crucial issue as it determines the efficiency of fund utilization, injected by donors in these institutions and assists regulators in controlling and monitoring the institution (Mustafa & Saat, 2013). The MFIs are recognized to be established with the aim of poverty alleviation (Zerai & Rani, 2012) so donors and governments have to make sure that these institutions are performing well (Mustafa & Saat, 2013). Whilst the ample literature on organization and organizational performance is available, there is limited literature on MFIs performance and even there is no consensus regarding the definition of microfinance performance. Roy and Goswami (2013), and Nanayakkara and Iselin (2012) mentioned that there are no instruments being developed to measure such performance because of the uniqueness and the nature of MFIs being the business with social objectives. Moreover, these MFIs are providing financial services to low income people and in many cases the funds are used for personal purposes, which make measuring the MFIs performance not easy.

Within the context of MFIs, the performance measure is influenced by two major schools of thought, which are the welfarist school and institutionalist school (Berguiga, 2009; Bassem, 2012). Studies related to welfarist school focus on the effect of microfinance on the poor people, imply that the effect on the poverty level of the borrowers as the performance of the MFIs. The measures used to reveal the impact of the MFIs on the poor people are the household income, expenditure on healthcare, clothing, water supply and building a quality of a dwelling house (Ghalib, Malki, & Imai, 2011). For the studies related to institutionalist school, the focus is mainly on the efficiency of MFIs to generate profit and to reach more the poor people. Measures such as profitability (Kamukama, 2010; Kamukama, 2011), sustainability (Thapa, 2009; Kinde, 2012) and efficiency (Caudill, Gropper, & Hartarska, 2009; Haq, Skully, & Pathan, 2010) used as single dimensions to measure the performance based on the view of institutional school.

For the MFIs performance measurement, there are many attempts to develop strategic performance measurement systems that consider the multidimensional aspect of measuring the overall performance of MFIs. For example, Nanayakkara and Iselin (2012) proposed that four dimensions, namely sustainability, the breadth of the outreach, depth of outreach, and portfolio at risk. Another performance measurement framework introduced by Mustafa and Saat (2013) suggests for the use of outreach and self-sustainability (one aspect) and the social impact of the change in the client's income as a direct microfinance outcome. For Roy and Goswami (2013) who propose a conceptual framework known as 360° approach to assess the overall performance of the MFIs, the dimensions cover the financial performance, outreach, sustainability, efficiency, social performance, institutional characteristics, productivity, and governance.

It is suitable to use balance scorecard, the most popular performance measurement model? The fact that many scholars use a balance scorecard to assess performance, for example Koveos and Randhawa (2004), Waweru (2010), Waweru and Spraakman (2012), and Kipesha (2013) show that such measurement can be used to measure MFIs performance with a variety of assessment measures rather than traditional financial system. This model is being adopted in the study identifying the aspects of (i) financing, (ii) customers, (iii) internal process, (iv) learning and growth, and (v) social perspective for measuring the MFIs performance. With the concern of profit and social objectives, the business and social perspectives of the MFIs are covered.

2.3 Total Quality Management

According to Ghadiri et al. (2013), and Demirbag, Tatoglu, Tekinkus, and Zaim (2006), quality is one of the crucial requirements for success and survival in the global market and for providing competitive advantage. It increases demand for product and services and thus contributes to the sustainability of the business. Organizations that realize the importance of quality are compelled to undergo transformations in their business models in order to provide quality products and services for customers (Lam, Lee, Ooi, & Lin, 2011). This also leads the organizations to compete successfully in the marketplace (Ghadiri et al., 2013). Not only this, quality is also an important aspect to gain sustainable competitive advantage globally (Lin & Su, 2013). Quality can be seen as the degree to which products and/or services delivered comprise value-added and excellent value that reach customer satisfaction.

The TQM is classified under the five broad perspectives and is viewed as management philosophy and guiding principles (Demirbag et al., 2006), as a management process (Kumar, Choisine, Grosbois, & Kumar, 2009), as a culture (Kanji & Wallace, 2000), as a strategy (Al-Swidi & Mahmood, 2012) and as a system (Boon, Arumugam, & Hwa, 2005). Despite the numerous interpretations and definitions provided by different scholars, the essence of these definitions shares many common elements (Talib & Rahman, 2011). Based on these insights, the TQM within this paper write-up is defined as a strategy, a process and an integrated system, including principles, methods and best practices aiming at achieving the MFIs overall performance. The aim is to look into the leadership and top management commitment to adopt the critical success factors of TQM, namely leadership, customer focus, strategic planning, training, continuous improvement, benchmarking, and quality culture. It enables the corporate TQM culture to be established by creating a suitable environment workplace to satisfy the internal and external customers' requirements alike.

Recent research interests regarding TQM focus on the TQM *strategy* and practices, measuring the performance of the organization in different sectors of the economy. For example, studies have been carried out in a diverse of economy sectors such as manufacturing (Ul Hassan, Mukhtar, Qureshi, & Sharif, 2012; Rahman & Bullock, 2005), multiple service sectors (Talib, Rahman, & Qureshi, 2013; Lam et al., 2011), telecommunication sector (Iqbal, Nadeem Talib, & Khan, 2012), health care industry (Dilber, Bayyurt, Zaim, & Tarim, 2005; Awuor & Kinuthia, 2013), banking sector (Al-swidi & Mahmoud, 2012; Jaafreh & Al-abadallat, 2012), public sector (Al Dhaafri, Yusoff, & Al Swidi, 2014) and education (Sayeda, Rajendran, & Lokachari, 2010). The increase in attention and interest in TQM strategy is not surprising as it is considered to be a source of competitive advantage for the organizations (Irfan & Kee, 2013). Moreover, Nair (2006), and Chong and Rundus (2004) suggest that the TQM implementation is an effective management system, triggering a fundamental change in an organization through which the organization overcomes new market environment challenges achieving competitive survival. This indicates the right direction of TQM to the MFIs performance. From the literature, in successful TQM implementation, several principles of TQM are included such as management and leadership, customer focus, strategic planning, training, continuous improvement, benchmarking and quality culture.

2.4 IT Capability

According to Hemmatfar, Salehi, and Bayat (2010), and Ghobakhloo, Hong, Sabouri, and Zulkifli (2012), IT is a pivotal factor to be utilized by a firm in its operations and strategies. It is regarded as the major strategic asset in most industries (Lin, 2007) because it provides organizations with internal and external information that enable them to recognize customers, their preferences and assist in making decision to satisfy customers and then gaining sustainable competitive advantages (Lai, Zhao, & Wang, 2006). Scholars such as Breznik (2012), and Liu et al. (2013) have highlighted that IT capability is an essential factor for organizations to compete in the market and achieve better performance.

Examining the effect of IT capability, a set of IT resources comprising IT knowledge, IT objects and an effective IT operations (which can be employed by an organization to work with other organizational resources and strategies to obtain sustained competitive advantage and gain superior performance) (Tippins & Sohi, 2003), is being positioned as the mediating factor to the relationship as the TQM is expected to contribute better to

organizational performance with the availability of IT capabilities (Brah & Lim, 2006; Sánchez-Rodríguez & Martínez-Lorente, 2011; Khanam et al., 2013).

Within the context of this paper, the IT capability is considered as the essential construct in combining with other organizational resources. It includes the capability to create a positive synergistic impact on firm performance that make a substitution, duplication or imitation is not an easy option (Liang et al., 2010; Alvarez-Suescun, 2007). As suggested by Jean, Sinkovics, and Kim (2008) that the relationship between IT and performance to be further investigated as it is still not very clear how different IT capability interacts with other organizational resources, the study construct is considered to explain the business capabilities and business processes in order to achieve better performance and to create competitive advantage.

3. Methodology

The main relationship under the review of the study is the relationship between TQM and MFIs performance. There are a lot of studies examining and proving the significant role of TQM implementation and practices on organizational performance (for example, the studies by Lam et al., 2011; Iqbal et al., 2012; Ul Hassan 2012; Wang, Chen, & Chen, 2012). Whilst Munizu (2013), and Wang et al. (2012) reveal significant role of TQM, Arawati, (2005), Demirbag et al. (2006), and Su, Zhang, Liu, and Dang (2008) have reported the failure of the direct and indirect effect of TQM strategy to achieve the desired outcomes. Thus, many researches and this research have been carried out to reinvestigate such relationship in different contexts and using different contextual variables in order to generalize the results.

Thus, the principle hypothesis to test in the study is for the significant relationship between TQM and MFIs performance. In the formal form, it is stated as the following.

H_A: TQM has a positive significant impact on the performance of the MFIs.

The next task is to examine the mediating effect of IT capability on the relationship between TQM and the MFIs. The test is for determining the mediating effect of IT capability as the partial or full mediating effect. The TQM principle implementation in the organizations generates many capabilities within the organization, which then creates the competitive advantage and thus, better performance can be achieved (Yusr et al., 2012). Empirically, TQM has been found to affect significantly organizational capabilities such as technological innovation capability, marketing capability and learning capability (Yusr et al., 2014; Yusr et al., 2012; Akgün et al., 2014).

In completing the test, the role of IT capability on the MFIs performance is investigated. Similarly, there is a bulk of researches available from the literature proving that IT capability has a direct impact on organizational performance. Interestingly, some report on the direct significant effect (Bharadwaj, 2000; Lin, 2007; Bi & Zhang, 2008; Yu & Xin-quan, 2011; Ong & Chen, 2013) and other ones questioned this relationship arguing that IT capability can only influence firm performance indirectly through some mediating variables (Tippins & Sohi, 2003; Zhu & Nakata, 2007; Pérez-López & Alegre, 2012). The confusing report indicates the need to examine the effect of IT capability in the model as the mediating factor. In the formal form, the hypotheses are stated as the following.

H_{A1}: TQM has a positive significant impact on the IT capability.

H_{A2}: IT capability has a positive significant impact on the performance of the MFIs.

In fact, IT capability is considered as an essential ability of the organization by which information can be managed and organizational resources such as innovation and business strategies are incorporated for superior performance (Pebrianto, 2013). Brah and Lim (2006) pointed out that IT capability serves as an enabler to quality performance as it helps to improve customer relationship management, by improving business operations effectiveness, increasing and providing high quality of services/products, giving greater flexibilities to customers and providing assistance to increase the employees' productivity. It is expected that application of IT capability improves the operational tasks of quality management and hence increase quality outcomes (Khanam, Siddiqui, & Talib, 2013). This is the proposed possible full mediating factor of the IT capability. Therefore, this study proposes the following hypothesis.

H_{A3}: IT capability mediates the relationship between TQM and the performance of the MFIs and positively significantly.

The data collection activity was done in 2014 from the branch managers of four Yemeni banks operating in microfinance namely, Al-Amal Microfinance Bank, Alkuraimi Islamic Microfinance Bank, Tadhamon Microfinance Islamic Bank, and Cooperative and Agricultural Credit (CAC) Bank. They are the reliable source due to their executive position and their ability to provide information on the implementation of strategies in the

organizations (Al-Swidi & Mahmood, 2011; Al-Swidi & Al-Hosam, 2012). Out of 108 distributed questionnaires, only 78 usable questionnaires were returned and used as the data for the analysis.

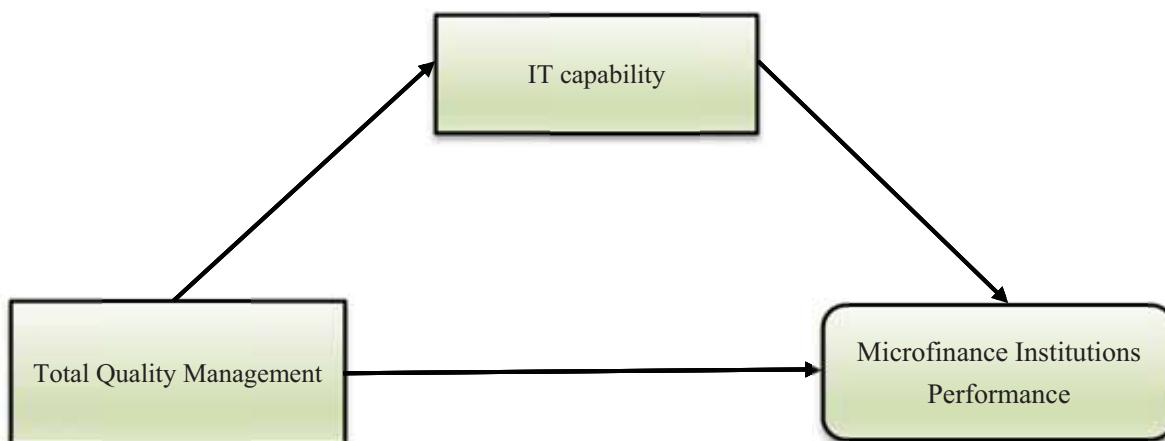


Figure 1. Theoretical framework

In measuring the performance of MFIs as a single construct, five dimensions, proposed by Kaplan and Norton (1993), as highlighted by Kipesha (2013), Nanayakkara and Iselin (2012), and Roy and Goswami (2013) are covered, namely, the financial, internal business, customer, and innovation and learning, and social dimension.

Although the measurements have been the subject of much debate among TQM scholars (Samson & Terziovski, 1999), particular TQM success factors have been noticeably investigated in TQM literature. For the TQM success factors measure, the study derives the measures from the works of Lam et al. (2011), Wang et al. (2012), Conca (2004), Brah, Wong, and Rao (2000), and Talib et al. (2013). These measures have been validated in the context of service industries.

The IT capability measurement developed by Tippins and Sohi (2003) is used to examine its mediating effect. It includes three dimensions, which are the IT knowledge, IT objects and IT operations as validated by Li, Chen and Huang (2006). Most recent studies such as Pérez-López and Alegre (2012), and Ringim, Razalli, and Hasnan (2012) have used this measurement. According to Liu et al. (2013), this kind of measurement has been found to be a more significant effect on organizational performance compared to other measurements that can be classified from integrated aspects.

4. Findings

The findings presented are the result from the analysis using Smart Partial Least Squares (PLS) version 3.0. It follows the two-step approach of the outer model assessment and the assessment of the inner model as suggested by (Hair, Ringle, & Sarstedt, 2011; Valerie, 2012; Henseler, Ringle & Sinkovics, 2009; Hair, Hult, Ringle, & Sarstedt, 2014). In the first step, the measurement model (outer model) was assessed to ensure the construct validity and reliability through content validity, convergent validity and discriminant validity. In the second step, the quality of the structural model was assessed by the R-square value, effect size, and predictive relevance of the model. Eventually, the hypothesized relationships were tested by running PLS bootstrapping in PLS 3.0.

4.1 The Measurement and Structural Model

For the structural equation modeling, the construct, convergent, and discriminant validity were examined to assess the goodness of measure (Hair et al., 2011; Valerie, 2012). The construct content validity measures, which include factor loadings, are loaded at 0.70 or higher. The convergent validity, which includes Composite Reliability (CR), Cronbach's alpha and Average Variance Extracted (AVE), the values of both CR, Cronbach's alpha is set higher than 0.70 and the values of the AVE to exceed the generally recognized 0.50 threshold as illustrated in Table 1 below.

Table 1. The content and convergent validity analysis

Construct	Items	Loadings	Cronbach's Alpha	CRa	AVEb
Benchmarking	BM1	0.896	0.876	0.923	0.801
	BM2	0.915			
	BM3	0.873			
Customer Focus	CF1	0.906	0.773	0.898	0.815
	CF3	0.899			
Continuous Improvement	CI1	0.868	0.717	0.876	0.779
	CI2	0.897			
Customer Perspective	CP1	0.897	0.715	0.875	0.778
	CP2	0.867			
Financial Perspective	FP1	0.857	0.727	0.879	0.784
	FP2	0.912			
IT Objects	ITB1	0.855	0.798	0.882	0.713
	ITB2	0.889			
	ITB3	0.787			
IT Knowledge	ITK1	0.879	0.844	0.906	0.762
	ITK2	0.840			
	ITK3	0.899			
IT Operation	ITP1	0.816	0.706	0.836	0.630
	ITP3	0.757			
	ITP4	0.806			
Learning and Growth Perspective	LGP1	0.907	0.733	0.881	0.788
	LGP2	0.868			
Leadership and Management	LM1	0.819	0.825	0.884	0.657
	LM2	0.706			
	LM4	0.841			
Internal process Perspective	LM5	0.866	0.731	0.880	0.786
	PP1	0.916			
Quality Culture	PP2	0.856	0.772	0.845	0.521
	QC1	0.709			
	QC2	0.771			
	QC3	0.700			
	QC4	0.718			
Social perspective	QC7	0.711	0.823	0.919	0.849
	SOP1	0.923			
Strategic Planning	SOP2	0.920	0.820	0.881	0.649
	SP1	0.828			
	SP2	0.791			
	SP3	0.818			
	SP4	0.785			
Training	TR1	0.741	0.831	0.881	0.598
	TR2	0.760			
	TR3	0.722			
	TR4	0.784			
	TR5	0.853			

The insights also show that the discriminant validity of the outer model is verified and confirmed as none of the interrelations of the instruments are greater than the square root of the AVE of the instrument as shown in Table 2 below. For the structural model, the inner model is analyzed where four criteria are examined, namely the R^2 values, effect size (f^2), predictive relevance of the model, and the level and significance of the path coefficients (Chin, 2010; Hair et al., 2011; Valerie, 2012). The R^2 score shows the variance in the endogenous latent variables shows the value for IT capability was 0.317. This indicates that 31.7 % of the variance in IT capability is explained by TQM. The R^2 value of the MFIs performance was 0.298 indicating that 29.8% of the variance in the MFIs performance is explained by both TQM and IT capability. This is considered substantial under criterion R^2 evaluation recommended by Cohen (1988).

Table 2. Discriminant validity matrix

	BM	CF	CI	CP	FP	ITB	ITK	ITP	LGP	LM	PP	QC	SOP	SP	TR
BM	0.895														
CF	0.244	0.903													
CI	0.333	0.58	0.883												
CP	0.069	0.271	0.098	0.882											
FP	0.338	0.155	0.083	0.422	0.885										
ITB	0.295	0.399	0.411	0.251	0.336	0.845									
ITK	0.076	0.272	0.102	0.037	0.17	0.534	0.873								
ITP	0.272	0.221	0.277	0.253	0.36	0.699	0.334	0.793							
LGP	0.206	0.377	0.452	0.228	0.281	0.455	0.336	0.363	0.888						
LM	0.343	0.625	0.588	0.264	0.169	0.516	0.335	0.291	0.413	0.81					
PP	0.048	-0.037	0.062	0.114	0.308	0.112	0.147	0.233	0.442	-0.073	0.886				
QC	0.116	0.553	0.333	0.455	0.257	0.408	0.223	0.142	0.349	0.385	0.074	0.722			
SOP	0.184	-0.017	0.224	0.172	0.22	0.253	-0.024	0.296	0.194	0.173	0.099	0.157	0.922		
SP	0.466	0.604	0.715	0.311	0.246	0.533	0.171	0.466	0.443	0.765	0.024	0.364	0.226	0.806	
TR	0.609	0.488	0.505	0.165	0.415	0.589	0.322	0.511	0.443	0.493	0.201	0.317	0.266	0.625	0.773

BM= Benchmarking; CF= Customer Focus; CI= Continuous Improvement; CP= Customer Perspective; FP= Financial Perspective; ITB= IT Objects; ITK= IT Knowledge; ITP= IT Operation; LGP= Learning and Growth Perspective; LM= Leadership Management; PP= Internal Process Perspective; QC= Quality Culture; SOP= Social Perspective; SP= Strategic Planning; TR=Training.

Table 3. The effect Size of the latent variables

Construct	R ² included	R ² excluded	R ² included- R ² excluded	1- R ² included	Effect Size (f ²)	Effect Size Rating
TQM	0.298	0.221	0.077	0.702	0.109	Small effect
IT capability	0.298	0.239	0.059	0.702	0.084	Small effect

The effect size (f²) analysis is presented to complement the R² value employed to determine the effect sizes of specific latent variables' impact upon the dependent variables (Chin, 2010). Cohen (1988) suggests the f² values of 0.02 represents small, 0.15 represents medium and 0.35 represents large effect sizes of the predictive variables. The results illustrated in Table (3) above showed that a small effect size of TQM on MFIs performance with f² values of 0.109 and similarly a small effect size of IT capability has been found on MFIs performance with f² values of 0.084.

In regard to the predictive relevance of the model, the Smart PLS 3.0 results highlighted in Table (4) below indicate that the cross-validated redundancy of IT capability was 0.132 and MFIs performance was 0.153. As it is more than zero, it can be confirmed that the model has an adequate prediction quality (Fornell & Cha, 1994).

Table 4. Predictive Quality Indicators of the Model

Variable	Variable Type	R square	Cross-Validated Redundancy	Cross-Validated Commonality
Total Quality Management				0.280
IT capability	Endogenous	0.317	0.132	0.317
MFIs performance	Endogenous	0.298	0.081	0.153

Unlike the other Structural Equation Modeling, PLS has only one measure of Goodness of Fit (GoF) which is called the global GoF measure (Tenenhaus, Esposito, Chatelin, & Lauro, 2005), which involves the calculation of geometric mean of the AVE and the average R² for the endogenous variables. According to Wetzels, Odekerken-Schröder, and Oppen (2009), the threshold values of GoF can be 0.1, 0.25 and 0.36 which represent small, medium and large respectively. The model GoF measure of this study was large with the GoF value of 0.44 which refers to an adequate and valid global PLS model.

4.2 Hypothesis Testing

Upon the goodness of the measurement model being established, the hypotheses were tested and the PLS algorithm path coefficient and bootstrapping results were generated.

Table 5. Hypothesis testing results

No.	Hypothesis Path	Path Coefficient	Standard Error	T Value	P Value	Decision
H _A	TQM -> MFIs per	0.325	0.163	1.993**	0.023	Supported
H _{A1}	TQM -> IT cap	0.562	0.097	5.802***	0.000	Supported
H _{A2}	IT cap -> MFIs per	0.292	0.184	1.589*	0.056	Supported

Significant level: ***: $p < 0.001$; **: $p < 0.05$; *: $p < 0.1$

The results proved that TQM has a positive and a significant effect on the performance of MFIs ($\beta = 0.325$, $t = 1.993$, $p < 0.05$). The hypothesis null was rejected at the significance level of 5%. This result shows the importance role of TQM for fostering MFIs performance. It also shows that TQM has a strong positive significant effect on IT capability ($\beta = 0.562$, $t = 5.802$, $p < 0.001$). For this one, the null hypothesis was rejected at the significance level of 0.1%. This result indicates the significant role of organizational resources such as TQM on organizational capabilities (IT capability). Similarly, IT capability has a positive and significant effect on MFIs performance, but at the significant level slightly above 5% ($\beta = 0.292$, $t = 1.589$, $p < 0.056$).

In testing the mediating effects of IT capability in the relationship between TQM and MFIs performance, the Smart PLS estimates the indirect effect among these variables. The bootstrapping method was used together with the other two methods the Baron and Kenny method and the Variance Accounted For (VAF) method. The bootstrapping results illustrated in Table 6 below shows that the IT capability has significantly an indirect effect on the performance of MFIs ($\beta = 0.192$, $t = 1.547$, $p < 0.10$). This indicates that IT capability is verified as a mediator in the link between TQM and MFIs performance.

Table 6. The mediating effect results

Path	Path Coefficient	T. Value	P value	Decision based on		
				Bootstrapping Method	Baron & Kenny Method	Variance Accounted For (VAF)
A	0.562***	5.802	0.000			
B	0.292*	1.589	0.056			
a*b	0.192*	1.547	0.061	Mediating Effect	Partial Mediation	Partial Mediation
C	0.489***	5.798	0.000			
c'	0.325*	1.993	0.023			
VAF		0.371				

Significant level: ***: $p < 0.001$; **: $p < 0.05$; *: $p < 0.1$

The Baron and Kenny method has approved and confirmed the mediating effect of IT capability in the relationship between TQM and MFIs performance as,

1. The TQM as the predictor variable significantly affecting the IT capability as mediator variable.
2. The IT capability as a mediating factor significantly affecting the MFIs performance, the dependent variable.
3. The TQM as the predictor variable is also significantly affecting the MFIs performance (dependent variable) when the IT variable (mediating variable) was excluded from the model.

The results show that the effect of TQM is positive and significant to the MFIs performance ($\beta = 0.489$, $t = 5.798$, $p < 0.001$) in the case of IT capability exclusion also when the IT capability is included ($\beta = 0.325$, $t = 1.993$, $p < 0.05$). However, the effect of TQM on MFIs performance is observed to be lower with the inclusion of IT capability. Further test on the effect of TQM on MFIs performance in the presence of IT capability shows that it is not significant. It indicates that IT capability is to be verified as a partial mediator instead of a full mediator.

The VAF method is also utilized to estimate the magnitude of the indirect effect of TQM on MFIs performance through IT capability. Hair et al. (2014) suggested that when the VAF is higher than 0.80, it is interpreted full mediation, while a value less than 0.20, it is concluded no mediation and when the VAF is between 0.20 and 0.80, it is characterized as partial mediation. In this study, the VAF value illustrated in Table 6 shows that 37.1% of the total effect of TQM on MFIs performance was explained by indirect effects of IT capability and a partial mediation was confirmed. This result also concludes that IT capability can be characterized as a partial mediator of the mentioned relationship.

5. Discussion

The key finding of the study shows that TQM has a positive and significant effect on MFIs performance at the significance level of 5%. This indicates that the performance of MFIs in Yemen, in the Middle-East countries, can be improved as a result of TQM implementation. The results are consistent with previous researches in the other non-Arab countries examining the effect of TQM on firm performance, such as by Lam et al. (2011), Wang et al. (2012), and Munizu (2013).

More importantly, the result of our study reveals more evidences regarding the mediating effects of IT capability on the relationship between TQM and MFIs performance. It is proven that TQM has a strong positive effect on IT capability (at significance level of 1%), which indicates that implementing TQM significantly results in building and improving IT capability. IT capabilities are needed so that TQM implementation can significantly influence the MFIs performance. Although the significance level of 10% is reported in this study on the relation between IT capability and the MFIs performance, this level is accepted and a conclusion is made allocating necessary resources to build IT capabilities is important for MFIs performance improvement. The first finding is in line with the view of Yusr et al. (2012) who argue TQM strategy can be implemented to promote organizational capabilities together with the technological innovation capability that result in gaining competitive advantage and superior performance. It is also similar to the evidence provided by Yusr et al. (2014), Yusr et al. (2012), and Akgün et al. (2014) who also include the marketing capability and learning capability in their studies linking TQM to the organization. The second finding is compatible with prior studies that confirmed the significant role of IT capability on the performance of organizations, such as by Bharadwaj (2000), Lin (2007), Bi and Zhang (2008), Yu and Xin-quan (2011), and Ong and Chen (2013).

Such mediating effect of IT capability on the relationship between TQM and MFIs performance is viewed as partial mediation. In general, when explaining the relationship between TQM and organizational performance, most scholars suggest for the full mediating factor of IT capability, however, for the MFIs performance where our study is the first attempt to do so the finding indicates for the partial mediation. This study differs from studies that test IT capability as a moderator on such relationship, for example IT investment by Liu, Lu, and Hu (2008), service innovation by Wei-Chen (2010), and business process reengineering by Ringim et al. (2012). This finding (partial mediating effect of IT capability) that being explained by a strong connection to any one of the variables, indicates that the implementation of TQM goes together with the improvement of IT capability, however, claims cannot be made for the better MFIs performance as the result of IT capability implementation. This is against most models claiming the positive and significance effect of IT capability on organizational performance and the most logical explanation probably due to the nature of the microfinance itself.

6. Conclusion

The performance and sustainability of MFIs have been the crucial issues being emphasized in fighting poverty and reducing unemployment. Millions of dollars have been injected into the sector and the success of MFIs will certainly affect millions of poor people living worldwide, and the effective use of the huge funds injected by donors and investors. However, limited of knowledge regarding the success drivers that enhance the performance of MFIs is available and the research attempts to link TQM and the MFIs performance with the mediating effect of IT capability is so valuable. This result, which shows the partial mediating effect of IT (using Baron and Kenny method and VAF on the significant relationship between TQM and the MFIs performance, indicates that it is in line with the view of RBV theory regarding the role of organizational resources in building capabilities as confirmed by the significant and strong effect of TQM on IT capability, which also affecting the MFIs performance. This is supposed to be the theoretical contribution in terms of the first study to examine the integration between TQM and MFIs performance with IT capability as the mediator. Moreover, the study contributes to the resource-based view theory, capability theory and complementarity theory by providing a broader theoretical perspective regarding the role of organizational resources and capabilities and how they can be deployed to foster the MFIs organizational performance

Whilst most studies on organizational performance measures focus only on the four main perspectives of the balanced scorecard, namely financial, customer, internal process, and finally learning and growth perspective, the social perspective is not emphasized. The social perspective that has been included in this study to measure MFIs performance are actually concerned with the business as well as the social objectives. This, thus, provides an additional perspective of consideration while looking at the performance of the MFIs. Moreover, this particular study was conducted in Yemen, where the culture and religion are closely tied with the social aspect provide a new dimension to the understanding of the organizational performance, in particular the MFIs performance.

For the practitioners, the insights can be used as the indication for policy formation and managerial implication to sustain the MFIs performance as they understand the role of TQM and IT capability on the performance of MFIs. In Yemen, the MFIs management can build strong organizational resources and develop IT competency to establish viable and enduring MFIs. The Yemeni government initiatives and strategies which aim at fighting poverty and improve the nation economy can be achieved once the MFIs performance is addressed. This study provides microfinance practitioners clear insight on how to ensure the sustainability of MFIs by understanding the role of TQM and IT capability on the performance of MFIs. IT capability should leverage the organizational resources and all employees should be trained to use IT system effectively so that TQM can better enhance the MFIs performance. Thus, in this respect, roadmap and guidelines to make necessary interventions for the development of MFIs.

For future research and more insights, it is proposed to look into other factors that potentially affecting the MFIs performance such as the organizational resources, strategies and capabilities. Such relations can be tested independently or together to reveal the bigger picture of the factors impacting the MFIs performance. Such research approach can also be applied to other type of organizational performance in finding any similarity or difference when the same study is conducted elsewhere in the Middle East where the culture and people behavior are dominated by a common religion.

Acknowledgements

The authors would like to express sincere thanks and gratitude to Mr Mohammed Saleh Al-lai, Vice Chairman of the Board of Directors of Sanabel Network, who is also the Chairman of Board of Directors of Yemen Microfinance Network and the CEO of Al-Amal Microfinance bank for his great support and encouragement.

References

- Abdel Baki, R., Zain, S., & Cordier, C. (2010). *MIX Microfinance World: 2010 Arab Microfinance Analysis & Benchmarking Report*. Retrieved from http://www.themix.org/sites/default/files/2010%20Arab%20Microfinance%20Analysis%20Benchmarking%20Report%20-Final_3.pdf
- Ahn, M. J., & York, A. S. (2011). Resource-based and institution-based approaches to biotechnology industry development in Malaysia. *Asia Pacific Journal of Management*, 28(2), 257-275. <http://dx.doi.org/10.1007/s10490-009-9147-2>
- Akgün, A. E., Ince, H., Imamoglu, S. Z., Keskin, H., & Kocoglu, İ. (2014). The mediator role of learning capability and business innovativeness between total quality management and financial performance. *International Journal of Production Research*, 52(3), 888-901. <http://dx.doi.org/10.1080/00207543.2013.843796>
- Al Dhaafri, H. S., Yusoff, R. Z. B., & Al Swidi, A. K. (2014). The Relationship between Enterprise Resource Planning, Total Quality Management, Organizational Excellence, and Organizational Performance-the Mediating Role of Total Quality Management and Organizational Excellence. *Asian Social Science*, 10(14), 158. <http://dx.doi.org/10.5539/ass.v10n14p158>
- Al-Dhaafri, H. S., Bin Yusoff, R. Z., & Al-Swidi, A. K. (2013). The Effect of Total Quality Management, Enterprise Resource Planning and the Entrepreneurial Orientation on the Organizational Performance: The Mediating Role of the Organizational Excellence-A Proposed Research Framework. *International Journal of Business Administration*, 4(1), 66-85. <http://dx.doi.org/10.5430/ijba.v4n1p66>
- Almarri, K., & Gardiner, P. (2014). Application of Resource-based View to Project Management Research: Supporters and Opponents. *Procedia-Social and Behavioral Sciences*, 119, 437-445. <http://dx.doi.org/10.1016/j.sbspro.2014.03.049>
- Al-Swidi, A. K., & Al-Hosam, A. (2012). The Effect of Entrepreneurial Orientation on the Organizational Performance: A Study on the Islamic Banks in Yemen Using the Partial Least Squares Approach. *Arabian Journal of Business and Management Review (Oman Chapter)*, 2(1), 73-84.
- Al-Swidi, A. K., & Mahmood, R. (2011). Yemeni banking system: Critical issues and future recommended strategies. *European Journal of Social Sciences*, 20(4), 637-655.
- Al-Swidi, A. K., & Mahmood, R. (2012). Total quality management, entrepreneurial orientation and organizational performance: The role of organizational culture. *African Journal of Business Management*, 6(13), 4717-4727. <http://dx.doi.org/10.5897/AJBM11.2016>
- Alvarez-Suescun, E. (2007). Testing resource-based propositions about IS sourcing decisions. *Industrial Management & Data Systems*, 107(6), 762-79. <http://dx.doi.org/10.1108/02635570710758716>

- Arawati, A. (2005). The structural linkages between TQM, product quality performance, and business performance: Preliminary empirical study in electronics companies. *Singapore Management Review*, 27(1), 87-105.
- Awuor, E. O., & Kinuthia, D. M. (2013). Total Quality Management Practices in Selected Private Hospitals in Nairobi, Kenya. *European Journal of Business and Management*, 5(13), 33-44.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <http://dx.doi.org/10.1177/014920639101700108>
- Barney, J. B., & Clark, D. N. (2007). *Resource-based theory: Creating and sustaining competitive advantage*. Oxford: Oxford University Press.
- Bassem, B. S. (2012). Social and financial performance of microfinance institutions: Is there a trade-off? *Journal of Economics and International Finance*, 4(4), 92-100. <http://dx.doi.org/10.5897/JEIF11.129>
- Berguiga, I. (2009). *Social Performance vs. Financial Performance of Microfinance Institutions*. Mimeo, East Paris University. Retrieved from <http://www.gredeg.cnrs.fr/colloques/nfi/papers/PapierOnLine/Berguiga.pdf>
- Bharadwaj, A. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly*, 24, 169-196. <http://dx.doi.org/10.2307/3250983>
- Bhatt, G. D., & Grover, V. (2005). Types of Information Technology Capabilities and their role in competitive Advantage: An Empirical Study. *Journal of Management Information Systems*, 22(2), 253-277. <http://dx.doi.org/10.2307/40398752>
- Bi, X., & Zhang, H. (2008). *Empirical Research on Relationship between Information Technology Capability and Firm Performance: the Evidence from Listed Companies and Information Power 500 in China*. Paper presented at the International Conference on Computer Science and Software Engineering. China. <http://dx.doi.org/10.1109/CSSE.2008.12>
- Boon, O. K., Arumugam, V., & Hwa, T. S. (2005). Does soft TQM predict employees' attributes? *The TQM Magazine*, 17(3), 279-289. <http://dx.doi.org/10.1108/09544780510594243>
- Brah, S. A., & Lim, H. Y. (2006). The effects of technology and TQM on the performance of logistics companies. *International Journal of Physical Distribution & Logistics Management*, 36(3), 192-209. <http://dx.doi.org/10.1108/09600030610661796>
- Brah, S. A., Wong, J. L., & Rao, B. M. (2000). TQM and business performance in the service sector: a Singaporean study. *International Journal of operations & Production Management*, 20(11), 1293-1312. <http://dx.doi.org/10.1108/01443570010348262>
- Breznik, L. (2012). Can information technology be a source of competitive advantage? *Economic and Business Review*, 14(3), 251-269. Retrieved from http://www.researchgate.net/profile/Lidija_Breznik/publication/249998794_CAN_INFORMATION_TECHNOLOGY_BE_A_SOURCE_OF_COMPETITIVE_ADVANTAGE/links/0deec51e8f454abd17000000.pdf
- Brown, J., & Fraser, M. (2006). Approaches and perspectives in social and environmental accounting: an overview of the conceptual landscape. *Business Strategy and the Environment*, 15(2), 103-117. <http://dx.doi.org/10.1002/bse.452>
- Caudill, S. B., Gropper, D. M., & Hartarska, V. (2009). Which microfinance institutions are becoming more cost effective with time? Evidence from a mixture model. *Journal of Money, Credit and Banking*, 41(4), 651-672. <http://dx.doi.org/10.1111/j.1538-4616.2009.00226.x>
- Chenhall, R. H. (2005). Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: an exploratory study. *Accounting, Organizations and Society*, 30(5), 395-422. <http://dx.doi.org/10.1016/j.aos.2004.08.001>
- Chin, W. W. (2010). How to write up and report PLS analyses. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares* (1st ed., pp. 655-690). Springer, Berlin. http://dx.doi.org/10.1007/978-3-540-32827-8_29
- Chong, V. K., & Rundus, M. J. (2004). Total quality management, market competition and organizational performance. *The British Accounting Review*, 36, 155-172. <http://dx.doi.org/10.1016/j.bar.2003.10.006>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.

- Combs, J. G., Crook, T. R., & Shook, C. L. (2005). The dimensionality of organizational performance and its implications for strategic management research. *Research methodology in strategy and management*, 2, 259-286. [http://dx.doi.org/10.1016/S1479-8387\(05\)02011-4](http://dx.doi.org/10.1016/S1479-8387(05)02011-4)
- Conca, F. J., Llopis, J., & Tari, J. J. (2004). Development of a measure to assess quality management in certified firms. *European Journal of Operational Research*, 156(3), 683-697. [http://dx.doi.org/10.1016/S0377-2217\(03\)00145-0](http://dx.doi.org/10.1016/S0377-2217(03)00145-0)
- Crook, T. R., Ketchen, D. J., Combs, J. G., & Todd, S. Y. (2008). Strategic resources and performance: a meta-analysis. *Strategic management journal*, 29(11), 1141-1154. <http://dx.doi.org/10.1002/smj.703>
- Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2009). Microfinance meets the market. *Journal of Economic Perspectives*, 23(1), 167-192. <http://dx.doi.org/10.1257/jep.23.1.167>
- Dacheva, P. (2009). Commercialization in Microfinance—A Study of Profitability, Outreach and Success Factors within the Latin American Context. *Sweet Briar College Working Paper*. Retrieved from <http://www.sbc.edu/sites/default/files/Honors/PDacheva.pdf>
- Demirbag, M., Tatoglu, E., Tekinkus, M., & Zaim, S. (2006). An analysis of the relationship between TQM implementation and organizational performance: evidence from Turkish SMEs. *Journal of Manufacturing Technology Management*, 17(6), 829-847. <http://dx.doi.org/10.1108/17410380610678828>
- Dilber, M., Bayyurt, N., Zaim, S., & Tarim, M. (2005). Critical factors of total quality management and its effect on performance in health care industry: a Turkish experience. *Problems and Perspectives in Management*, 4, 220-234. Retrieved from http://businessperspectives.org/journals_free/ppm/2005/PPM_EN_2005_04_Dilber.pdf
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10-11), 1105-1121. [http://dx.doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](http://dx.doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)
- El Shafeey, T., & Trott, P. (2014). Resource-based competition: three schools of thought and thirteen criticisms. *European Business Review*, 26(2), 122-148. <http://dx.doi.org/10.1108/EBR-07-2013-0096>
- El Shenawy, E., Baker, T., & Lemak, D. J. (2007). A meta-analysis of the effect of TQM on competitive advantage. *International Journal of Quality & Reliability Management*, 24(5), 442-471. <http://dx.doi.org/10.1108/02656710710748349>
- Fahy, J. (2000). The resource-based view of the firm: Some stumbling block on the road to understanding sustainable competitive advantage. *Journal of European Industrial Training*, 24(23/4), 94-104. <http://dx.doi.org/10.1108/03090590010321061>
- Finkelstein, S., & Hambrick, D. C. (1996). *Strategic Leadership: Top executives and their effects on organizations*. New York: West.
- Fornell, C., & Cha, J. (1994). Partial least squares. *Advanced methods of marketing research*, 407, 52-78.
- Galbreath, J. (2005). Which resources matter the most to firm success? An exploratory study of resource-based theory. *Technovation*, 25(9), 979-987. <http://dx.doi.org/10.1016/j.technovation.2004.02.008>
- Ghadiri, A., Bahari, M. D., Bafrani, F. A., Alami, M., Farzaneh, M., & Timachi, M. (2013). The survey of relationship between total quality management and financial performance. *Strategies*, 5(2). Retrieved from <http://journal-archieives33.webs.com/590-598.pdf>
- Ghalib, A. K., Malki, I., & Imai, K. S. (2011). *The Impact of Microfinance and its Role in Easing Poverty of Rural Households: Estimations from Pakistan* (No. DP2011-28). Retrieved from <http://www.rieb.kobe-u.ac.jp/academic/ra/dp/English/DP2011-28.pdf>
- Ghobakhloo, M., Hong, T. S., Sabouri, M. S., & Zulkifli, N. (2012). Strategies for successful information technology adoption in small and medium-sized enterprises. *Information*, 3(1), 36-67. <http://dx.doi.org/10.3390/info3010036>
- Hair, J. F. Jr., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications. Retrieved from <http://www.sagepub.com/books/Book237345>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-151. <http://dx.doi.org/10.2753/MTP1069-6679190202>

- Haq, M., Skully, M., & Pathan, S. (2010). Efficiency of microfinance institutions: A data envelopment analysis. *Asia-Pacific Financial Markets*, 17(1), 63-97. <http://dx.doi.org/10.1007/s10690-009-9103-7>
- Hemmatfar, M., Salehi, M., & Bayat, M. (2010). Competitive advantages and strategic information systems. *International Journal of Business and Management*, 5(7), 158.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. *Advances in International Marketing*, 20(1), 277-320. [http://dx.doi.org/10.1108/S1474-7979\(2009\)0000020014](http://dx.doi.org/10.1108/S1474-7979(2009)0000020014)
- Heskett, J. L., Jones, T. O., Sasser, W. Jr., & EarlSchlesinger, L. A. (1994). Putting the service-profit chain to work. *Harvard Business Review*, 72(2), 164.
- Iqbal, T., Khan, B. A., Nadeem Talib, D., & Khan, N. (2012). TQM and Organization Performance: The Mediation and Moderation Fit. *Life Science Journal*, 9(4).
- Irfan, S. M., & Kee, D. M. H. (2013). Critical Success Factors of TQM and its Impact on Increased Service Quality: A Case from Service Sector of Pakistan. *Middle East Journal of Scientific Research*, 15(1). <http://dx.doi.org/10.5829/idosi.mejsr.2013.15.1.828>
- Jaafreh, A. B., & Al-abadallat, A. Z. (2012). The Effect of Quality Management Practices on Organizational Performance in Jordan: An Empirical Study. *International Journal of Financial Research*, 4(1), 93. <http://dx.doi.org/10.5430/ijfr.v4n1p93>
- Jean, R.-J. B., Sinkovics, R. R., & Kim, D. (2008). Information technology and organizational performance within international business to business relationships: a review and an integrated conceptual framework. *International Marketing Review*, 25(5), 563-583. <http://dx.doi.org/10.1108/02651330810904099>
- Jing, F. F., & Avery, G. C. (2008). Missing Links in Understanding the Relationship between Leadership and Organizational Performance. *International Business & Economics Research Journal*, 7(5), 67-78.
- Jusoh, D., Ibrahim, N., & Zainuddin, Y. (2008). The performance consequence of multiple performance measures Usage: Evidence from the Malaysian manufacturers. *International Journal of Productivity and Performance Management*, 57(2), 119-136. <http://dx.doi.org/10.1108/17410400810847393>
- Kamukama, N., Ahiauzu, A., & Ntayi, J. M. (2010). Intellectual capital and performance: testing interaction effects. *Journal of Intellectual Capital*, 11(4), 554-574. <http://dx.doi.org/10.1108/14691931011085687>
- Kamukama, N., Ahiauzu, A., & Ntayi, J. M. (2011). Competitive advantage: mediator of intellectual capital and performance. *Journal of intellectual capital*, 12(1), 152-164. <http://dx.doi.org/10.1108/14691931111097953>
- Kanji, G. K., & Wallace, W. (2000). Business excellence through customer satisfaction. *Total Quality Management*, 11(7), 979-998. <http://dx.doi.org/10.1080/09544120050135515>
- Kaplan, R. S. & Norton, D. P. (1993). Putting the balanced scorecard to work. *Harvard Business Review*, 9(10), 134-47.
- Kaplan, R. S., & Norton, D. P. (2008). *The execution premium: linking strategy to operations for competitive advantage*. Harvard Business Press.
- Karimi Mazidi, A. R., Amini, A., & Latifi, M. (2014). The impact of information technology capability on firm performance; a focus on employee customer profit chain. *Iranian Journal of Management Studies*, 7(1), 95-120.
- Khaled, M. (2011). Building a Successful Business Model for Islamic Microfinance. In *Global Microcredit Summit Commissioned Workshop Paper*. Retrieved from http://www.globalmicrocreditsummit2011.org/userfiles/file/Workshop%20Papers/M_Khaled%20-%20Building%20a%20Successful%20Business%20Model%20for%20Islamic%20Microfinance.pdf
- Khanam, S., Siddiqui, J., & Talib, F. (2013). Role of Information Technology in Total Quality Management: A Literature Review. *International Journal of Advanced Research in Computer Engineering and Technology*, 2(8), 2433-2445.
- Kinde, B. A. (2012). Financial sustainability of microfinance institutions (MFIs) in Ethiopia. *European Journal of Business and Management*, 4(15), 1-10.
- Kipesha, E. F. (2013). Performance of Microfinance Institutions in Tanzania: Integrating Financial and Non-financial Metrics. *European Journal of Business and Management*, 5(4), 94-105.
- Kirby, J. (2005). Toward a theory of high performance. *Harvard business review*, 83(7), 30.

- Koveos, P., & Randhawa, D. (2004). Financial services for the poor: assessing microfinance institutions. *Managerial Finance*, 30(9), 70-95. <http://dx.doi.org/10.1108/03074350410769281>
- Kraaijenbrink, J., Spender, J. C., & Groen, A. J. (2010). The resource-based view: a review and assessment of its critiques. *Journal of management*, 36(1), 349-372. <http://dx.doi.org/10.1177/0149206309350775>
- Kumar, V., Choisine, F., de Grosbois, D., & Kumar, U. (2009). Impact of TQM on company's performance. *International journal of quality & reliability management*, 26(1), 23-37. <http://dx.doi.org/10.1108/02656710910924152>
- Lam, S. Y., Lee, V. H., Ooi, K. B., & Lin, B. (2011). The relationship between TQM, learning orientation and market performance in service organizations: An empirical analysis. *Total Quality Management & Business Excellence*, 22(12), 1277-1297. <http://dx.doi.org/10.1080/14783363.2011.631337>
- Li, E. Y., Chen, J. S., & Huang, Y. H. (2006). A framework for investigating the impact of IT capability and organizational capability on firm performance in the late industrializing context. *International Journal of Technology Management*, 36(1), 209-229. <http://dx.doi.org/10.1504/IJTM.2006.009969>
- Liang, T. P., You, J. J., & Liu, C. C. (2010). A resource-based perspective on information technology and firm performance: a meta-analysis. *Industrial Management & Data Systems*, 110(8), 1138-1158. <http://dx.doi.org/10.1108/02635571011077807>
- Lin, B. W. (2007). Information technology capability and value creation: Evidence from the US banking industry. *Technology in Society*, 29(1), 93-106. <http://dx.doi.org/10.1016/j.techsoc.2006.10.003>
- Lin, C. S., & Su, C. T. (2013). The Taiwan national quality award and market value of the firms: An empirical study. *International Journal of Production Economics*, 144(1), 57-67. <http://dx.doi.org/10.1016/j.ijpe.2013.01.015>
- Liu, P., Zhao, R. Y., Wang, W. L., & Xiao, J. (2013). Information technology capability and firm performance: A meta-analysis. In *Service Systems and Service Management (ICSSSM), 2013 10th International Conference on* (pp. 719-724). <http://dx.doi.org/10.1109/icsssm.2013.6602519>
- Liu, Y., Lu, H., & Hu, J. (2008). IT capability as moderator between IT investment and firm performance. *Tsinghua Science & Technology*, 13(3), 329-336. [http://dx.doi.org/10.1016/s1007-0214\(08\)70053-1](http://dx.doi.org/10.1016/s1007-0214(08)70053-1)
- Lu, Y., Zhou, L., Bruton, G., & Li, W. (2010). Capabilities as a mediator linking resources and the international performance of entrepreneurial firms in an emerging economy. *Journal of International Business Studies*, 41(3), 419-436. <http://dx.doi.org/10.1057/jibs.2009.73>
- Makadok, R. (2001). Toward a synthesis of the resource-base and dynamic capability view of rent creation. *Strategic Management Journal*, 22(5), 387-401. <http://dx.doi.org/10.1002/smj.158>
- Melville, N., Kraemer, K., & Gurbaxani, V. (2004). Review: Information technology and organizational performance: An integrative model of IT business value. *MIS quarterly*, 28(2), 283-322. <http://dx.doi.org/10.2307/25148636>
- Morgan, N. A., Slotegraaf, R. J., & Vorhies, D. W. (2009). Linking marketing capabilities with profit growth. *International Journal of Research in Marketing*, 26(4), 284-293. <http://dx.doi.org/10.1016/j.ijresmar.2009.06.005>
- Morgan, N. A., Vorhies, D. W., & Mason, C. H. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*, 30(8), 909-920. <http://dx.doi.org/10.1002/smj.764>
- Mueller, F. (1996). Human Resources as Strategic Assets: An Evolutionary Resource-Based Theory. *Journal of Management studies*, 33(6), 757-785. <http://dx.doi.org/10.1111/j.1467-6486.1996.tb00171.x>
- Munizu, M. (2013). The Impact of Total Quality Management Practices towards Competitive Advantage and Organizational Performance: Case of Fishery Industry in South Sulawesi Province of Indonesia. *Pakistan Journal of Commerce & Social Sciences*, 7(1).
- Mustafa, A. K., & Saat, M. M. (2013). Performance Measurement Characteristics: A new set for Microfinance Institutions. *Interdisciplinary Journal of Contemporary Research in Business*, 4(10).
- Nair, A. (2006). Meta-analysis of the relationship between quality management practices and firm performance-implications for quality management theory development. *Journal of Operations Management*, 24, 948-975. <http://dx.doi.org/10.1016/j.jom.2005.11.005>
- Nanayakkara, G., & Iselin, E. R. (2012). An Exploratory Study of the Performance of Microfinancing

- Institutions Using the Balanced Scorecard Approach. *International Journal of Business and Information*, 7(2).
- Neely, A. D., Adams, C., & Kennerley, M. (2002). *The Performance Prism: The scorecard for measuring and managing business success*. Financial Times Prentice Hall London. Retrieved from <http://210.55.20.100/news/Events/Tertiary%20Services%20Conference/Tertiary%20Conference/PDF's/2009/General%20Papers/NM%20Performance%2520Prism.pdf>
- Ong, C. S., & Chen, P. (2013). Information technology capability-enabled performance, future performance, and value. *Industrial Management & Data Systems*, 113(5), 669-682. <http://dx.doi.org/10.1108/02635571311324133>
- Owen, D. (2006). Emerging issues in sustainability reporting. *Business Strategy and the Environment*, 15(4), 217-218. <http://dx.doi.org/10.1002/bse.530>
- Pavlous, P. A. (2004). *IT enabled dynamic capabilities in new product development: Building a competitive advantage in turbulent environments* (Unpublished Dissertation). University of Southern California.
- Pebrianto, A. (2013). The Influence of Information Technology Capability, Organizational Learning, and Knowledge Management Capability on Organizational Performance (A Study of Banking Branches Company in Southern Kalimantan Province). *Information and Knowledge Management*, 3(11), 112-120.
- Pérez-López, S., & Alegre, J. (2012). Information technology competency, knowledge processes and firm performance. *Industrial Management & Data Systems*, 112(4), 644-662. <http://dx.doi.org/10.1108/02635571211225521>
- Powell, T. C. (1995). Total quality management as competitive advantage: A review and empirical study. *Strategic Management Journal*, 16(1), 15-37. <http://dx.doi.org/10.1002/smj.4250160105>
- Prajogo, D. I., & Hong, S. W. (2008). The effect of TQM on performance in R&D environments: A perspective from SouthKorean firms. *Technovation*, 28(12), 855-863. <http://dx.doi.org/10.1016/j.technovation.2008.06.001>
- Priem, R. L., & Butler, J. E. (2001). Is the resource-based “view” a useful perspective for strategic management research? *Academy of management review*, 26(1), 22-40. <http://dx.doi.org/10.2307/259392>
- Rahman, S. U., & Bullock, P. (2005). Soft TQM, hard TQM, and organisational performance relationships: an empirical investigation. *Omega*, 33(1), 73-83. <http://dx.doi.org/10.1016/j.omega.2004.03.008>
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of management*, 35(3), 718-804. <http://dx.doi.org/10.1177/0149206308330560>
- Ringim, K. J., Razalli, M. R., & Hasnan, N. (2012). Moderating effect of Information technology (IT) capability on the relationship between business process reengineering factors and organizational performance of Bank. *African Journal of Business Management*, 6(16), 5551-5567. <http://dx.doi.org/10.5897/AJBM11.2792>
- Roy, A., & Goswami, C. (2013). A scientometric analysis of literature on performance assessment of microfinance institutions (1995-2010). *International Journal of Commerce and Management*, 23(2), 148-174. <http://dx.doi.org/10.1108/10569211311324939>
- Samson, D., & Terziovski, M. (1999). The relationship between total quality management practices and operational performance. *Journal of operations management*, 17(4), 393-409. [http://dx.doi.org/10.1016/S0272-6963\(98\)00046-1](http://dx.doi.org/10.1016/S0272-6963(98)00046-1)
- Sánchez-Rodríguez, C., & Martínez-Lorente, A. R. (2011). Effect of IT and quality management on performance. *Industrial Management & Data Systems*, 111(6), 830-848. <http://dx.doi.org/10.1108/02635571111144937>
- Sayeda, B., Rajendran, C., & Lokachari, P. S. (2010). An empirical study of total quality management in engineering educational institutions of India: perspective of management. *Benchmarking: An International Journal*, 17(5), 728-767. <http://dx.doi.org/sci-hub.org/10.1108/14635771011076461>
- Shin, S., & Aiken, K. D. (2012). The mediating role of marketing capability: evidence from Korean companies. *Asia Pacific Journal of Marketing and Logistics*, 24(4), 658-677. <http://dx.doi.org/10.1108/13555851211259070>
- Steurer, R. (2006). Mapping stakeholder theory anew: from the ‘stakeholder theory of the firm’ to three perspectives on business–society relations. *Business Strategy and the Environment*, 15(1), 55-69.

<http://dx.doi.org/10.1002/bse.467>

- Su, Q., Li, Z., Zhang, S. X., Liu, Y. Y., & Dang, J. X. (2008). The impacts of quality management practices on business performance: an empirical investigation from China. *International Journal of Quality & Reliability Management*, 25(8), 809-823. <http://dx.doi.org/sci-hub.org/10.1108/02656710810898621>
- Talib, F., & Rahman, Z. (2011). *Pareto analysis of total quality management factors critical to success for service industries*. Paper presented at 5th International Quality Conference, Center for Quality. Retrieved from <http://www.cqm.rs/2011/cd/5iqc/pdf/088.pdf>
- Talib, F., Rahman, Z., & Qureshi, M. N. (2013). An empirical investigation of relationship between total quality management practices and quality performance in Indian service companies. *International Journal of Quality & Reliability Management*, 30(3), 280-318. <http://dx.doi.org/10.1108/02656711311299845>
- Tangen, S. (2004). Performance measurement: from philosophy to practice. *International Journal of Productivity and Performance Management*, 53(8), 726-737. <http://dx.doi.org/10.1108/17410400410569134>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533. [http://dx.doi.org/10.1002/\(sici\)1097-0266\(199708\)18:7<509::aid-smj882>3.0.co;2-z](http://dx.doi.org/10.1002/(sici)1097-0266(199708)18:7<509::aid-smj882>3.0.co;2-z)
- Tenenhaus, M., Esposito, V., Chatelin, Y. M., & Lauro, C. (2005). PLS Path Modeling. *Computational Statistics and Data Analysis*, 28, 159- 205. <http://dx.doi.org/10.1016/j.csda.2004.03.005>
- Thapa, G. (2007). Sustainability and governance of microfinance institutions: recent experiences and some lessons for Southeast Asia. *Asian Journal of Agriculture and Development*, 4(1), 17-37.
- Tippins, M. J., & Sohi, R. S. (2003). IT Competency and firm performance: Is organizational learning a missing link? *Strategic Management Journal*, 24, 745-761. <http://dx.doi.org/10.1002/smj.337>
- Ul Hassan, M., Mukhtar, A., Qureshi, S. U., & Sharif, S (2012). Impact of TQM Practices on Firm's Performance of Pakistan's Manufacturing Organizations. *International Journal*, 2(10).
- Valerie, F. (2012). Re-discovering the PLS approach in management science. *Management*, 15(1), 101-123.
- Wang, C. H., Chen, K. Y., & Chen, S. C. (2012). Total quality management, market orientation and hotel performance: the moderating effects of external environmental factors. *International Journal of Hospitality Management*, 31(1), 119-129. <http://dx.doi.org/10.1016/j.ijhm.2011.03.013>
- Waweru, N. (2010). The appropriateness of performance measurement systems in the services sector: case studies from the microfinance sector in Kenya. Paper presented at the *American Accounting Association, Management Accounting Section Conference*, 6-9 January. <http://dx.doi.org/10.2139/ssrn.1408262>
- Waweru, N., & Spraakman, G. (2012). The use of performance measures: case studies from the microfinance sector in Kenya. *Qualitative Research in Accounting & Management*, 9(1), 44-65. <http://dx.doi.org/10.1108/11766091211216105>
- Wei-Chen, T. (2010). The moderating effect of IT capability on the service innovation and supply chain performance. In *Technology Management for Global Economic Growth (PICMET), 2010 Proceedings of PICMET'10* (pp. 1-8). IEEE.
- Wetzels, M., Odekerken-Schroder, G., & Oppen, C. V. (2009). Using PLS path modeling for assessing hierarchical models: Guidelines and empirical illustration. *MIS Quarterly*, 33(1), 177-195. Retrieved from http://www.researchgate.net/profile/Gaby_Odekerken/publication/228754673_Using_PLS_path_modeling_for_assessing_hierarchical_construct_models_guidelines_and_empirical_illustration/links/0912f50883c99a26d4000000.pdf
- Yu, C., & Xin-quan, G. (2011). The empirical study on the relationship between information technology capability and innovation performance: The moderating role of learning commitment. In *E-Business and E-Government (ICEE), 2011 International Conference on* (pp. 1-4). IEEE. <http://dx.doi.org/10.1109/IC EBEG.2011.5882049>
- Yusr, M. M., Mokhtar, S. S. M. & Othman, A. R. (2014). The Effect of TQM Practices on Technological Innovation Capabilities: Applying on Malaysian Manufacturing Sector. *International Journal for Quality Research*, 8(2), 197-216.
- Yusr, M. M., Othman, A. R., & Mokhtar, S. S. M. (2012). Assessing the Mediating Role of Marketing Capability in the Relationship between TQM Practices and Innovation Performance Dynamic Capabilities Approach.

International Journal of Business and Social Science, 3(23), 165-176.

Zerai, B., & Rani, L. (2012). Is There a Tradeoff between Outreach and Sustainability of Micro finance institutions? Evidence from Indian Microfinance Institutions (MFIs). *Research Journal of Finance and Accounting*, 2(11), 32-41.

Zhu, Z., & Nakata, C. (2007). Reexamining the link between customer orientation and business performance: the role of information systems. *The Journal of Marketing Theory and Practice*, 15(3), 187-203.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Factors Affecting the Choice of School and Students' Level of Interest towards the Maritime Program

Carlos L. Aguado¹, Jake M. Laguador² & Joseph Cezar L. Deligero³

¹ Lyceum International Maritime Academy, Lyceum of the Philippines University, Batangas City, Philippines

² Research and Statistics Center, Lyceum of the Philippines University, Batangas City, Philippines

³ Strategic Communications and Alumni Affairs, Lyceum of the Philippines University, Batangas City, Philippines

Correspondence: Jake M. Laguador, Research and Statistics Center, Lyceum of the Philippines University, Batangas City, 4200, Philippines. Tel: 63-917-533-5261. E-mail: jakelaguador@gmail.com

Received: April 27, 2015 Accepted: June 10, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p231

URL: <http://dx.doi.org/10.5539/ass.v11n21p231>

Abstract

Several factors may be considered in selecting school and degree program like quality education, the people from the environment, personal choice; and accessibility of the school from students' residences. This study utilized a descriptive type of research method with Freshman Maritime students as respondents. Findings revealed that it is the personal choice of the students to enroll in maritime program in Lyceum of the Philippines University-Batangas (LPU-B) with the support primarily from their parents wherein quality education through being known as home of board toppers and its standards are considered big factor for their decision. They also believed that finishing maritime education would bring them in employment abroad which is basically the nature of duties and responsibilities of seafarers. High interest towards the degree program is also manifested among the maritime students. Maritime students graduated from public schools have significantly higher chance of being influenced by people in choosing the school and degree program and they also have significantly higher degree of interest towards the maritime program compared to those graduated from private schools.

Keywords: quality education, interest, maritime education, LPU, Filipino

1. Introduction

Graduating students from secondary schools may not have solid decision on where to go in college and what degree program they may possibly take. They are planning to enter college without clear idea of what career to pursue for their future (Ramirez & Dizon, 2014). They may sometimes consider the people and the information they received within their environment. There are several factors that may affect the decision of students and parents, where it can be a good source of insight for private higher education institutions to offer quality services that will suit to the needs, expectations and demands of the community. Academic institutions sought to observe the requirements of the customers, prospective students and other clients like industry partners when preparing an educational program (Hrnciar & Madzik, 2013). Degree programs and other student services are being developed to promote the image of the university (Nadelson, Semmelroth, Martinez, Featherstone, Fuhrman, & Sell, 2013).

With the curricular offerings of private colleges and universities which are almost identical programs makes diversification very difficult (Vaz & Mansori, 2013). Therefore, the competitive edge, uniqueness and quality must be established in educational marketing through image building while helping and guiding the parents towards the achievement of their desire for the success of their children.

The decision on good career choice and school sometimes depend on how the way students perceive the world and their future. Some of them may not have enough knowledge and consciousness about how they should process information from personal, social, economical, political, spiritual and environmental aspects of putting into context and realization of having a successful profession. Pafili and Mylonakis (2011) emphasized that in coming up with the right decision of what profession to take, students can properly utilize their skills and knowledge to gain proper experience who could contribute to the development and welfare of the society but Koni, Zainal, and Ibrahim (2012) noted that some studies show that not all students who enter a university have the intention to obtain the degree.

This study is more on preventive rather than a corrective action on the problems or consequences that may occur when the implementation of K-12 in the Philippines will reach in 2016 wherein no first year students will enroll in college. Deeper understanding on how customers make their choices and who make the choices are essential considerations in image building, marketing and advertising. The faculty members, students and marketing staff of the university assist the graduating students from various secondary schools within its vicinity and along the neighboring towns in the region to think of the appropriate college degree program that will be suitable to the needs of their respective communities or match to their line of interest. They provide possible options and the opportunities to be well oriented and informed of the program offerings that would make them excel and successful. Hirschi and Läge (2007) noted that the educational career starts officially in Grade 8 among students in Switzerland and it seems to assume that they enter this process with the same conditions and mostly uninformed of existing choices. This time, they will be orienting junior high school students to enter in the senior high school with properly selected academic track: **Accountancy, Business and Management (ABM) Strand; Humanities and Social Sciences Strand (HUMSS); Science, Technology, Engineering and Mathematics (STEM) Strand** while other colleges and universities will be offering other tracks based on the approval of the Department of Education.

The choice of career of the students is being influenced by some factors from the social environment, mainly the parents as immediate family who plays an active role in choosing the right education for their children (Pafili & Mylonakis, 2011). As a sign of respect for the parents and culture of the Filipinos, parents or the elderly are being consulted first by their children because primarily they will be the one to provide the financial support to enter in college (Laguador, 2013).

This present study explores the last phase of the Career Decision-Making Process Model of Hirschi and Läge (2007) which is the after actual decision-making which aims to determine, whether if the maritime program is definitely the college degree that the students under study really aspire to pursue, either personal choice or with consent and approval from other people. This is also relevant to the social cognitive theory of Bandura (1986) which explores the maturity and development of interest and career and how these things turned into action.

It is important for the institution to identify the willingness of the students to pursue the program where interest can be used as good indicator of career choice (Hirschi & Läge, 2008), so that if problems might occur in their academic performance related to negative attitude, the result of this study might be useful to explain the situation.

Part of the study is the issue of the type of high school where the Maritime students graduated either from public or private secondary schools. Estevan (2014) emphasized that in Brazil, although there is an improvement in the quality of public school which may also increase enrollment; there are some students who prefer private education now choose public schools. In the Philippines, based on personal observation that most parents transferred their children from private to public schools due to the global economic recession which parents working abroad become unemployed or they are receiving lesser amount of salary compared to their normal compensation. Some political challenges that the country faced for the past and present administrations make the parents financially affected. This study also explores the differences on how these students from private and public schools really value their college degree to become future seafarers to seek greener pastures from other countries.

Majority of the parents who can afford to educate their children in private schools are those capable to sustain in paying high tuition and other miscellaneous fees, projects, assignments and co-curricular activities. The nature of student life in public school is different from private due to the different levels of economic status which may somehow influence the attitude and behavior of the students towards on how they look at the environment based on their social orientation within their sphere. Student development can be equated from the kind of activities and quality of life that a school can provide wherein the success of every outcome still depends on how the students appreciate and apply the learning from various experiences.

It is a good insight for the academic institution to determine the reasons of the students for choosing them as a training ground for their college degree. This serves as initial information to strengthen the services of the university towards the attainment of its objectives and fulfillment of the expectations of its clients, stakeholders and the community, therefore, this study was conducted.

2. Objectives of the Study

The study aims to investigate the factors affecting the choice of school and degree program of the Freshman Year Maritime Students. It specifically aimed to identify the persons who could primarily influence the choice of the respondents to decide what degree program to take and enroll in LPU; to determine the reasons of the

respondents for the selection of school based on quality education, influence of people, personal preference; and accessibility and proximity; to determine the level of their interest towards maritime program; and test the difference between students' perception from private and public high school on the factors affecting their choice of school and level of interest towards the maritime program.

Ho: There is no significant difference on the factors affecting choice of school and level of interest on the maritime program between students who graduated from the private and public schools.

3. Research Methodology

3.1 Research Design

Descriptive-survey research method was employed to analyze and interpret the result of the study. It is considered appropriate to describe the nature of the phenomenon based on the perceived condition and status of some simple observable situations (Costales & Zulueta, 2003).

3.2 Participants

Out of one thousand Marine Engineering and Marine Transportation freshman students of LPU-B, 30 percent or 300 regular full time students were randomly selected to answer the survey. Systematic random sampling was used in identifying the respondents. Transferees from other universities and shifters from other degree programs were not included in the study because they have already experienced the college life; they are already adjusted and the level of their interest might be already different from those freshmen. Part-time students or those working students were also excluded due to different level of their responsibilities and priorities in life not only as student but also an employee. From the randomly selected participants, 181 or 60.3 percent of them were graduated private high schools against 119 or 39.7 percent from public schools. Records of the students were taken from Registrar's office of the university. Since maritime program is dominated by males which are almost 98 percent, female students were also excluded as respondent of the study. Those students who refused to participate in the study were replaced by respondents who were preliminary drawn from the list in case of non-participation of selected students were identified based on their willingness to participate in the study and they are from the same age bracket of 16 to 18 years old and with guardians, brothers or sisters living with them.

3.3 Instrument

The survey questionnaire was employed in identifying the persons who could primarily influence the choice of the respondents to decide what degree program to take in college and to enroll in LPU which was adapted from the study of Laguador (2013) in determining the career choice of engineering freshmen. The instrument was modified based on the specific objectives of the study. Another part of the instrument is to determine the reasons of the maritime students for the selection of school based on quality education, influence of people, personal choice as well as accessibility and proximity of the school. The instrument was content validated by the Director of Counseling and Testing Center of the University, Educational Psychologist and the Research Director. It was pre-tested to the Engineering students from the same institution since this degree program is also dominated by male students from the same year level and age bracket. The instrument obtained a computed Cronbach alpha of 0.78 which is already considered good or reliable to use.

3.4 Procedure

The instrument was personally administered by the researchers and staff of the Maritime Academy before the end of 1st semester SY 2014-2015. They were asked to participate in the survey with an informed consent. Participants were informed regarding the objective of the study and the confidentiality of the result which will be utilized solely in the purpose of this research. The ethical standards on conducting research with human as respondents had met by this study. They have the freedom to decline their participation in the study if they don't feel like answering the instrument due to busy schedule and other personal reasons.

3.5 Data Analysis

Results of the data gathered were analyzed and interpreted using weighted mean and ranking while independent sample t-test was employed to test the difference between maritime students from private and public schools in terms of the factors affecting their choice of school and level of interest towards maritime program.

The given scale was utilized to discuss the result of the data gathered.

Weight	Range	Verbal Interpretation (VI)	
4	3.50 - 4.00	Very Much (VM)	Strongly Agree (SA)
3	2.50 - 3.49	Much (M)	Agree (A)

2	1.50 - 2.49	Little (L)	Disagree (D)
1	1.00 - 1.49	Not at all (NA)	Strongly Disagree (SD)

4. Results and Discussion

Table 1 shows the degree of persons' influenced on the Maritime Students' Choice of Degree Program and School. It is the Maritime students' own choice to take Maritime Program and enroll in LPU-Batangas as manifested by the computed weighted mean scores of 3.53 and 3.52, respectively.

Table 1. Persons who influenced the maritime students' choice of degree program and school

Persons who influenced them	Degree Program	VI	Rank	School	VI	Rank
1. Father	3.28	M	3	3.41	M	2
2. Mother	3.46	M	2	3.32	M	3
3. Brother/Sister	3.25	M	4	3.03	M	6
4. Relatives	3.15	L	7	2.32	L	7
5. Friends	3.21	M	5	3.09	M	5
6. Teacher	3.16	M	6	3.25	M	4
7. Own Choice	3.53	VM	1	3.52	VM	1

Meanwhile, parents have much influenced mostly mothers in taking the degree and fathers in choosing the school followed by teachers and friends. Children are still being asked by their parents where they wanted to pursue their college degree but parents are considered the most influential person closest to their children to decide and convince where to study because they are the ones who will pay the tuition fees. Lee (2005) emphasized that decision makers have a strong tendency to consider both their cognitive and non-cognitive aspects, such as values and interests, in making decisions. Thus, solely relying on individuals' cognitive aspects may not provide a complete picture of their career decision making processes.

Brothers and sisters have also contributed to the decision of the respondents to choose maritime program while their relatives have little influence in making the decision in choosing the degree program and school. In the Philippines, most especially elder brothers and sisters, they also give their opinion regarding what is the best school and degree program for their siblings because sometimes they are helping the family to support financially the education of their younger siblings which is a good Filipino values and a good sign of gratitude. Aside from that, they are also being asked because parents are not knowledgeable enough about the in-demand professions nowadays and some of them maybe have not attended schools where they just have learned everything from experience.

Some students were also informally interviewed regarding their reasons of taking up Maritime program and some of them answered due to the frustrations of their father to become seafarers. Some of them have relatives working as officials and crews in shipping vessels and they were ensured that they could have immediate employment after graduation. Others have some apprehensions of not having accepted for shipboard training due to lack of connections.

Table 2 presents the factors that affect the choice of school among maritime students. They strongly agreed that one of the reasons of choosing the school is that LPU proven its ability to become home of board topnotchers and passers (3.52) and they also agreed that LPU has well known high quality standards (3.46). It is one of the best practices of the university to provide cash incentives for board top notchers in any degree program ranging from Php 60,000 to 100,000 depending on the positions landed in the top 10. LPU-Batangas already produced 249 board top notchers as of March 2015 and still counting.

Table 2. Factor affecting the choice of school

Quality Education: The University has...	WM	VI	Rank
well known high quality standards	3.46	A	2
various certifications like ISO	3.01	A	5
tuition fee that compensates quality education	3.28	A	4
produced graduates who easily find jobs	3.41	A	3
proven its ability to become home of board topnotchers and passers	3.52	SA	1
Composite Mean	3.34	A	
Most of my friends/relative are enrolled in this school	2.37	D	5

Quality Education: The University has...	WM	VI	Rank
Most of my classmates and close friends would like to study in LPU	3.39	A	2
My close relatives were Lyceum Alumni	3.04	A	4
Parent's Choice	3.42	A	1
High school teachers' advice	3.27	A	3
Composite Mean	3.09	A	
Personal Preferences			
Own Choice	3.57	SA	1
Preferred course is offered	3.41	A	2
Composite Mean	3.49	A	
Proximity and Accessibility			
Near at our present family residence	2.36	D	3
This is the nearest university where maritime program is offered	3.61	SA	1
The transportation is accessible	3.23	A	2
Composite Mean	3.07	A	

It is part of the mission and vision of the institution to monitor the academic performance of its students to ensure that they possess the established student outcomes set for them to achieve before graduation. Nkang (2012) stressed that the qualifications of the university graduates must be internationally competitive through making realized the learning environment and students' outcomes thoroughly achieved.

Another reason is that the LPU graduates easily find jobs (3.41) and tuition fee compensates quality education (3.28). LPU or LIMA as ISO certified considered as their least reason of choosing the school. It seems that some parents were not much aware of the certifications but they will see the benefit of being ISO certified when they already experienced the services being provided to them as customer of the university.

The composite mean of 3.34 implies that the image of school in terms of providing quality education is highly considered by the students in choosing the school for their college education. Quality is being considered by anyone in making a decision. They chose LPU because they believe in the capability of this institution to provide quality education to its customers. Although managing quality in tertiary education in a multicultural population with different approaches according to Soomro and Ahmad (2012) is not only challenging and tough but also an uphill task, institutions must continuously be true to their mission of providing quality to its clients which can be recognized by the community as marketing tool for greater enrolment.

Parents (3.42) have always high regards in terms of choosing the school where their children will be trained as future professionals. The willingness of their High school classmates and friends to study in LPU (3.39) is also considered as factor that influenced their decision; advise from teachers in high school (3.27); and having close relatives who were LPU Alumni also contribute to their decision while having friends and relatives enrolled in LPU (2.37) is considered the least.

The Maritime students strongly agreed in choosing then university is their own choice (3.57) and they agreed that the preferred degree program is offered (3.41) in this university. This signifies that as early as high school, they know where to go in college. They believe in the capability of LPU to produce board passers and topnotchers. They know that they can get what they expect from the institution. In the study of Nadelson et al. (2013), they found out that personal reason is one of the students' perceived influences on the decisions of attending the University of their Choice.

The respondents strongly agreed that LPU is the nearest university where maritime program is offered (3.61) and the campus is accessible to transportation (3.23) while they disagreed that LPU is near their place or residence (2.36). Most of the maritime students were residents of Mindoro and other nearby provinces, therefore LPU is considered far from their residences. Instead of going to Manila and other international schools here and abroad, they prefer to enroll in provincial schools like LPU-Batangas because it can also provide the same quality of education that other prominent schools can offer. The cost of living in the province is less expensive compared to National Capital Region. Aside from that, the environment is also less polluted and populated in the province.

Table 3 shows the level of interest of maritime students towards their enrolled degree program. The students strongly agreed that maritime profession will take them for employment abroad (3.73) and it is their top priority (3.58). They are certain that the Maritime profession definitely will bring them to different places in the world since that is the true nature of their profession. They agreed that Maritime program is their personal choice (3.42) and they find it stimulating and challenging (3.42). They believe that they can manage the difficulties of

some activities involved in maritime profession effectively (3.34). They also agreed that maritime is the field that they can do better (3.27) and they enjoy performing the skills and operations involved in maritime profession (3.18). Achievement of appropriate skills and knowledge can be best acquired from various school related factors such as effective implementation of curriculum with quality delivery of instruction through the aid of state-of-the-art facilities, well defined and employed student services, integration of values and strong involvement in research and community programs of the university (Dotong, 2014).

Table 3. Level of interest towards maritime program

Interest Towards the Maritime Program	WM	VI	Rank
Maritime is my top priority.	3.58	SA	2
Maritime is my personal choice	3.42	A	3.5
Maritime is the field that I think I can do better.	3.27	A	6
I enjoy performing the skills and operations involved in maritime field.	3.18	A	7
I believe that I can be successful along the maritime program.	3.04	A	9
I like the challenges that maritime program offers to me.	3.15	A	8
I believe that maritime profession will take me for employment abroad.	3.73	SA	1
I find maritime profession stimulating and challenging	3.42	A	3.5
I believe that I can manage the difficulties of some activities involved on maritime program effectively	3.34	A	5
Composite Mean	3.35	A	

Though they also agreed that they like the challenges that maritime program offers to them (3.15) and they can be successful along the maritime program (3.04) these obtained the least weighted mean scores. This signifies that they are still uncertain of what will happen after studying and finishing the program. There is still doubt on the back of their mind if maritime profession could really bring them to success.

The computed composite mean of 3.35 implies that the maritime students have high level of interest towards the maritime program. They were enrolled in a degree program where they are motivated to meet the difficulties of the maritime program no matter what happen. Learning to appreciate more the maritime program would bring them to more exciting experiences from the curricular and extracurricular activities prepared for them to hone as future mariners. Ramirez and Dizon (2014) emphasized the importance of identifying the interest towards the program wherein due to low level of interest, they would think sometimes to drop the enrolled uninteresting courses or even stop schooling.

Managing one's career is critical not only for those soon to be entering the labor market but, similarly, those starting to make the early stages of their college degree (Jackson, 2015). The role of the guidance counseling is therefore necessary to make the students learn to embrace and appreciate the nature of Maritime program. Students also depend on their teacher to develop more the interest (Yang, 2008) of the maritime students towards their enrolled degree program.

Table 4 reveals the differences on the factors that influence the choice of degree program and school and the interest towards the program between students from private and public schools. There is significant difference in the influence of people and interest towards the degree program as indicated by the p- values of 0.043 and 0.036, respectively, which are less than the 0.05 level of significance. Thus, the null hypothesis is rejected on these variables. This signifies that maritime students from public schools have significantly higher chance of being influenced by people and they have significantly higher level of interest towards Maritime program compared to those students graduated from private.

Table 4. Differences between students' perceptions from private and public high schools on the factors affecting their choice of school and interest towards the maritime program

	Private	Public	p-value	Interpretation
Quality Education	3.39	3.28	0.281	Not Significant
Influence of People	2.86	3.32	0.043	Significant
Personal Preference	3.55	3.42	0.082	Not Significant
Proximity and Accessibility	3.15	2.98	0.169	Not Significant
Interest towards the program	3.21	3.49	0.036	Significant

Meanwhile, the respondents do not significantly differ in terms of quality education, personal preference and proximity and accessibility as indicated by the p- values which are greater than the 0.05 level of significance. Therefore, the no significant difference on these variables is accepted.

There is a tendency for Filipino family with economic income from average to below average to enroll their children in public schools to minimize the expenses of the family in sustaining the education of all children who went to school simultaneously. Parents of these children sometimes asked their relatives who have finished or just those have just reached college education regarding what degree program would be appropriate for their children who were also about to take college. The opinion of other people in choosing school and degree program is an important input to parents who have not attended formal schooling.

Students from average or below average family income or those students from public school have realized the need for them to hold on their dreams to live the life they are aspiring for establishing a good family. They saw primarily the kind of life of ordinary people from their classmates and friends who are living in below poverty level who really strive to survive.

Due to these findings, research on the comparison of character and values learned or acquired from private and public schools may be conducted to establish clear differences (if any) on the way private and public schools have influenced on shaping the personality and individuality of the students to be productive when they reach college and become responsible citizens of the country.

5. Conclusion

It is the personal choice of the students to enroll in maritime program in LPU-Batangas with the support primarily from their parents. The advice from brothers and sisters as well as teachers is also being considered in making their decision. Being home of board toppers and known for its standards are some of the qualities considered by the parents and students in choosing LPU. With the willingness of high school classmates and friends to enroll in LPU also contributes to their decision. Since LPU is one of the Maritime schools in the Southern part of Luzon in the Philippines, students from neighboring towns chose to enroll in LPU Batangas instead of going to Manila and other schools in the region or abroad.

They strongly believed that maritime profession will bring them to different parts of the world to fulfill their duties and responsibilities as seafarers. That is their number one motivation to pursue the maritime program. If they can practice the profession right after graduation and they have the eagerness to make their dreams come true, there is an assurance that they can come across all borders.

Students from public schools have significantly higher possibility of being influenced by their parents, siblings, friends and relatives; and they have significantly higher level of interest towards the degree program compared to students from private schools.

6. Recommendation

In the advent of K-12, no college freshmen will enroll starting School Year 2016-2017 in the Philippines, the university may offer Maritime education track for senior high school and encourage them to take this track in order for the university to use its facilities especially the laboratories and the faculty members may be provided teaching load during the first two school years of Senior High School of the K – 12 program which served as major change in the set up of collegiate schools in the Philippines. Parents may be invited during orientations to provide them deeper understanding of the demand in Maritime professions. Marketing efforts of the university may now focus among elementary schools to promote the junior and senior high school. Stachowski (2011) noted that educational marketing holds practical tools to help out higher educational institutions continue to exist and even flourish in such competitive and aggressive environments.

All the student achievements and university accomplishments may continuously be disseminated through various media like newspaper, television and radio commercials as well as tarpaulin printing and billboards as well as the use social networking media. Alumni achievements may also be announced in appropriate venue and occasion to honor them for what they have contributed for the community. They served as the living proof of what LPU have planted to grow personally and professionally.

Quality assurance mechanisms of the university like program accreditations, Investors in People, Philippine Quality Award, Autonomous Status and ISO certification may be explained in a language that parents and students as well as any ordinary people may understand the meaning of these initiatives and accomplishments for them. Nkang (2012) emphasized that the implementation of Quality Assurance Mechanisms will facilitate and help the university to the realization of their educational goals and objectives. The staff and faculty members of Lyceum International Maritime Academy may gather all maritime freshmen in a general assembly and discussed

everything about the nature of the program of study and as a profession to get them motivated so that they can push their potential to the limits especially those students graduated from private schools. Li (2009) emphasized the importance of introductory class or the first or second week of meetings with the students where teachers have to provide them preliminary understanding on the twist and turns of the course and its relevance to the Maritime program itself, so that students will be inspired to learn and they will be more interested to finish the program. The changing expectations and perceptions of students for their experience in the university provide rationalization to continuously monitor the expectations of the students and their motivations for pursuing a college degree (Nadelson et al., 2013).

Understanding their duties and responsibilities will keep them aware of what to expect from the program and how they can achieve the specific program educational objectives as part of the implementation of Outcomes-Based Education. It would also help increase the students' level of interest towards the program especially those students who graduated from private schools if they are given enough time during class discussion to see the outside world of the profession through video presentation and actual scenarios of simulations and problem solving method. With that, they would responsive to the details on every aspect of the maritime program which would also trigger their motivation and attitude to keep well informed and educated of the profession.

This study was only limited to students enrolled in Maritime programs and it can also be conducted to other degree programs to confirm the result of the study. Other variables like marketing tools and strategies of the university may also be considered in future researches to measure its effectiveness and efficiency towards the attainment of target goals of the university in enrolment. The strength of the image of the university may also deem necessary to deeply assess as important factor that could also influence to the choice of school.

References

- Akinyemi, G. M., & Abiddin, N. Z. (2013). Quality Administration and Management in Higher Education in Nigeria: Implications for Human Resource Development. *International Education Studies*, 6(4), 225. <http://dx.doi.org/10.5539/ies.v6n4p225>
- Bandura, A. (1986). *Social Foundations of Thought and Action: a Social Cognitive Theory*. Englewood Cliffs, NC: Prentice-Hall.
- Costales, N. E. B. Jr., & Zulueta, F. M. (2003). Methods of Research: Thesis-Writing and Applied Statistics (ch. 5, pp. 75-76). Navotas, Metro Manila, Philippines: Navotas Press.
- Curran, J. M., & Rosen, D. E. (2006). Student attitudes toward college courses: An examination of influences and intentions. *Journal of Marketing Education*, 28(2), 135-148. <http://dx.doi.org/10.1177/0273475306288401>
- Dotong, C. I. (2014). School-Related Factors in the Development of Graduates' Competencies towards Employability. *Journal of Education and Literature*, 2(1), 28-36.
- Hirschi, A., & Läge, D. (2008). Using Accuracy of Self-estimated Interest Type as a Sign of Career Choice Readiness in Career Assessment of Secondary Students. *Journal of Career Assessment*. <http://dx.doi.org/10.1177/1069072708317372>
- Hirschi, A., & Läge, D. (2007). The Relation of Secondary Students' Career-Choice Readiness to a Six-Phase Model of Career Decision Making. *Journal of Career Development*, 34(2), 164-191. <http://dx.doi.org/10.1177/0894845307307473>
- Hrnciar, M., & Madzík, P. (2013). Improving the Quality of Higher Education in Central Europe: Approach Based on GAP Analysis. *Higher Education Studies*, 3(4), 75. <http://dx.doi.org/10.5539/hes.v3n4p75>
- Jackson, D. (2015). Career Choice Status Among Undergraduates and the Influence of Work-Integrated Learning. *Australian Journal of Career Development*, 24(1), 3-14. <http://dx.doi.org/10.1177/1038416215570043>
- Koni, A., Zainal, K., & Ibrahim, M. (2012). An Assessment of the Services Quality of Palestine Higher Education. *International Education Studies*, 6(2), 33. <http://dx.doi.org/10.5539/ies.v6n2p33>
- Laguador, J. M. (2014). Examination of Influence and Intention towards Lyceum of the Philippines University and Career Choice of General Engineering Students. *International Journal of Management Sciences*, 3(11), 847-855
- Lee, K. H. (2005). Coping with Career Indecision: Differences Between Four Career Choice Types. *Journal of Career Development*, 31(4), 279-289. <http://dx.doi.org/10.1177/089484530503100405>

- Lent, R. W., Brown, S. D., & Hackett, G. (2002). Social Cognitive Career Theory. *Career Choice and Development, 4*, 255-311.
- Nadelson, L. S., Semmelroth, C., Martinez, G., Featherstone, M., Fuhriman, C. A., & Sell, A. (2013). Why Did They Come Here? The Influences and Expectations of First-Year Students' College Experience. *Higher Education Studies*. <http://dx.doi.org/10.5539/hes.v3n1p50>
- Nkang, I. E. (2012). Challenges of Globalization and Quality Assurance in Nigerian University Education. *International Education Studies, 6*(1), 207. <http://dx.doi.org/10.5539/ies.v6n1p207>
- Pafili, E., & Mylonakis, J. (2011). Occupation Structure and Career Choice vs Education Development and Training Level: A Presentation of Theoretical Approaches. *International Education Studies, 4*(4), 22. <http://dx.doi.org/10.5539/ies.v4n4p22>
- Ramirez, Y. P., & Dizon, N. C. (2014). Assessment of Interest as Subjective Personal Data of Engineering Freshmen towards their Enrolled Degree Program. *International Journal of Academic Research in Progressive Education and Development, 3*(1), 195-207. <http://dx.doi.org/10.6007/IJARPED/v3-i1/760>
- Soomro, T. R., & Ahmad, R. (2012). Quality in Higher Education: United Arab Emirates Perspective. *Higher Education Studies, 2*(4), 148. <http://dx.doi.org/10.5539/hes.v2n4p148>
- Stachowski, C. A. (2011). Educational Marketing: A Review and Implications for Supporting Practice in Tertiary Education. *Educational Management Administration & Leadership, 39*(2), 186-204. <http://dx.doi.org/10.1177/1741143210390056>
- Stevan, F. (2014). *Public Education Quality and Private School Enrollment* (No. 2014_14). University of São Paulo (FEA-USP).
- Vaz, A., & Mansori, S. (2013). Malaysian private education quality: Application of SERVQUAL model. *International Education Studies, 6*(4), 164. <http://dx.doi.org/10.5539/ies.v6n4p164>
- Yang, Y. (2008). The Importance of the Teacher for Developing Interest in Learning English by Chinese Students. *International Education Studies, 1*(1), 95. <http://dx.doi.org/10.5539/ies.v1n1p95>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Empirical Analysis of the System of Risk Management on Small and Medium-Size Enterprises

Raigul Doszhan¹, Akmaral Mustafina¹ & Gulnazym Supugalieva¹

¹ Al-Farabi Kazakh National Univeristy, Almaty, Kazakhstan

Correspondence: Raigul Doszhan, Al-Farabi Kazakh National Univeristy, Almaty, Kazakhstan. E-mail: info@kaznu.kz

Received: April 23, 2015 Accepted: May 5, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p240

URL: <http://dx.doi.org/10.5539/ass.v11n21p240>

Abstract

Risk management is an important element among the activities of small and medium-sized enterprises. It is necessary for SMEs to be able to effectively manage risks to survive in highly competitive conditions. Although there are positive dynamics of growth in the number of SMEs in Kazakhstan, statistics show unprofitability in their activities. The article shows an empirical method of analysis where 82 representatives of small and medium-size enterprises were interviewed. This article addresses the problems of SMEs in the sphere of trade, manufacturing, construction and services, which have been studied by the author in recent years and considers the role of external consultants in the risk management activities of SMEs.

Keywords: small and medium enterprises, risks problems of small and medium businesses, Cronbach index

1. Introduction

An empirical knowledge is a complex of statements about real empirical objects. The empirical knowledge is based on knowledge of acquaintance. A rational factor and its forms (understandings, comprehensions, etc) are present here but have a subordinate value. That's why an analyzed object is reflected primarily from the side of its external links and performances accessible for contemplation and expressing the internal relations (Bryman, 2011).

2. Method

The main target of questionnaire method of this article is:

- to find out the entrepreneurs' attitude to risks;
- a condition of risk management on practice of small and medium business;
- an elimination of factors which influence on the system of risk management implementation on the enterprises of small and medium business;
- an elimination of factors which stimulate the system of risk management implementation on the enterprises of small and medium business.

The results received after an interviewing suffered the regression analysis, factor analysis and descriptive analysis.

In total there were 82 enterprises surveyed among which 44 answers were received by means of SurveyMonkey questionnaire and the rest 38 – paper based.

During a survey all the ethical norms were observed. All the survey members were consulted about the purposes and tasks of enquiry. Either a participation in an enquiry was exceptionally voluntary.

The basic instrument of investigation was a questionnaire which consisted of 36 questions. A survey was made on two languages – Russian and Kazakh, but the most entrepreneurs desired to answer in Russian.

From an informative point of view all the questions of questionnaire could be separated minimum on two groups:

- 1) The first ten questions give an indication about the general characteristics of surveyed objects (size, age of business, legal organizational form, kind of activity, annual turnover) and respondents (sex, age, position, education).

- The rest questions of questionnaire (from 11 to 36) are directed on the peculiarities of external and internal business environment, presence or absence of the risk management elements, sufficiency and availability of resources for risks control on enterprise.

From a statistic point of view the questions could be separated on three groups:

- The questions in which a respondent should choose one of offered answers (questions from 2 to 11 and also 18, 20, 23, 25, 27, 28, 30, 33, 34 and 36). To each of these questions in the limits of our statistical analysis a corresponding variable is set q_j , where j is equal to the number of question in questionnaire which is categorical (nominal) and takes the integer values from 1 to n , where n is the quantity of variants of answers on this question. Thus each variant of answer corresponds to its own variate value.
- The questions which stipulated an opportunity of simultaneous choice of several variants of answer (questions from 12 to 17, 19, 21, 22, 24, 29, 31, 32 and 35). In this case to each variant the other variable corresponded – q_{j_k} , where j is equal to the number of question in questionnaire and k – to an order number of the answer’s variant for this question. These variables are binary (also correspond to the number of nominal variables), i.e. take a value 1 for those respondents who chose this variant and 0 – if otherwise.
- The question 26 in which the respondents were asked to determine a level of significance of different risks for business in numbers. For each risk a variable q_{26_k} was created where k is a numerical order which corresponds to set type of risk in the list of all risks of this question. This variable is serial, i.e. allows ranging the risks according to their level of significance for the entities of small business.

3. Results

There were 82 respondents who took participation in an investigation. Their answers on basic questions are shown in the Figures 1-9.

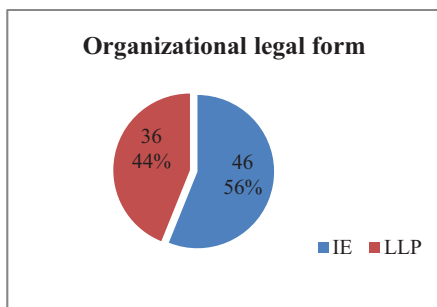


Figure 1.

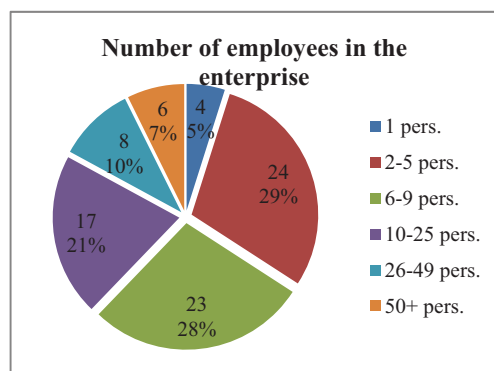


Figure 3.

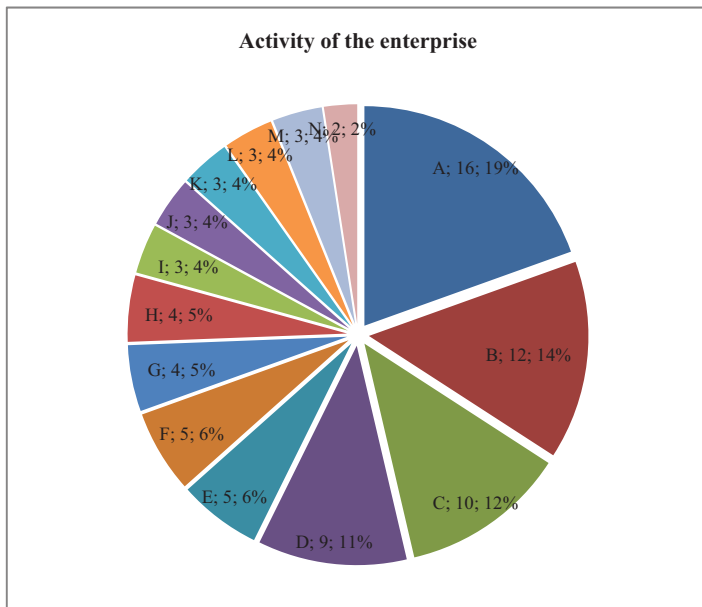


Figure 2.

A	Services for accommodation and meals	H	other
B	Professional, scientific and technical activities	I	Transportation and warehousing
C	Other services	J	Information and communication
D	trade	K	Financial and insurance activities
E	Health and social services	L	Education
F	production	M	Arts, entertainment, recreation
G	Administrative and support services	N	Real estate transactions

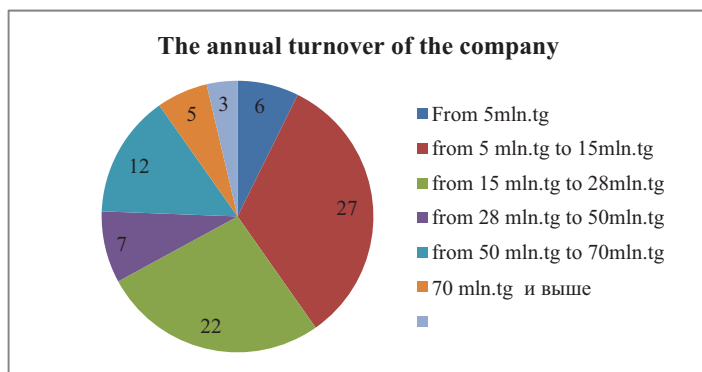


Figure 4.

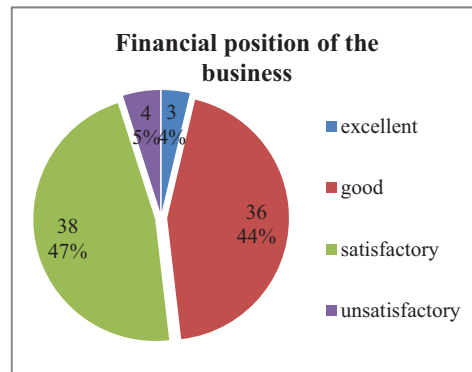


Figure 5.

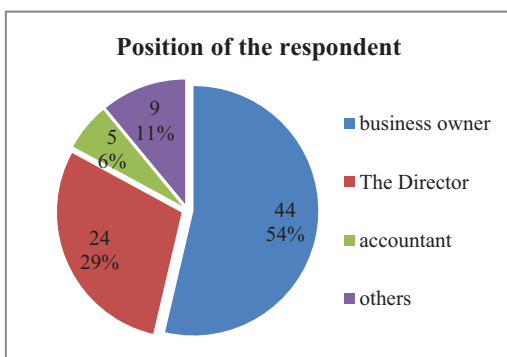


Figure 6.

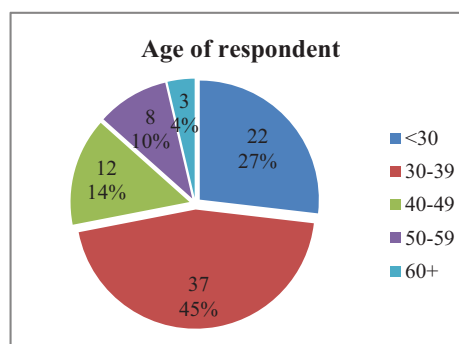


Figure 7.

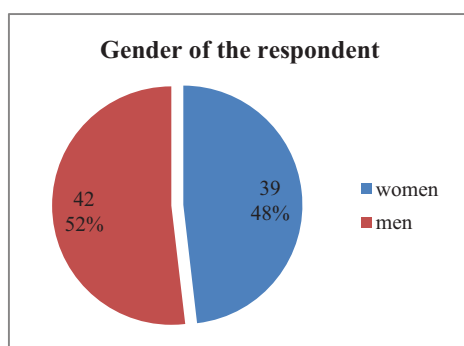


Figure 8.

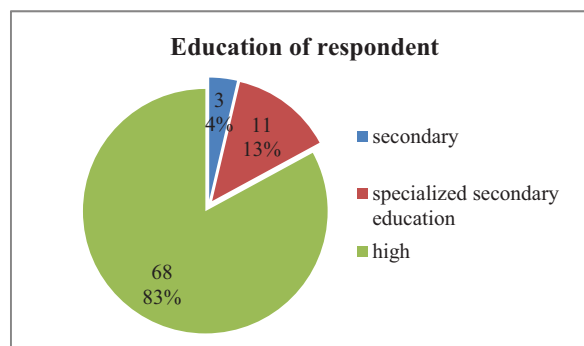


Figure 9.

In whole an under-representation of business entities with unsatisfied financial condition including determined by objective standards is a common practice (and problem) of investigations because usually such entities refuse to take part in enquiries. Consequently we cannot in the limits of our investigation determine how the presence of risk management system can assist to overcome the financial difficulties of business which is let's say on the verge of bankruptcy, i.e. our results relate first of all to stably functioning small enterprises.

The last suggestion is supported also by the fact that the respondents' anticipations regarding the perspectives of the national economy development are quite positive: 70% of them wait its growth (stable and inconspicuous), 12% consider that an economic dynamics will stay unchanged and only 16% and 1% accordingly predict an inconspicuous or strong fall of the Kazakhstani economy. Moreover basically a subjective assessment of financial condition correlates to these anticipations: the business representatives with unsatisfied financial condition mainly expect fall or stability, with good or satisfied – inconspicuous growth or stability, with exelent – only significant growth. It also can prove that a meaning of respondent about a business financial condition depends on his grade of business optimism.

From other side 44% of surveyed consider that if an economic situation in the country will be unfavourable it will prevent their business development in current year and only 29% relate a favourable economic situation to the factors of growth. That is no matter what they expect but a small entrepreneurship is quite dependable from

macroeconomic shocks and this dependence is quite peculiar: if the economy falls it brings the significant losses including in the form of liquidation of enterprises, but if it grows it doesn't always act as a fillip of small business development, because the profits of economic growth are redistributed first of all in favour of big and partially middle companies. In fact 2013 was quite difficult year for the most of surveyed enterprises: a half of them faced with price rise on market, 37% – with competition strengthening, 18% – with lack of cash, 15% – with sales decrease, and 15% noted that the conditions turned out to be more difficult than they expected. Only 11% of all surveyed announced that their business showed out new opportunities and only 6% of firms increased their sales. The majority (58%) connects it directly to devaluation. In this connection an attitude of mind of surveyed mainly could be considered optimistic if under these conditions they continue to believe in growth of economy or its stable development.

Whereby we can pay our attention to the fact that the entities of small business mainly rely on the internal sources of development which they can manage (first of all increase of sales and improvement of business model), but a standard basically from negative factors of external environment (rise of prices and rent, unfavourable business climate in the country, strengthening of competition). Besides the most significant types of risk management for them are the financial and market, but the significance of risk management and personnel risk in comparison with them on 1-1.5 points (according to 7 point scale) lower.

Let's pay our attention to the fact that the anticipations of respondents regarding the macroeconomic dynamics depend not only on the level of their optimism – they are also could be considered highly burdened with “the baggage of the past”, because the anticipations and the past experience strongly correlate to each other. Thus, the two thirds of respondents who faced in 2013 a price rise expect a negative influence of this factor in current year, but almost a quarter of those who didn't face it consider that in this year they won't suffer the influence of this factor.

In regard to excess develop on the level of selling market or internal environment of organization the other picture is observed: notwithstanding the past negative experience the major part of respondents expect in future an absence of unfavourable influence from such factors, while the overwhelming majority of those who didn't face them in past continue to consider that in future they won't meet them. For example 67% of those who suffered an aggravation of firms' competition in 2013 and 85% of those who didn't have such experience in current year don't relate this factor to the row of deterrents. Practically the analogue figures could be observed in relation to the factor of sales decrease.

What did the entities of small business do in order to overcome the unfavourable conditions of development and prevent negative consequences? Basically improved the work with clients (64%). Besides 38% reconsidered the current expenses, 25% improved marketing, 22% introduced changes in business process. Only 6% were forced to leave some markets or change suppliers.

In regard to an assistance from outside more than a half of respondents admitted that their business needs outside financing (44% – exactly, 13% – possible). 11% recognized problems with financing as a deterrent for business development in current year. And if a quarter of enterprises didn't face the problem of attraction of means from outside resources yet, but practically for all the rest it is linked to difficulties (only 5% of respondents consider that it is easily feasible). Whereby the funds of entrepreneurship's support are not very popular sources of financing: 72% of enterprises didn't call in aid to them, 5% didn't know about their existence, 10% don't rely this system, and 5% couldn't receive any assistance from them. Only 7% had a successful experience of appealation to supporting funds and only for two from 82 surveyed enterprises the means of these funds are one of the sources of their business financing. Less than 60% of surveyed know about the state entrepreneurship support programs. Mainly the small business exists at its sole cost and expense (70% of firms), by means of friends' and relatives' support (12%), and from outside sources the most popular are the means of banks (21%).

A picture of respondents' composition also could be important for interpretation of answers and results of investigation. The majority of surveyed – 83% are the owners of business or the directors of enterprises, what means that we can rely the received from them data and we could be sure that their answers correspond an actual state of things on enterprises and give an adequate representation of risk management practice on them. 6% of respondents are the accountants, 11% – the representatives of other job positions (mainly administrators, secretaries) and in this case we can only hope that the represented in their answers “worldview” reflects reality adequately. At least almost all of them have a high education (12 from 14 people).

At last let's go into the questions which directly relate to risk management in small business.

From 82 enterprises the complete system of risk management works only for 6 (it is 7% from overall volume of selection), partially – for 19 (23%). A quarter is going to introduce it in near future and by 22% falls on those

who still study the base of risk management and think over its advantages for their own business and on those who are not going to introduce such system at all. Whereby an overwhelming majority of surveyed (92%) would like to manage, assess and control risks of their business better including 16 from 18 who are not going to introduce the system of risk management on their enterprises. Along with that more than a half of such interested (55%) in their own opinion don't have enough knowledges in the sphere of risk management. The lack of knowledges is observed even where the risks are managed already on a systematic basis: it is actual for 17% of enterprises with the full system of risk management and for 47% of firms with partial. The respondents themselves consider a qualification absence in this sphere a main obstacle for the system of risk management introduction (32% of surveyed).

Notwithstanding the absence of the system of risk management on the majority of enterprises almost all the respondents argue that they assess the risks in the process of planning (53% always, 44% some times). However a half of them don't have a well-defined behaviour strategy in case of risk situations occurrence (mainly those who don't assess the risks during planning or do it sometimes).

Consequently the respondents have a desire to manage the risks in small business but suffer an evident lack of any knowledge about the systematic risk management and what advantages it can give to a small enterprise. The last can be reflected including in the fact what instruments of risk management are used by firms on a current moment and how the decisions are made in risk situations. Thus, the main instrument of risk management among the surveyed is avoiding of risk dealings (53%) and the decisions regarding the risks are took by the majority in reliance on the past experience (59%) and on an intuition (21%). The most "advanced" methods such as business diversification, usage of the results of mathematical calculations and attraction of outside consultants are applied on less then quarter of enterprises.

Before getting started directly to work with data of our investigation it is necessary to understand how reliable a chosen enquiring instrumentarium occurred, how it corresponds to the tasks of our investigation. We set our mind on determination of how the enterprises of small business behave themselves in regard to risks which they face and for this purpose we asked a row of questions. We'd like to receive the most exact and full answers which will characterize an examined occurrence. Thus, speaking mathematical language in the process of data collection we intend for each observed object (i) to minimize the difference between an effective value for each variable (Q_i^{real}) and observed (Q_i^{obs}).

A deviation of one from another refers to the measurement errors of this variable (MEQ):

$$Q_i^{obs} = Q_i^{real} + MEQ_i \quad (1)$$

The measurement errors could be casual (MEQ^{rand}) and systematic (MEQ^{syst}) thus for each observed object (i):

$$MEQ_i = MEQ^{syst} + MEQ_i^{rand} \quad (2)$$

The casual errors always present in the process of measurement, they vary from one observed object to another and could be caused by the unanticipated deviations in understanding and interpretation of questions by separate respondents, by unpredictable difference in the conditions of questionnaire conduction with different participants, etc. It is important to emphasize that the casualty of deviations means not only that they are not constant for all the observed objects but also that their appearance is not connected to any features of these objects. For example an understanding of question is not an answer on it but exactly understanding! And systematically it doesn't depend on sex, age, education, position and other characteristics of respondents.

A mean value of casual errors of measurement for each variable in selection is equal to zero:

$$\overline{MEQ^{rand}} = \frac{\sum_1^N MEQ_i^{rand}}{N} = 0 \quad (3)$$

The systematic errors of measurement if they occur are present in all the investigations. Their reason is in an incorrectness of measuring instrument (in our case of questionnaire, thus in choice of quantity of questions and variants of answers on them, in descriptions, explanations and requirements to filling the data sheet). If such errors are present thus they are constant for all the selection or proportional to an actual value of variable. In the first case:

$$\overline{MEQ^{syst}} = \frac{\sum_1^N MEQ^{syst}}{N} = MEQ^{syst} \neq 0 \tag{4.1}$$

In the second case:

$$\overline{MEQ^{syst}} = \frac{\sum_1^N a * Q_i^{real}}{N} = a \overline{Q^{real}} \neq \{Q^{real} \neq 0\} \neq 0 \tag{4.2}$$

where *a* is a factor of proportionality and *a* > 0.

In the process of statistical data analysis we transfer to the usage of mean values of variables ($\overline{Q^{obs}}$) and characterize a corresponding criterion also in the mean ($\overline{Q^{real}}$) where:

$$\overline{Q^{obs}} = \frac{\sum_1^N Q_i^{obs}}{N} \quad \overline{Q^{real}} = \frac{\sum_1^N Q_i^{real}}{N} \tag{5}$$

N is a quantity of observances (of respondents).

In order we could talk about an adequacy of received data it is necessary that $\overline{Q^{obs}} = \overline{Q^{real}}$.

If there are the measurement errors we have:

Where

$$\overline{Q^{obs}} = \overline{Q^{real}} + \overline{MEQ} \tag{6}$$

$$\overline{MEQ} = \overline{MEQ^{rand}} + \overline{MEQ^{syst}} \tag{7}$$

Considering the features of casual and systematic errors if the last are absent, thus:

$$\overline{Q^{obs}} = \overline{Q^{real}} + \overline{MEQ} = \overline{Q^{real}} + \overline{MEQ^{syst}} = \left\{ \text{ec.nu} - \overline{MEQ^{syst}} = 0 \right\} = \overline{Q^{real}} \tag{8}$$

otherwise:

$$\overline{Q^{obs}} = \overline{Q^{real}} + \overline{MEQ} \neq \left\{ \text{ec.nu} - \overline{MEQ^{syst}} \neq 0 \right\} \neq \overline{Q^{real}} \tag{9}$$

Consequently the presence of casual errors doesn't prevent the usage of statistical analysis, i.e. doesn't distort the results and allows considering them adequate for all the selection. As to the systematic errors if observer knows about their presence, reasons and nature (constant or proportional), thus in order to receive more adequate results he usually can insert the corresponding adjustments in data or evaluations or under the repeated data collection to change the applied instrumentarium and its organization. Otherwise an understanding of analyzed phenomenon based on observed data will give to an investigator an inadequate picture of reality.

In this work in order to prove that received answers on a variety of questions of our questionnaire adequately determine one general investigated problem sphere we check them on an internal conformity by means of factor α (alpha) of Cronbach. This test is built on evaluation of correlation between the dispersion of actual values and the dispersion of observed values of variables. The dispersion of observed values for each variable consists of the dispersion of actual values (answers of respondents) and the dispersion of measurement errors (Cronbach, 1951).

The α of Cronbach is a figure from 0 to 1 which shows how adequately the tested variables determine one phenomenon. It is considered that if $0.7 \leq \alpha \leq 1$ thus the data are internally conformal, the measurement errors are casual, the observed dependences are close to actually existing and the chosen enquiring instrumentarium is reliable (Nunnally, 1978). It should be noted that the high values of the α of Cronbach are not obligatory prove an internal data consistency because could be the result of simple introduction in questionnaire of a large number of questions which measure the same phenomenon but worded differently (Cortina, 1993). That's why to prove an investigating instrumentarium as reliable on the basis of test of the α of Cronbach is possible only in case if the questions in questionnaire are not only combined by a thematic communality but each separate variable in analysis is intended to collect for investigator some unique information which couldn't be received from data of other variables. For this purpose in the indicator values, i.e. in the answers of respondents on the same question or subitem a definite variation should be observed.

It is necessary to emphasize here that the α of Cronbach is estimated exactly by variables but not by the questions of questionnaire (the difference between them has been shown before, in the section 1.1) and it means

that it can take the high values in case if there are little number of questions in questionnaire but at least one of them has a large number of variants of answers. In order it didn't prevent the evaluation of data consistency dimension it is necessary to make a clear distinction between these variants according to subject matter in a way where they couldn't cross significantly. Accordingly we determine in our data on what number of variables the evaluations were received (n).

By means of the α of Cronbach an index of measurement errors (ν) could be estimated either: it is equal to a difference between 1 and a square of the α of Cronbach. If this index is high (i.e. the α of Cronbach is small) it could be connected as a minimum with two reasons. First of all the investigated problem actually could be multi aspect and the answers on different items of questionnaire characterize its different sides and it should be considered in the following analysis. Secondly it can occur that the answers on different groups of questions characterize the completely different phenomena excluding the directly investigated. Thirdly there the systematic measurement errors are present connected to incorrectness of selection methods of investigations (formation of selection), data collection or investigation instrument itself (questionnaire). For example the number of questions in questionnaire was insufficient for an adequate description of interesting for investigator problem or the data contain a lot of omissions (questions left by at least some of respondents without answers) or the questions were worded incorrectly and as a result of which misunderstood by all the respondents. All these are the potential sources of measurement errors.

If the α of Cronbach takes low values, thus unfortunately it is impossible to specify according to only this evaluation by what of the listed before reasons it was caused, as well as if we don't doubt in correctness of the investigation organization and the process of data collection we cannot say what number of potentially possible phenomena are hidden in our data and what are these phenomena.

We evaluated the α of Cronbach according to all the variables which reflect the condition of external and internal business environment and the system of risk management on enterprises (the questions of questionnaire from 11 to 36) excluding those for which a zero or low variation of values were observed (in other words excluding those questions and subitems on which all or almost all of respondents gave the same answers). Their exclusion is necessary because in otherwise we can receive an overestimated value of the α of Cronbach and make an improper conclusion of internal data consistency degree (actually it will be less than evaluated). Because of an analogue reason we additionally estimated the α of Cronbach excluding the questions which cross with each other intensively within the meaning (in our questionnaire there were two pairs of such questions: 14 and 16, 28 and 34; whereby one of the questions were excluded from each pair of evaluation).

Besides we evaluated the α of Cronbach as to all the enterprises of our selection and exceptionally to those the representatives of which answered all the questions (there were 51 of such in our selection). In the first case the evaluation is made according to pair correlations between the variables, in the second – according to general. If there were no missed answers thus the data gave the same results. If the omissions were present but they born an occasional character or their number was relatively not large so it is worth to rely on the results of the second approach. Under the casualty of omissions the fact that they don't depend on the characteristics of respondents and observed phenomenon is understood, i.e. there is no fact that some groups of respondents significantly more often leave some definite questions without answers than others.

There is no special methodology of checking the omissions on casualty, but we evaluated the regressional dependences of missed answers presence from the main features of respondents and their business. The results are represented in the Table 2.1 of annex 2. They imply that there are no significant differences between the separate groups of enterprises according to the presence of missed answers excluding the case of the enterprises' separation according to the presence of the system of risk management: if it is present (full-value or partial proceeding from the answers on the 30th question of questionnaire) thus the respondents significantly more often answered on all the questions of questionnaire than those who noted an absence of such system in their business. In whole it is an expected result because those who don't manage the risks of their business first of all can worse understand some questions of questionnaire and secondly can consider this problematic not actual and uninteresting for themselves. Along with that it is necessary to understand that these observations probably (according to the fact what questions were left without answers) will be excluded from the following analysis including from an evaluation of regression equations in the result of what we can receive an incomplete or incorrect information about the factors of the system of risk management presence on enterprises.

That's why in our case we can consider the values of the α of Cronbach evaluated by means of the first and the second approaches as low and high limits of a true value of the α of Cronbach consequently. All the received evaluations are represented in the Table 1.

Table 1. The values of the α of Cronbach and an index of measurement errors ν (n is a number of variables included in the analysis)

	All the observations (respondents)	Without observations with missed values (only the respondents who answered on all the questions of questionnaire)
All the variables except those with zero and low variation ($n = 105$)	$\alpha = 0.74$ $\nu = 0.45$	$\alpha = 0.86$ $\nu = 0.26$
Without questions 16, 34 ($n = 98$)	$\alpha = 0.74$ $\nu = 0.45$	$\alpha = 0.85$ $\nu = 0.28$
Without questions 14, 28 ($n = 97$)	$\alpha = 0.72$ $\nu = 0.48$	$\alpha = 0.86$ $\nu = 0.26$

Notice. The values of the α of Cronbach are evaluated according to standardized variable values. The standardization of data allows giving answers on all questions according to one scale (with a mean value equal to 0 and a dispersion equal to 1) in the case when the scales of answers on separate questions don't coincide between each other.

All these values exceed the limit of 0.7 that's why we can consider the applied questionnaire a reliable instrument of studying a condition of the system of risk management on chosen entities of small business.

References

- Bryman, A., & Bell, E. (2011). *Business Research methods* (3rd ed., pp. 10-38). Oxford University Press.
- Cortina, J. M. (1993). What is Coefficient Alpha? An Examination of Theory and Applications. *Journal of Applied Psychology*, 78, 98-104.
- Cronbach, L. J. (1951). Coefficient Alpha and the Internal Structure of Tests. *Psychometrika*, 16(3), 297-334.
- Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Comparative Performance Analysis between Conventional and Islamic Banks in Bangladesh- An Application of Binary Logistic Regression

Abu Hanifa Md. Noman¹, Sajeda Pervin², Nazneen Jahan Chowdhury³, Md. Amzad Hossain³ & Hasanul Banna⁴

¹ Faculty of Business and Accountancy, University of Malaya, Malaysia & Faculty of Business Studies, International Islamic University Chittagong, Bangladesh

² Institute of Graduate Studies, University of Malaya, Malaysia & Faculty of Business Administration, BGC Trust University Bangladesh, Bangladesh

³ Faculty of Business Studies, International Islamic University Chittagong, Bangladesh

⁴ Faculty of Business and Accountancy, University of Malaya, Malaysia

Correspondence: Abu Hanifa Md. Noman, Faculty of Business and Accountancy, University of Malaya, Jalan Universiti, Kuala Lumpur-50603, Malaysia. E-mail: kosiralam@yahoo.com

Received: April 24, 2015 Accepted: May 29, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p248

URL: <http://dx.doi.org/10.5539/ass.v11n21p248>

Abstract

The study aims to answer the research question of what type of banks between Islamic and Conventional banks are doing well on bank level performance in Bangladesh? In order to answer the research question the study uses binary logistic regression. Using 223 observations of 23 convention banks and 7 Islamic banks of Bangladesh during 2003 to 2013, the study shows an existence of a significant difference between conventional and Islamic bank in Bangladesh on profitability, credit risk, capitalization and bank size. The investigation further finds that profitability, efficiency, liquidity and size of Islamic banks are lower than conventional banks in Bangladesh. However, the results confirm that Islamic banks have higher capitalization and better credit risk management than conventional banks in Bangladesh. The study incorporates some significant policy implications for Islamic banks.

Keywords: bank performance, Bangladesh, binary logistic regression, conventional banks, Islamic Banks

1. Introduction

Recent global financial crisis, hence forth, GFC put conventional banks (Note 1) in serious difficulties around the world (Choon et al., 2012; Wasiuzzaman & Gunasegavan, 2013). Conversely, Islamic banks (Note 2) successfully survived during the crisis (Willison, 2009; Khediri et al., 2015). This is due to the fact that Islamic banks are highly regulated by Shariah (Note 3) principles which restrict them to invest in the projects which brought conventional banks in distress and stimulated crisis (Hasan & Dridi, 2011). As a result, Islamic finance brings the attention of the investors who were disappointed with conventional banks experiencing GFC in recent years (Johnes et al., 2014). Thus, Islamic banking is not confined only in Muslim countries rather extends its practices to non-muslim countries as well.

Now, more than 300 financial institutions including banks, insurance and non-bank financials' institutions are operating under Shariah based financial system in 70 countries (Khediri et al., 2015). Particularly, 5 Islamic banks in United Kingdom and 19 Islamic financial institutions in United States represent the globalization of Islamic banks in recent years. Moreover, many international banks among others Standard Chartered Bank, Citi Bank NA, HSBC have started Islamic wings in different muslim countries in order to meet the extended demand of Shariah compliant products.

Islamic banking is based on Shariah which does not allow to involve in interest (riba), speculative and dishonest transactions rather it suggests to perform transaction based on risk sharing or profit and loss sharing, henceforth, PLS sharing assuming real economic transaction backed by real property (Beck et al., 2013). This fundamentals make Islamic banks different from conventional banks theoretically. Say for example, interest based contract of conventional banks is replaced with return in Islamic banks where both risk and profit or loss are shared between banks and clients. In addition, they use investment deposit and demand deposit in order to collect fund from depositors which are free from interest and based on risk and PLS and mark up principles (Ho *et al.*, 2014).

Moreover, Islamic banks produce shariah compliance financial products based on markup and PLS principles. However, as both conventional and Islamic banks are regulated in same way and operated in same competitive environment, it is possible for Islamic banks to adopt similar strategies as conventional banks adopt. Moreover, in reality, the findings of different literatures show that Islamic banks are not truly Islamic and different from theory. Such as, Siddiqi (2006) find more reliance of Islamic banks on markup financing and less on PLS financing. Moreover, initially Chong and Liu (2009) and later Khan (2010) find that deposit mobilization of Islamic banks is not interest free and only a small part of investment financing is based on PLS paradigm. More particularly, Bourkhis and Nabi (2013) find that only less than 20% of Islamic banks assets are mobilized to long term and risk sharing financing.

Islamic finance has gain interest of researchers in recent years due to its different banking fundamentals. Most of the research of Islamic finance are theoretical in nature focusing on Islamic fundamentals and the vehicles of Islamic banking (Bashir, 1983; Karim, 2001; Siddiqi, 2006; Chong & Liu, 2009; Khan, 2010; Faye et al., 2013; Said et al., 2013; Magd & McCoy, 2014). Empirical studies on Islamic banking can be grouped on regulatory, management and supervisory challenge (Murjan & Ruza, 2002; Jobst, 2007); efficiency (Abdul-Majid et al., 2010; Belanes & Hassiki, 2012; Rosman et al., 2014); Profitability (Hassoune, 2002; Ben Khediri & Ben-Khedhiri, 2009; Farook et al., 2012); Stability and concentration (Bourkhis & Nabi, 2013; Mohammed et al., 2015); Risk exposure (Abdul Karim et al., 2014; Farook et al., 2014; Ghosh, 2014; Saiti et al., 2014; Shaban et al., 2014; Daher et al., 2015); and Comparative performance of Islamic banks with conventional banks (Beck et al., 2013; Bourkhis & Nabi, 2013; Srairi, 2013; Ho et al., 2014; Johnes et al., 2014; Khediri et al., 2015). However, increased attention of Islamic banking across the world require to know the comparative strength and bank level performance between Islamic banks and conventional banks. Yet, the earlier studies focusing on the comparison between Islamic banks and conventional banks in term of bank level performance remain inconclusive in their findings which need further investigation for significant policy implications. In order to fulfill the research gap the study warrants to answer the research question what types of banks are doing better in bank level performance?

In investigating the distinction between Islamic banks and conventional banks in bank level performance we have selected Bangladesh for some valid reasons. Firstly, Bangladesh is the first country in Southeast Asia where Islamic banking has been introduced with the establishment of Islami Bank Bangladesh Limited in March 30, 1983 (Kabir et al., 2012). Now the number of full-fledged Islamic banks becomes 8. Moreover, 16 conventional banks including 3 international banks also dealing with Islamic banking products in order meet increased demand of Islamic banking in the country. Secondly, the country has been experienced a rapid growth in Islamic banking since its inception which is attributed to increased market share and assets growth. Financial stability report (2014) published by Bangladesh Bank (Note 4) reports that Islamic banking industry gains market share of 18.8 percent in total deposit and 21.6 percent in total credit in 2013. Thirdly, Bangladesh is one of several least affected countries in recent GFC. One of the reasons could be the development of Islamic banking system in Bangladesh (Wasiuzzaman & Gunasegavan, 2013; Khediri et al., 2015). Moreover, banking industry of Bangladesh may be an excellent case for investigating comparative performance between Islamic banks and conventional banks where out of 56 banks 8 full-fledged Islamic banks and 16 conventional banks with Islamic branches and windows are operating under Shariah principle.

The article is decomposed in to five sections. Where, the next section discusses literature review and hypothesis development. Sector 3 explains methodology, variable selection and data used. Sector 4 covers results and discussion of the study. The conclusion and policy recommendation is explained in the last section.

2. Literature Review and Hypothesis Development

We focus on investigating the difference between Islamic banks and conventional banks in bank level performance in Bangladesh. So far, a few studies have investigated the comparative analysis between the two types of banks on bank level performance especially profitability and efficiency using different sample and different methodologies. Such as, Metwally (1997) investigates 15 Islamic banks and 15 conventional banks during 1992-1994 using Logit model, Discriminant analysis and Probit model and find that similar profitability and efficiency, but different liquidity, credit risk and leverage between the two types of banks. In another study Iqbal (2001) considering 12 Islamic and 12 conventional banks using mean test finds better profitable and capitalized Islamic banks than conventional counter parts during 1990 to 1998. In addition, Olson and Zoubi (2008) focusing 28 conventional banks and 16 Islamic banks of GCC countries during 2000 to 2005 applying mean test, Neural network and Logit model find high profitability and less efficiency of Islamic banks in compare to conventional banks. They further argue that accounting ratios are good indicators for differentiating between the two types of banks. Later on, Srairi (2013) finds more efficient conventional banks than Islamic

banks on 48 conventional and 23 Islamic banks of GCC region during 1999 to 2007. They use equality of mean test and probabilistic stochastic frontier analysis in the investigation process. In a subsequent study Belanes and Hassiki (2012) focusing 19 conventional and 13 Islamic banks of MENA region during 2006 to 2009 find no significant difference between conventional and Islamic banks on the efficiency score. Furthermore, Beck *et al.* (2013) investigated business model, efficiency and stability of 510 conventional and Islamic banks of 22 countries during 1995 to 2009. They find a significant difference in business model between conventional and Islamic banks. They further find better profitability, assets quality and capitalization but less efficiency of Islamic banks than conventional banks. In another study, Abedifar *et al.* (2013) investigate 553 conventional and Islamic banks of 24 countries during 1999 to 2009 using mean test and OLS random effect model they find high profitability, better capitalization and low credit risk of Islamic banks than conventional banks. More recently Khediri *et al.* (2015) also examine conventional banks and Islamic banks of GCC countries over 2003 to 2010. Using Logit model, discriminant analysis, tree of classification and neural network model they find that Islamic banks are better capitalized, highly profitable and liquid; and have low credit risk than conventional banks.

2.1 Hypothesis Development

We firstly give attention to banking profitability. Among the others Iqbal (2001); Hassoune (2002); Olson and Zoubi (2008); (Abedifar *et al.* (2013) find that Islamic banks are more profitable than conventional banks. Regarding the high profitability of Islamic banks Hassoune (2002) explains that Islamic banks accumulate funds through non-remunerative current accounts which makes their lower funding cost and higher net interest margin in a high interest rate market which makes Islamic banks to be more profitable than conventional banks. In addition, Abedifar *et al.* (2013) argue that PLS arrangement of Islamic banks provides them safeguard in worse conditions. They further argue that profit of Islamic banks are less volatile than conventional banks due to high religiosity of the depositors. High religiosity makes them more loyal to the Islamic banks which led them to take low or even no profit and even refusing to withdraw funds from the Islamic banks in the worse performance of the banks. They further point out that religious client also interested to pay high rent for banking services to the Islamic banks based on religious belief. Based on that we design our first hypothesis in the following way

H1: Profitability of Islamic banks is higher than conventional banks.

Now we are turning to efficiency. The studies focusing comparative efficiency between Islamic banks and conventional banks Olson and Zoubi (2008); Srairi (2013); (Beck *et al.* (2013); Johnes *et al.* (2014)) find that Islamic banks are less efficient than conventional banks. The low efficiency of Islamic banks can be attribute to some reasons. Firstly, most of the products of Islamic banks are customized from conventional banks based on Shariah law which increase their operational cost (Khediri *et al.*, 2015). Secondly, the size of Islamic banks is comparatively lower which restrain them to reach at economic of scale and make them less efficient than conventional banks (Olson & Zoubi, 2008; Abdul-Majid *et al.*, 2010). Thirdly, foreign banks are more efficient than local banks but Islamic banks are normally domestically owned which also make them less efficient than conventional banks (Belanes & Hassiki, 2012). Moreover, Johnes *et al.* (2014) argues less product standardization of Islamic banks may be another reason of their less efficiency. Therefore, we can develop our second and third hypotheses in the following way:

H2: Islamic banks are less efficient than conventional banks.

H3: Islamic banks are smaller in size comparing conventional banks.

We are focusing on default risk or credit risk of banks. Credit risk is the likelihood of borrowers' inability to fulfill their contractual obligations. The borrowers' failure to pay causes loss which gives rise to credit risk. A bank also becomes the default if its assets fall short of liabilities. Olson and Zoubi (2008); Beck *et al.* (2013) and Khediri *et al.* (2015) find that Islamic banks have low credit risk than conventional banks. The low credit risk of Islamic banks can be attributed to different reasons. Islamic banks mobilize funds to the entrepreneurs based on profit and loss sharing agreement (*Mudaraba and Musharaka*) which allows them to move credit risk from assets part of the liability part of the balance sheet. As a result any decrease in assets side does decrease in liability side (Olson & Zoubi, 2008). Abedifar *et al.* (2013) argues that profit and loss sharing agreement enables Islamic banks to remove the insolvency risk of non-payment to depositors in case of worse economic condition which increase their loss absolving capacity in compare to conventional banks. The other channel of fund mobilization of Islamic banks is markup (*Murabaha, Islisna and Ijara*) which requires the financial transaction to be backed by real economic properties. This characteristics of Islamic bank reduces the chance to involve in speculative behavior (Gharar) which is strictly restricted in Islamic finance. Moreover, Islamic finance bans gambling (mysir) which requires to ensure symmetry of information between banks and entrepreneur which ultimately reduces moral hazard and adverse selection of Islamic banks (Abedifar *et al.*, 2013; Beck *et al.*, 2013).

Further point out that religiosity of entrepreneurs of Islamic bank reduces their default risk. The explanation reinforces us to develop our fourth hypothesis in the following way:

H4: Credit risk of Islamic banks is lower than conventional banks.

Now we are turning to bank liquidity. Excessive withdrawal from savings and current account put banks in liquidity crisis. Banks require to maintain high liquidity ratio in order to keep liquidity risk low. Past studies such as Bourkhis and Nabi (2013); Beck et al. (2013) and Khediri et al. (2015) find that Islamic banks maintain high liquidity ratio than conventional banks. This is due to fact that Islamic banks an only invest in shariah approved halal project. They also can not invest in interest driven government securities and conventional inter bank fund market which make their liquidity management difficult. As a result, Islamic banks need to maintain high capitalization ratio to support liquidity. Moreover, Iqbal (2001); Abedifar et al. (2013) and Khediri *et al.* (2015) finds better capitalization of Islamic bank than conventional banks. Regarding high capitalization Hasan and Dridi (2011) argues that Islamic banks need to keep high capital buffer in order to face the challenge of liquidity management given limited scope of risk sharing or profit and loss sharing investment with uncertain return. Therefore we can develop hypothesis regarding liquidity and capitalization in the following way:

H5: Liquidity of Islamic banks is higher than conventional banks

H6: Capitalization of Islamic banks is higher than conventional banks.

3. Methodology, Variables Selection and Data

We run Binary Logistic Regression (BLR) in order to discern conventional banking and Islamic banking on certain attributes. It divides the cases in to two groups on the basis of probabilities yielding from maximum-likelihood method. Where, Maximum-likelihood method estimates the value of parameters so as to maximize the probability or likelihood of obtaining the actual observations. For a particular case, if the model returns is $P > 0.5$, the case is assigned in to the group 1, otherwise, in to group 0. The BLR model can be written in the following way:

$$\ln\left(\frac{P}{1-P}\right) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n \quad (1)$$

Where, P indicates the probability of occurring an event and 1-P indicates the probability of non-occurrence of the event. Moreover, $\left(\frac{P}{1-P}\right)$ is the odds ratio which is the ratio indicating the probability of occurrence to non-occurrence of the event. Conversion to log form, log odds ratio becomes an instrument in order to determine the membership belonging to a particular group. Two possible group are 0 and 1; if odds ratio are less than 1, that is P less than 1-P, otherwise 1. X is the independent regressors and α and β are the parameters of the logit functions to be estimated. Probability of occurrence of an event (P) is calculate in BLR in the following way:

$$P = \frac{e^{\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n}}{1 + e^{\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n}} \quad (2)$$

Hosmer and Lameshow test is used in BLR model as a test of overall significance of the model. Cox & Snell R square and Nagelkerke R square are used as pseudo R square in BLR model as a measures of goodness of the model fit where model fit is assessed by determining the proportion of correct prediction. In addition, classification matrix exhibits predictive efficiency of the model.

3.1 Variable Selection

We apply BLR model on our dichotomous dependent variable such as Banking system having the value 0 for conventional banks and 1 for Islamic banks. We discriminate both banking system on six attributes of banking performance such as profitability, efficiency, size, credit risk, capital adequacy, and liquidity. We consider ROAA, LLRGL, ETA, lnTA, LTA and CI ratio as the proxy of profitability, credit risk, capital adequacy, size, liquidity and efficiency respectively.

We measure profitability using the ratio of net profit to average assets (ROAA) following (Heffernan and Fu (2008); Athanasoglou et al. (2008); Francis (2013); Perera et al. (2013)). It is a good indicator of a bank's financial performance and managerial efficiency. This ratio displays how efficient a company is in utilizing its assets and is also useful to aid comparison among peers in the same industry. Higher ratio is the indication of better profitable firm.

We measure credit risk as a ratio of loan loss reserve to gross loan (LLRGL) following Athanasoglou et al. (2008) and Masood and Ashraf (2012). Credit risk arises from lending operations of the bank. Some loan turns to impaired or bad due to worse economic condition of the borrowers which brings banks in to financial loss. In order to take percussion against impaired loan banks require to keep loan loss reserve as buffer against the loss from yearly profit. The central bank determines the policy for the banking industry regarding the level of loan loss reserve. Considering the policy bank management determines the reserve level for loan loss at the beginning of the period. Higher LLRGL ratio indicates higher credit risk and lower performance of the bank.

In addition we consider the ratio of equity to total assets (ETA) as capitalization ratio following Athanasoglou et al. (2008); Masood and Ashraf (2012); Wasiuzzaman and Gunasegavan (2013) and Perera et al. (2013). It measures the bank's ability to absorb loss. The ratio does not only represent banks higher capital adequacy of the bank but also reduce risk and regulatory cost. Higher the ratio is the indication of the bank is running with profitable investment opportunity and lower the ratio indicates that bank is suffering from capital adequacy problem.

Moreover, we consider the ratio of net loan to total assets as a proxy of bank's liquidity following Wasiuzzaman and Gunasegavan (2013). Loan constitutes the largest interest earning assets of the bank and expects to effects performance positively. If major segment of the deposit is used for loan creation, it is expected that the ratio increases interest income and effects profitability positively. However, high ratio may reduce liquidity level of the banks which may increase funding cost and also increase the credit risk of the bank. In that case, high LTA ratio may indicate low liquidity of the banks.

Cost to income (CI) ratio indicates the operational efficiency of the bank indicating the cost of running the bank in compare to it's income (Heffernan & Fu, 2008). Higher the ratio means that bank is operating at low efficiency and at high competition which negatively affects the profitability of the bank.

Bank size also may be a proxy of bank performance. Big banks may hold more market share and perform better than small banks if they are efficient and free from bureaucracy. We consider bank size as the natural logarithm of total assets following Athanasoglou et al. (2008); Masood and Ashraf (2012); Perera et al. (2013).

3.2 Data

In order to discern conventional banks and Islamic banks of Bangladesh in term of performance we rely on the bank level performance indicators. We collect the bank level data from Bankscope database from the year 2003 to 2013. There are 56 banks in Bangladesh which can be decomposed in to 4 major types such as 4 public commercial banks, 4 development banks, 39 local private commercial banks and 9 foreign private commercial banks. Our study covers only local private commercial banks in Bangladesh as they are operated under either conventional or Islamic system or dual system and all public banks and development bank are operated under conventional system. Moreover, we exclude 9 newly established local private commercial banks from our analysis which have started operations during 2013. We also have omitted foreign commercial banks due to unavailability of required data in the Bankscope database. Therefore, we use an unbalanced panel of 30 banks with 223 observations representing 68 percent of total banking assets of the country composing 23 conventional banks and 7 Islamic banks. We use statistical software package SPSS for processing our results. We use BLR model to achieve our intended objectives of the study. Hair et al. (2009) recommends at least 10 observations per parameter estimated as minimum sample requirement for logistic regression. Our sample adequately meets this condition.

4. Results and Discussion

Table 1. Descriptive statistics of the performance indicators

Variable	Overall		Islamic Banks		Conventional banks	
	Obser.	Mean	Mean	SD	Mean	SD
ROAA	223	1.46	1.42	1.13	1.47	.920
LLRGL	196	3.14	2.74	1.91	3.25	1.93
CI	214	43.13	41.97	18.69	43.54	10.35
ETA	213	8.29	9.84	10.90	7.72	2.22
LTA	214	65.16	65.71	15.00	64.97	12.08
lnTA	215	6.02	5.99	.420	6.03	.30

We use two step analysis for discriminating conventional and Islamic banks based on bank level performance indicators in Bangladesh. Firstly, the study uses descriptive statistics and finally uses binary logistic regression analysis for achieving the intended objective. Table 1 reports the descriptive statistics showing mean, standard deviation of the explanatory variables for all banks, Islamic banks and conventional banks.

The mean ROAA of all banks is 1.46 and mean ROAA of Islamic banks and conventional banks are 1.42 and 1.47 respectively. Higher mean and lower standard deviation of ROAA of conventional banks indicates high profitability of conventional banks in Bangladesh. Moreover, the mean of LLRGL of all banks is 3.14 and high mean and low standard deviation of conventional banks of implies their better credit risk management quality. The overall mean of CI ratio is 43.14 and it is 41.97 for only Islamic banks and 43.54 for only conventional banks. Low mean and high standard deviation of CI ratio of Islamic banks suggest that they are more cost efficient than their conventional counter parts however, cost efficiency among all Islamic banks are not same. The overall mean of ETA ratio is 8.29 and it is 9.84 for Islamic banks and 7.72 for conventional banks. Higher ETA of Islamic banks indicates their better capitalization. Moreover, the mean LTA of all banks is 65.16 and it is 65.71 for Islamic banks and 64.97 for conventional banks. High LTA ratio of Islamic banks shows their higher liquidity risk. Finally lnTA of all banks is 6.02 and it is 5.99 for Islamic banks and 6.03 for conventional banks. Higher lnTA and lower standard deviation of convention banks implies comparative larger size of conventional banks in compare to Islamic bank in Bangladesh.

In the second step of our analysis we run BLR to discriminate between Conventional banks and Islamic banks regarding banking performance on different bank level attributes in Bangladesh. We use dichotomous variable as dependent variable where we consider 1 for Islamic banks and 0 for conventional banks. We regress six bank characteristics representing banking performance to the model in order to differentiate between both types of banks. Our regressors include Return on Average Assets (ROAA), ratio of Loan Loss Reserve to Gross Loan (LLRGL), Cost to Income ratio (CI), ratio of Equity to Total Assets (ETA), ratio of Loan to Total Assets (LTA) and natural logarithm of total assets (lnTA) representing profitability, credit risk, cost efficiency, capitalization, liquidity and bank size respectively. The regression output is sensitive to correlation between the independent variables. In order to identify potential multicollinearity among the variables we run Pearson correlation which is reported in Table 2. Pearson correlation table reports that our independent variables are free from multicollinearity problem and we conform that our result is free from biasness.

Table 2. Pearson correlation Metrix

Explanatory variables	ROAA	LLRGL	CI	ETA	LTA	lnTA
ROAA	1.000					
LLRGL	.383	1.000				
CI	.431	.015	1.000			
ETA	-.264	-.467	.269	1.000		
LTA	-.016	.135	.382	.234	1.000	
Lgsize	.098	.152	-.055	-.196	.029	1.000

Based on equation (1), we have tested the following BLR model.

$$\ln\left(\frac{P}{1-P}\right) = -.516 - .516ROAA - .576LLRGL - .001CI + .166ETA + 0.035LTA - 3.29lnTA \quad (3)$$

The results from BLR are summarized in Table 3. The Hosmer and Lemeshow test is not statistically significant ($\lambda = 4.70, p = .79$) indicating that our BLR model is a good fitted model. For robustness check, we ran the omnibus tests of model coefficients, which test the null hypothesis of no improvement on the predictive ability of the predictors. The tests are highly significant suggesting the efficacy of our model. Finally, our model's hit ratio is well over 79.6 percent. Particularly, our model correctly predicted 145 out of 148 cases (i.e. 98%) for conventional banks, and 7 of 43 cases (i.e. 16%) of Islamic banks. The Cox and Snell and Nagelkerke statistics show that our model accounts for the range of 15 percent to 25 percent of the total variation between conventional and Islamic banks. In addition, the low standard error (less than 5) of our independent regressors conform that our model is free from multicollinearity problem (Chan, 2004) and the model is unbiased. We report values of Wald test to show the significance of individual predictor variables included in the model. Higher value of Wald test implies greater contribution of the variable in the model.

The estimates of the BLR model show that there is a significant difference between Islamic banks and conventional banks in terms of profitability (ROAA), credit risk (LLRGL), capitalization (ETA) and size (lnTA). However, both types of banks are not significantly different on the basis of efficiency (CI) and liquidity (LTA). The negative coefficient of ROAA indicating that the profitability of Islamic banks in Bangladesh is not better than conventional banks which reject our first hypothesis. This may be attributed due to lack of suitable investment opportunity for Islamic bank in the country. Here, Islamic banks cannot invest in interest based government securities. Another reason may be the inclusion of ICB Islamic bank (Note 5) in Islamic banks panel.

Table 3. Binary logistic regression results

	Expected sign	Estimates		Wald test
		β	S.E.	
Constant		-.516	.322	2.565**
ROAA	+	-.516	.322	2.565*
LLRGL	-	-.576	.196	8.611***
CI	-	-.001	.021	.001
ETA	+	.166	.052	10.121**
LTA	-	.035	.024	2.101
lnTA	-	-3.290	1.387	5.626**
<i>Hosmer and Lemeshow Test</i>		4.701		
-2 Log likelihood		174.613		
<i>Pseudo R²: Cox & Snell R Square</i>		15 %		
<i>Pseudo R²: Nagelkerke R Square</i>		25%		
<i>Observations</i>		223		
<i>Hit ratio with model</i>		79.9%		
Dependent variable BANKSYS (1 = Islamic banks, 0 = Conventional Bank)				
* value is significant at 10% significant level, ** value is significant at 5% level and *** value is 1% significant level. ROAA stands for Return on Average Assets, LLRGL stands for ratio of Loan Loss Reserve to Gross Loan, CI stands for Cost to Income ratio, ETA stands for Equity to Total Assets, LTA stands for Loan to Total Assets and lnTA stands for log of Total Assets.				

Cost to Income ratio has a negative coefficient but not statistically significant. This means that Islamic banks are not efficient than conventional banks in Bangladesh. Log of total assets (lnTA) has also negative coefficient and the value is statistically significant. This means that the size of Islamic banks are smaller than conventional banks in Bangladesh which supports our third hypothesis. This is due to fact that most of the Islamic banks are newer in Bangladesh of which first Shariah based bank established in 1983. Moreover, local ownership of all Islamic banks may also be another reason of their smaller size in compare to conventional banks in Bangladesh. The credit risk indicator the ratio of loan loss reserve to gross loan also has a negative coefficient. This means that credit risk of Islamic banks is lower than conventional banks in Bangladesh which supports our fourth hypothesis. This further implies that Islamic banks are less vulnerable to credit risk than conventional banks in Bangladesh. Less vulnerability of Islamic banks can be attribute to their ability to move the negative shocks on assets side to the investment deposit (that is, musharak account to mudaraba account). The PLS on deposit side also provides them secondary protection in addition their book capital. Moreover, Bangladesh is a country with more than 90 percent Muslim population, their high religiosity may also influence on the low credit risk of Islamic banks.

Loan to total assets ratio shows a positive coefficient indicating loan disbursement of Islamic banks is higher than conventional banks. This results implies low liquidity of Islamic banks in Bangladesh. Bangladesh banks allows Islamic banks a concessional level of statutory liquidity reserve comparing to conventional banks due to the availability to low volume of Shariah based statutory liquidity reserve eligible instruments in the money market. As Shariah approve money market instruments are limited in Bangladesh, Islamic banks can borrow newly introduced Islamic Inter-banks Money Market (IIMM (Note 6)) and/or Islamic investment bond fund issued by government of Bangladesh.

The coefficient of equity to total asset ratio is positive and significant. This result implies that the capitalization of Islamic banks is higher than conventional banks which support our sixth hypothesis. A strong capitalization of

Islamic banks explain their high financial strength and better resilience to the various shocks if arise. High capitalization of Islamic banks is attributed to the compliance of minimum capital adequacy ratio of 10 percent under Basel II accord (Financial stability report, 2013)

5. Conclusion and Policy Implication

Interest free banking has gained interest of policy makers, investors and researchers in recent years due to its less vulnerability to financial crisis especially the recent GFC. Most of the studies focusing Islamic banking are theoretical in nature. Moreover, a few empirical studies already focus on the comparative studies between Islamic banks and conventional banks in terms of profitability, efficiency, risks and other aspects of banking characteristics and reach conflicting findings. Furthermore, most of the studies are focusing cross countries and limited single country studies do not cover Bangladesh, where, more than 90 percent of total population is Muslim and the growth of Islamic banking is very high in recent years.

The study aims at investigating the distinction between Islamic banks and conventional banks on bank level performance of Bangladesh. In the investigation process the study uses binary logit regression and an unbalanced panel of 223 observations of 23 conventional banks and 7 Islamic banks during 2003-2013. It contributes to the existing literature of Islamic banking by examining six hypotheses such as profitability, credit risk, liquidity, efficiency, capitalization and bank size of Islamic banks and conventional banks. The study finds significant distinction between conventional banks and Islamic banks in Bangladesh on profitability, credit risk, capitalization and bank size. However, they are not significantly different on efficiency and leverage. The study further finds that Islamic banks have low profitability, credit risk, efficiency, liquidity and small size than conventional banks. However, capitalization of Islamic bank is higher than conventional banks. The findings of the study imply that Islamic banks are not capable of using their high capitalization for increasing profitability due to low efficiency, small bank size and lack of specific regulatory framework in Bangladesh. This situation is created due to lack of shariah compliance investment products and experienced as well as capable management of Islamic banks in Bangladesh. Under the circumstances, central bank needs to come out with specific regulatory policy framework in order to improve investment opportunity and managerial capability so that Islamic bank can invest their high capitalization for different maturity periods.

References

- Abdul-Majid, M., Saal, D. S., & Battisti, G. (2010). Efficiency in Islamic and conventional banking: an international comparison. *Journal of Productivity Analysis*, 34(1), 25-43.
- Abdul Karim, M., Hassan, M. K., Hassan, T., & Mohamad, S. (2014). Capital adequacy and lending and deposit behaviors of conventional and Islamic banks. *Pacific-Basin Finance Journal*, 28, 58-75. <http://dx.doi.org/10.1016/j.pacfin.2013.11.002>
- Abedifar, P., Molyneux, P., & Tarazi, A. (2013). Risk in Islamic banking. *Review of Finance*, 17(6), 2035-2096.
- Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of International Financial Markets, Institutions and Money*, 18(2), 121-136.
- Bashir, B. A. (1983). Portfolio management of Islamic banks: 'Certainty model'. *Journal of Banking & Finance*, 7(3), 339-354. [http://dx.doi.org/10.1016/0378-4266\(83\)90043-2](http://dx.doi.org/10.1016/0378-4266(83)90043-2)
- Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. conventional banking: Business model, efficiency and stability. *Journal of Banking & Finance*, 37(2), 433-447. <http://dx.doi.org/10.1016/j.jbankfin.2012.09.016>
- Belanes, A., & Hassiki, S. (2012). Efficiency in Islamic and conventional banks: A comparative analysis in the MENA region. *Bankers, Markets and Investors*, 120, 36-49.
- Ben Khediri, K., & Ben-Khedhiri, H. (2009). Determinants of Islamic bank profitability in the MENA region. *International Journal of Monetary Economics and Finance*, 2(3), 409-426.
- Bourkhis, K., & Nabi, M. S. (2013). Islamic and conventional banks' soundness during the 2007-2008 financial crisis. *Review of Financial Economics*, 22(2), 68-77. <http://dx.doi.org/10.1016/j.rfe.2013.01.001>
- Chan, Y. (2004). Biostatistics 202: logistic regression analysis. *Singapore medical journal*, 45(4), 149-153.
- Chong, B. S., & Liu, M.-H. (2009). Islamic banking: Interest-free or interest-based? *Pacific-Basin Finance Journal*, 17(1), 125-144. <http://dx.doi.org/10.1016/j.pacfin.2007.12.003>
- Choon, Y., Thim, C. K., & Kyzy, B. T. (2012). Performance of Islamic Commercial Banks in Malaysia: An

- Empirical study. *Journal of Islamic Economics, Banking and Finance*, 8(2), 67-79.
- Daher, H., Masih, M., & Ibrahim, M. (2015). The unique risk exposures of Islamic banks' capital buffers: A dynamic panel data analysis. *Journal of International Financial Markets, Institutions and Money*, 36(0), 36-52. <http://dx.doi.org/10.1016/j.intfin.2015.02.012>
- Farook, S., Hassan, M. K., & Clinch, G. (2012). Profit distribution management by Islamic banks: An empirical investigation. *The Quarterly Review of Economics and Finance*, 52(3), 333-347. <http://dx.doi.org/10.1016/j.qref.2012.04.007>
- Farook, S., Hassan, M. K., & Clinch, G. (2014). Islamic bank incentives and discretionary loan loss provisions. *Pacific-Basin Finance Journal*, 28(0), 152-174. <http://dx.doi.org/10.1016/j.pacfin.2013.12.006>
- Faye, I., Triki, T., & Kangoye, T. (2013). The Islamic finance promises: Evidence from Africa. *Review of Development Finance*, 3(3), 136-151. <http://dx.doi.org/10.1016/j.rdf.2013.08.003>
- Francis, M. E. (2013). Determinants of commercial bank profitability in Sub-Saharan Africa. *International Journal of Economics and Finance*, 5(9), 134.
- Ghosh, S. (2014). Risk, capital and financial crisis: Evidence for GCC banks. *Borsa Istanbul Review*, 14(3), 145-157. <http://dx.doi.org/10.1016/j.bir.2014.06.003>
- Hasan, M., & Dridi, J. (2011). The effects of the global crisis on Islamic and conventional banks: A comparative study. *Journal of International Commerce, Economics and Policy*, 2(2), 163-200.
- Hassoune, A. (2002). Islamic banks' profitability in an interest rate cycle. *International journal of Islamic financial services*, 4(2), 1-13.
- Heffernan, S., & Fu, M. (2008). The determinants of bank performance in China. Available at SSRN 1247713.
- Ho, C. S. F., Abd Rahman, N. A., Yusuf, N. H. M., & Zamzamin, Z. (2014). Performance of global Islamic versus conventional share indices: International evidence. *Pacific-Basin Finance Journal*, 28, 110-121. <http://dx.doi.org/10.1016/j.pacfin.2013.09.002>
- Iqbal, M. (2001). Islamic and conventional banking in the nineties: a comparative study. *Islamic economic studies*, 8(2), 1-27.
- Jobst, A. A. (2007). The economics of Islamic finance and securitization. *IMF Working Papers*, 1-35.
- Johnes, J., Izzeldin, M., & Pappas, V. (2014). A comparison of performance of Islamic and conventional banks 2004-2009. *Journal of Economic Behavior & Organization*, 103, Supplement, S93-S107. <http://dx.doi.org/10.1016/j.jebo.2013.07.016>
- Kabir, M. R., Ullah, M. H., & Khan, M. M. (2012). Comparative Analysis of Profit Rate of Islamic Banks on Investment (ROI) and Fixed Rate of Interest on Loan of Conventional Banks in Bangladesh. *World*, 2(6).
- Karim, R. A. A. (2001). International accounting harmonization, banking regulation, and Islamic banks. *The International Journal of Accounting*, 36(2), 169-193. [http://dx.doi.org/10.1016/S0020-7063\(01\)00093-0](http://dx.doi.org/10.1016/S0020-7063(01)00093-0)
- Khan, F. (2010). How 'Islamic' is Islamic Banking? *Journal of Economic Behavior & Organization*, 76(3), 805-820. <http://dx.doi.org/10.1016/j.jebo.2010.09.015>
- Khediri, K. B., Charfeddine, L., & Youssef, S. B. (2015). Islamic versus conventional banks in the GCC countries: A comparative study using classification techniques. *Research in International Business and Finance*, 33(0), 75-98. <http://dx.doi.org/10.1016/j.ribaf.2014.07.002>
- Magd, H. A. E., & McCoy, M. P. (2014). Islamic Finance Development in the Sultanate of Oman: Barriers and Recommendations. *Procedia Economics and Finance*, 15, 1619-1631. [http://dx.doi.org/10.1016/S2212-5671\(14\)00633-9](http://dx.doi.org/10.1016/S2212-5671(14)00633-9)
- Masood, O., & Ashraf, M. (2012). Bank-specific and macroeconomic profitability determinants of Islamic banks: The case of different countries. *Qualitative Research in Financial Markets*, 4(2/3), 255-268.
- Metwally, M. M. (1997). Differences between the financial characteristics of interest-free banks and conventional banks. *European Business Review*, 97(2), 92-98.
- Mohammed, N., Ismail, A. G., & Muhammad, J. (2015). Evidence on Market Concentration in Malaysian Dual Banking System. *Procedia - Social and Behavioral Sciences*, 172(0), 169-176. <http://dx.doi.org/10.1016/j.sbspro.2015.01.351>
- Murjan, W., & Ruza, C. (2002). The competitive nature of the Arab Middle Eastern banking markets.

International Advances in Economic Research, 8(4), 267-274.

- Olson, D., & Zoubi, T. A. (2008). Using accounting ratios to distinguish between Islamic and conventional banks in the GCC region. *The International Journal of Accounting*, 43(1), 45-65. <http://dx.doi.org/10.1016/j.intacc.2008.01.003>
- Perera, S., Skully, M., & Chaudhry, Z. (2013). Determinants of commercial bank profitability: South Asian evidence. *Asian Journal of Finance & Accounting*, 5(1), 365-380.
- Rosman, R., Wahab, N. A., & Zainol, Z. (2014). Efficiency of Islamic banks during the financial crisis: An analysis of Middle Eastern and Asian countries. *Pacific-Basin Finance Journal*, 28, 76-90. <http://dx.doi.org/10.1016/j.pacfin.2013.11.001>
- Said, R., Daud, M. M., Radjeman, L. A., & Ismail, N. (2013). Probing Corporate Ethical Identity of Shari'ah Compliant Companies. *Procedia Economics and Finance*, 7, 230-235. [http://dx.doi.org/10.1016/S2212-5671\(13\)00239-6](http://dx.doi.org/10.1016/S2212-5671(13)00239-6)
- Saiti, B., Bacha, O. I., & Masih, M. (2014). The diversification benefits from Islamic investment during the financial turmoil: The case for the US-based equity investors. *Borsa Istanbul Review*, 14(4), 196-211. <http://dx.doi.org/10.1016/j.bir.2014.08.002>
- Shaban, M., Duygun, M., Anwar, M., & Akbar, B. (2014). Diversification and banks' willingness to lend to small businesses: Evidence from Islamic and conventional banks in Indonesia. *Journal of Economic Behavior & Organization*, 103(Supplement), S39-S55. <http://dx.doi.org/10.1016/j.jebo.2014.03.021>
- Siddiqi, M. N. (2006). Islamic banking and finance in theory and practice: A Survey of state of the Art. *Islamic economic studies*, 13(2), 1-48.
- Srairi, S. (2013). Ownership structure and risk-taking behaviour in conventional and Islamic banks: Evidence for MENA countries. *Borsa Istanbul Review*, 13(4), 115-127. <http://dx.doi.org/10.1016/j.bir.2013.10.010>
- Wasiuzzaman, S., & Gunasegavan, N. U. (2013). Comparative study of the performance of Islamic and conventional banks: The case of Malaysia. *Humanomics*, 29(1), 43-60.
- Willison, B. (2009). Technology trends in Islamic investment banking. *Islamic Finance News*, 6(19), 22-23.

Notes

Note 1. Commercial banks offering interest based banking products.

Note 2. Commercial banks offering interest free banking products.

Note 3. A legal framework which is based on Islamic principles of jurisprudence used to regulate every aspects of human life.

Note 4. Central Bank of Bangladesh.

Note 5. The bank established in 1987, April in the name of Al-Baraka bank which was suffering from huge cumulate loss and provision short fall during 2000s. The name of the bank has been changed to ICB Islamic bank and converted to full-fledged Islamic bank in 2008, February which not yet recovered from the crisis.

Note 6. IIMM has been introduced in Bangladesh since December 2012 in order to facilitate Islamic banks to support them in liquidity management.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Delayed Goodwill Impairment Charges: An Examination of the Declined Market Capitalization

Jamaliah Abdul Majid¹ & Nor Asma Lode¹

¹ School of Accountancy, Universiti Utara Malaysia, Malaysia

Correspondence: Jamaliah Abdul Majid, School of Accountancy, Universiti Utara Malaysia, 06010, Sintok, Kedah, Malaysia. E-mail: jamaliah@uum.edu.my

Received: April 26, 2015 Accepted: May 24, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p258

URL: <http://dx.doi.org/10.5539/ass.v11n21p258>

“..... Often, share prices reflect the impairment before the company records it on the balance sheet. In other words, the impairment test comes too late.”

Hans Hoogervorst, Chairman of the IASB¹

Abstract

This study has two main objectives. First, it examines the extent to which the declined in the market capitalization below the book values of the net assets represents an appropriate proxy for an indication that goodwill may be impaired by listed companies in Malaysia, as an example of listed companies in an emerging market. Using the findings from the first research objective, this study explores cases of late reporting of goodwill impairment losses. Results show that as a stand-alone, the declined in the market capitalization is not an ideal proxy for an indication that goodwill may be impaired, as it does not fully reflect the condition of the cash-generating-units containing goodwill, disclosed in the Notes to the financial statement. However, when the declined in the market capitalization is examined in relation to financial performance of companies and their segment results, it becomes a useful starting point in identifying cases of late reporting of goodwill impairment losses. The study provides important implications for policy makers and relevant authorities, in that, to enhance the quality of financial reporting, the relevant authorities need to closely monitor the disclosure of goodwill impairment by listed companies in the emerging market of Malaysia.

Keywords: market capitalization, goodwill impairment, managerial discretion

1. Introduction

The implementation of goodwill impairment-only approach by the US Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) has led to a renewed focus on a subsequent accounting for goodwill. Standard setters and regulatory bodies raise concern on the lack of rigorousness of the impairment test conducted by companies (Hoogervorst, 2012; EFRAG, 2013; KPMG, 2014) while audit firms and academics highlight the degree of subjectivity inherent in the impairment test (Li, Shroff, Venkataraman & Zhang, 2011; Ramanna & Watts, 2012) which may limit its effectiveness (KPMG, 2014).

In an attempt to evaluate the reliability of the impairment testing of goodwill and hence to assess goodwill impairment analyses reported by companies, regulators, such as the US Securities and Exchange Commission (SEC) has made use of the companies' market capitalization. For example, the SEC, in its comment letters sent to US listed companies, requested the companies to provide explanation on the non-impairment of goodwill, as their market capitalization fell below the book values of the net assets (Regions, 2009; Murphy, 2012). Accordingly, audit firms advised their clients to provide detailed disclosures of goodwill impairment when the companies experienced such condition (Ernst & Young, 2011).

One possible implication of the lack of reliability of the impairment testing of goodwill is that goodwill impairment losses were reported late on the financial statements. Prior studies (e.g., Li et al., 2011; Ramanna & Watts, 2012; KPMG, 2014) documented that goodwill impairment charges lag behind the economic impairment. Li et al. (2011) conjectured that companies may have used the discretion inherent in the impairment testing of goodwill to delay the reporting of goodwill impairment losses.

Despite concerns raised by the Chairman of the IASB and academics on the reliability of the impairment testing of goodwill and the late reporting of goodwill impairment losses, there has been no prior research to our

knowledge that examine the late reporting of goodwill impairment losses by listed companies in an emerging market. Morck, Yeung, and Yu (2000) argued that compared to the developed markets, the stock prices in the emerging markets are less reflective of the firm-specific information. Therefore, it is an empirical issue to evaluate the appropriateness of the application of the market capitalization in relation to goodwill impairment reported by listed companies in an emerging market. The present study aims to fill this void.

Specifically, the objective of our study is twofold. First, to examine the extent to which the declined in the companies' market capitalization below the book value of the net assets represents an appropriate proxy for an indication that goodwill may be impaired by listed companies in Malaysia, as an example of listed companies in an emerging market. Using results from the first research objective, our second research objective is to explore cases of late reporting of goodwill impairment losses by Malaysian listed companies.

The remainder of this paper is structured as follows. Section 2 presents prior literature on goodwill impairment testing and triggering events for the impairment test. Section 3 describes our research method. Section 4 reports the findings while Section 5 concludes the paper.

2. Prior Literature

2.1 Impairment Testing of Goodwill

The introduction of the International Financial Reporting Standard (IFRS) 3 *Business Combinations* by the IASB lead to the prohibition of an amortization of goodwill. The IFRS 3 also requires companies to perform an impairment review of goodwill annually or more frequently if events or changes in circumstances indicate that the goodwill might be impaired (IASB, 2006a). The purpose of the impairment test is to ensure that the carrying amount of the assets (inclusive of goodwill) reported on the balance sheet do not exceed their recoverable amount (IASB, 2006b; Ernst & Young, 2008). In performing the impairment test, managers are required to use judgment and estimations (Ernst & Young, 2007). To limit the risk of an over-optimistic or over-pessimistic estimation applied by the managers, Malaysian Financial Reporting Standard² (FRS) 136 *Impairment of Assets* (similar to the IAS 36) provides safeguards in the form of a list of indicators that the assets may be impaired (see Figure 1). Nevertheless, the standard emphasizes that the list is not exhaustive (IASB, 2006a; IASB, 2006b).

-
- Market value of the asset declined significantly
 - Increased in the market interest rates
 - Evidence is available of obsolescence or physical damage of an asset
 - Significant changes with an adverse effect on the entity which affect the asset
 - Evidence is available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected
 - Dividend for an investment in a subsidiary, jointly controlled entity or associate
 - Significant changes with an adverse effect on the entity
 - The carrying amount of the net assets of the entity is more than its market capitalization
-

Figure 1. List of indicators that an asset (goodwill) may be impaired
Source: MASB (2006: FRS 136, paragraph 12)

From Figure 1, it is observed that the first six indicators provided by the FRS 136 relate specifically to company's assets. Information concerning these indications can only be accessed internally by the management. The remaining two indications relate to the economic environment in which the assets (inclusive of goodwill) operate.

This study focuses mainly on the market capitalization, the last indicator presented in Figure 1, for three main reasons. First, a decline in a company's market capitalization beyond the book value of its net assets implies that the market regards the business as being overvalued (Ernst & Young, 2008). It suggests that investors perceive the company's value to be worth less than the amount presented on the balance sheet. Thus, if the decline is not due to short term volatility in the market, it is one of the factors that can potentially increase the risk for impairment (Price water house Coopers, 2009).

Second, FRS 136 (paragraph 90) requires a company to perform an impairment test of goodwill at least annually (MASB, 2006). Thus, we argue that because a company would normally carry out the impairment test at the balance sheet date, the declined in the market capitalization below the book values of the net assets, which existed prior to the impairment test, might influence the test itself. Even if a company is applying value-in-use as

a basis of a recoverable amount of its cash-generating-units (CGUs) containing goodwill, the decline in the market capitalization might influence the manager's estimation of future cash flows of the CGUs. Hence, there is a possibility for an impairment loss to occur if the recoverable amount of the CGUs is lower than its carrying amount. Third, unlike other indicators noted above, a decline in the market capitalization below its book value is observable externally. Thus, we would be able to examine the decline in the market capitalization.

2.2 Application of the Market Capitalization

In evaluating the reliability of an impairment testing of goodwill undertaken by companies, and hence the reporting of goodwill on the financial statements, the US SEC normally refers to the companies' market capitalization (Fox III, 2008; Jacobs, 2008; Latham & Watkins, 2009; Murphy, 2012). This is evidenced from the SEC comment letters, which requested US listed companies to explain reasons for their goodwill impairment analyses (see for example Regions, 2009).

Apart from regulators, prior studies (e.g., Beatty & Weber, 2006; AbuGhazaleh, Al-Hares, & Roberts, 2011; Ramanna & Watts, 2012) have also employed the companies' market capitalization (with modification) in analyzing goodwill impairment reported by US listed companies. For example, Beatty and Weber (2006), in their analysis of goodwill impairment by US listed companies, selected companies that faced a decline in the market values below the book values of the net assets. Further, they imposed an additional selection criterion that the gap between these two values shall not exceed the amount of goodwill balance reported on the financial statement. By applying the companies' market capitalization (with modification), these prior studies have made an implicit assumption that a decline in the firms' market values below the book values of the net asset is a good indication of goodwill impairment.

2.3 Other Triggering Events and the Importance of Disclosure of Goodwill Impairment

Apart from the decline in the market capitalization below the book value of the net assets, as discussed in Section 2.1, there are other indicators or triggering events that have been highlighted by prior studies. For example, Comiskey and Mulford (2010), in their analysis of disclosure of triggering events for goodwill impairment test by US listed companies, explain that the triggering events vary from company to company. In addition to the market capitalization, other factors, such as the duration and severity of the decline (Latham & Watkins, 2009) and the performances of the reporting units or the CGUs containing goodwill also play their roles in the recognition of goodwill impairment losses (Comiskey & Mulford, 2010).

Prior studies also point out that the decline in the market capitalization below the book value of the net assets does not necessitate companies to take goodwill write-offs (KPMG, 2014). This is because there are situations where the CGUs containing goodwill are insensitive to the market capitalization as an indicator (Ernst & Young, 2011). As a result, the recoverable amount of the CGUs exceeds the market capitalization (Ernst & Young, 2011). In these situations, Ernst & Young (2011) suggested companies to disclose sufficient information to indicate reasons for reporting the goodwill impairment and to describe factors which may lead to impairment losses in the near future.

The emphasis on providing detailed information concerning goodwill impairment as discussed above is in line with the disclosure requirements as stipulated by the IAS 36 and hence the FRS 136. As discussed earlier, when IFRS 3 was introduced, the standard prohibited an amortization of goodwill and requires companies to perform an impairment test of goodwill at least annually. The IASB board members argued that with the abolition of goodwill amortization, the impairment test of goodwill, as stated in IAS 36, does not meet the requirement of a "rigorous and operational impairment test" (IASB, 2006 a & b: Basis for Conclusion). As a result, the IASB decided to improve the reliability of the impairment test through disclosure requirements (IASB, 2006b: Basis for Conclusion). This was done by requiring companies to disclose enough information to allow users to evaluate the reliability of the impairment test and at the same time maintaining an appropriate balance in the magnitude of the disclosures (IASB, 2006b: Basis for Conclusions). Thus, it is important for companies to provide detailed disclosure of goodwill impairment including triggering events that may lead to goodwill impairment losses in order to assist users to evaluate the reliability of the impairment test and hence the reporting of goodwill on the financial statements.

3. Method

3.1 Data Source

To evaluate the extent to which the decline in the market capitalization below the book value of the net assets represents an appropriate proxy for an indication that goodwill may be impaired, we compare two types of information, which represent the observed practice vs. stated explanation. The data compared are: (i) the

market-to-book ratio at the balance sheet date, which is obtained from Datastream, and (ii) reasons for companies reporting goodwill impairment (both zero and goodwill impairment losses) disclosed in the Notes to the financial statement. The market values are the fiscal year-end price per share multiplies with the total number of shares outstanding.

3.2 Sample Selection

We analyze the appropriateness of the declined in the market capitalization from 2006 to 2007. 2006 represents the first year of the FRS 3 (similar to the IFRS 3 issued by the IASB) implementation in Malaysia. We also examine the disclosure and the market capitalization in the following year in order to assess the relative disclosure of goodwill impairment over time. Table 1 shows that the number of firm-years that are available for the analysis is 760. The analysis is conducted in two ways. First, it is performed across companies within one year of the FRS 3 implementation. This covers 294 companies with financial year ended December 2006 and a further 235 companies with financial year ended non-December 2007. Second, the analysis is conducted on a subset of companies over a period of two years. This includes 258 companies with data available for the financial years ended December 2006 and December 2007.

Table 1. Sample selection

Total number of companies with:	
Financial year ended December 2006	294
Financial year ended non-December 2007	235
Financial year ended December 2007	<u>258</u>
	787
Less: annual reports unavailable	(27)
Total final number of companies	<u>760</u>

From the results of the first research objective, we explore in detailed cases of late reporting of goodwill impairment losses. To identify companies that appear to delay reporting their goodwill impairment losses, we focus on selected companies in which their annual reports are available throughout several years and reported goodwill impairment losses. Our exploration is guided by four key items that have been employed by prior studies and disclosure requirements of the FRS 136 (see Figure 2 – extracted from Abdul Majid, 2013).

- Goodwill movement.
- Segment results – i.e. cash-generating-units (CGUs) containing goodwill.
- Financial performances of the company - i.e. operating income, profit or loss from ordinary activities pre-tax and pre-goodwill impairment loss, net income available to equity holders pre-goodwill impairment loss, and basic earnings per share.
- Market-to-book ratio.

Figure 2. Key items that were employed in exploring cases of late reporting of goodwill impairment losses
Source: Abdul Majid (2013)

4. Results and Discussion

4.1 Results of the Appropriateness of the Declined in the Market Capitalization

In analyzing the appropriateness of the declined in the market capitalization below the book value of the net assets, as a proxy for an indication that goodwill may be impaired, we compared two types of information, which represent the observed practice vs. stated explanation. As noted in Section 3.1, observed practice refers to the market-to-book ratio at the balance sheet date, which is obtained from Datastream while the stated explanation refers to reasons for reporting goodwill impairment (both zero and goodwill impairment losses) disclosed in the Notes to the financial statement.

The comparison of these two types of information leads to observation of three groups, as follows:

- Group 1 - companies with poor disclosure, which do not provide reasons for reporting goodwill impairment in the Notes to the financial statement (see the illustrative example in Appendix A).
- Group 2 – companies whose market-to-book ratio reflects their stated reasons for reporting goodwill impairment as disclosed in the Notes to the financial statement (see the illustrative example in Appendix B).

- Group 3 – companies whose market-to-book ratio conflicts with their stated reasons for reporting goodwill impairment as disclosed in the Notes to the financial statement (see the illustrative example in Appendix C).

One striking issue that emerges from the close inspection of the annual reports, particularly the Notes to the financial statement, is that companies' disclosure related to the impairment testing of goodwill is not encouraging. In all three groups, the majority of the companies do not disclose information concerning CGUs containing goodwill and discount rates applied, the two essential disclosure requirements that were required by the FRS 136. Further, although Groups 2 and 3 disclosed reasons for reporting goodwill impairment, the disclosures are inadequate, especially for users of annual report to evaluate the reliability of the impairment testing of goodwill. Not only that these disclosures were aggregated but they are also boilerplate in nature. These findings are consistent with the results documented by the Financial Reporting Council (FRC) in the UK in 2008. The study found that even though all of the 32 UK listed companies which they have analyzed disclosed information regarding an impairment testing of goodwill, many of these disclosures are generic in nature and 'inappropriately aggregated' (FRC, 2008). The FRC considered such disclosures as providing little information to users of financial statement in understanding factors influencing valuation of goodwill and in evaluating the estimation made by the management concerning the impairment test (FRC, 2008).

Table 2 reports the number of companies in each of the three groups. Panel A of the table shows that overall approximately one-third of the companies with financial year ended December 2006 do not disclose reasons for reporting goodwill impairment (companies in Group 1). The number of companies in Group 1 reduces slightly from 33% to 30% for the financial year ended non-December 2007. Panel B of the table shows that the lack of disclosure reduces over time as the proportion of companies which fall into Group 1 (poor disclosure) decreases from 31% (for the financial year ended December 2006) to 19% (for the financial year ended December 2007). Perhaps, this reflects increased understanding of the standard.

Groups 2 and 3 comprise those companies who disclosed their reasons for reporting goodwill impairment in the Notes to the financial statement. For Group 2, the reasons disclosed coincide with their observed practice (market-to-book ratio). Table 3 (panel A) shows that of the 170 companies with financial year ended December 2006, 45% of the companies are classified into Group 2. The proportion remained similar (45%) for companies with financial year ended non-December 2007. The comparison of the frequency of companies in Group 2 over time shows that the proportion increases to 53% for the financial year ended December 2007, suggesting that the disclosure improves over time.

For Group 3, their disclosed reasons conflicted with the observed practice (market-to-book ratio). Table 3 (panel A) shows that for companies with financial year ended December 2006, 55% of the companies fall into Group 3. For companies with financial year ended non-December 2007, the percentage of companies that fall into Group 3 remained similar at 55%. The comparison of companies in Group 3 over a period of two years shows an improvement in the disclosure, in that, the number of companies in Group 3 reduces to 47% over the year.

Table 2. Breakdown of companies' disclosure of goodwill impairment into three different groups

Panel A: Analysis conducted across firms within one year of implementing FRS 3	Number of companies					
	December-2006			Non-December-2007		
	All	GWIL(IL)	GWIL(0)	All	GWIL(IL)	GWIL(0)
Reason for reporting goodwill impairment not disclosed (Group 1)	92 (33%)	17 (24%)	75 (36%)	68 (30%)	17 (33%)	51 (29%)
Reason for reporting goodwill impairment disclosed (Groups 2 & 3)	189 (67%)	53(76%)	136 (64%)	156 (70%)	34 (67%)	122 (71%)
Total	281 (100%)	70 (100%)	211 (100%)	224 (100%)	51 (100%)	173 (100%)
Panel B: Analysis conducted on a subset of firms over a period of two years implementing FRS 3						
Reason for reporting goodwill impairment not disclosed (Group 1)	78 (31%)	6 (12%)	72 (36%)	49(19%)	9(15%)	40(21%)
Reason for reporting goodwill impairment disclosed (Groups 2 & 3)	170 (69%)	43 (88%)	127(64%)	206(81%)	52(85%)	154(79%)
Total	248 (100%)	49 (100%)	199 (100%)	255 (100%)	61 (100%)	194 (100%)

GWIL(IL) denotes reporting goodwill impairment loss; GWIL(0) denotes reporting zero goodwill impairment.

In addition to the descriptive analysis, we conducted a non-parametric test to assess whether the three groups (Groups 1-3) differ with regard to their market-to-book ratio. A Kruskal-Wallis test shows that there is a statistically significant difference in the market-to-book ratio among the three groups with $\chi^2(2)$ of 85.337 and p-value of 0.000. Further, the mean rank for Group 1 is 366.26, for Group 2 is 464.80 and for Group 3 is 293.75. These statistically significant results indicate that the market-to-book ratio differ among the three groups, suggesting that companies take into consideration the declined in the market capitalization when providing the disclosure of goodwill impairment in the Notes to the financial statement.

In sum, assuming that the disclosed reasons reflect the true and fair view of the companies' goodwill reported on the balance sheet as they have been audited, the findings that nearly equal proportions of companies are classified into Groups 2 and 3 imply that the declined in the market capitalization below the book value of the net assets is not an ideal proxy for an indication that goodwill may be impaired. This is because for approximately half of the companies that disclosed their reasons (i.e. companies in Group 3), their market capitalizations do not fully reflect the condition of the CGUs containing goodwill disclosed in the Notes to the financial statements.

Table 3. Analysis of companies' disclosures in relation to the declined in the market capitalization for Groups 2 and 3

Panel A: Analysis conducted across firms within one year of implementing FRS 3	Number of companies					
	December-2006			Non-December-2007		
	All	GWIL(IL)	GWIL(0)	All	GWIL(IL)	GWIL(0)
No conflict between the market-to-book ratio & Notes to the financial statement (Group 2)	77 (45%)	28 (65%)	49 (39%)	93 (45%)	26 (50%)	67 (44%)
Conflict between the market-to-book ratio & Notes to the financial statement (Group 3)	93 (55%)	15 (35%)	78 (61%)	113 (55%)	26 (50%)	87 (56%)
Total	170 (100%)	43 (100%)	127 (100%)	206 (100%)	52 (100%)	154 (100%)
Panel B: Analysis conducted on a subset of firms over a period of two years implementing FRS 3	Number of companies					
	December-2006			December-2007		
	All	GWIL(IL)	GWIL(0)	All	GWIL(IL)	GWIL(0)
No conflict between the market-to-book ratio & Notes to the financial statement (Group 2)	84 (44%)	33 (62%)	51 (37%)	83 (53%)	21 (62%)	62 (51%)
Conflict between the market-to-book ratio & Notes to the financial statement (Group 3)	105 (56%)	20 (38%)	85 (63%)	73 (47%)	13 (38%)	60 (49%)
Total	189 (100%)	53 (100%)	136 (100%)	156 (100%)	34 (100%)	122 (100%)

GWIL(IL) denotes reporting goodwill impairment loss; GWIL(0) denotes reporting zero goodwill impairment.

4.2 Results of the Late Reporting of Goodwill Impairment Losses

The results from the first research objective show that there are three distinct disclosure groups: (i) Group 1, companies with poor disclosure, (ii) Group 2, companies where their disclosed reasons coincide with the observed practice, and (iii) Group 3, companies where their disclosed reasons conflicted with the observed practice. To address the second research objective, we selected 20 companies from Group 3, and imposed an additional criterion that these companies must have reported goodwill impairment losses during any of the financial year.

Table 3 shows that in total there are 59 companies that fulfilled these requirements (i.e. 20 companies with financial year ended December 2006, 26 companies with financial year ended non-December 2007, and 13 companies with financial year ended December 2007). Thus, the 20 companies selected represent one-third of all

of the companies which reported goodwill impairment losses and are classified into Group 3. These 20 companies comprise seven companies with financial year ended December 2006, seven companies with financial year ended non-December 2007, and six companies with financial year ended December 2007. These companies not only fall into Group 3 and have reported goodwill impairment losses but they also have annual reports available throughout the period of investigation. These criteria are imposed because in order to identify companies that delayed reporting the impairment losses, we have to trace the goodwill impairment losses back from the write-off year to the acquisition year (i.e. the year the goodwill was acquired).

Guided by the four key items, as presented in Figure 2, we found that of the 20 companies analyzed, four companies appear to delay reporting goodwill impairment losses. In this study, delayed in reporting goodwill impairment losses is said to occur when three conditions are met: the market-to-book ratio is less than one, the segment (CGU) to which goodwill is allocated experienced losses, and the company's financial performance is lower than that of the previous year. Yet in all the three conditions, managers do not report goodwill impairment losses immediately in the income statement. Of the four companies identified, two cases of companies (i.e. LRG1 Ltd, and LRG2 Ltd³) will be discussed in this paper. This is because each of these companies illustrates additional issues for companies that delayed reporting goodwill impairment losses. Tables 4 and 5 present the analyses of goodwill movement for the two companies.

Table 4 shows that LRG1 Ltd acquired goodwill in 2003 amounted to RM587 872 (see item 1b). In 2004, the company's financial performances declined with its net income available to common equity holders (pre-goodwill impairment loss) reduced to negative RM1 524 000 (see item 3c) and its basic EPS fell to negative 2.93 cents (see item 3d). Likewise, the market-to-book ratio is less than one (see item 4). In 2005, at the end of the third year of acquiring the goodwill, the declined in the company's financial performance and its market value affected the segment result containing goodwill (i.e. electrical and mechanical engineering) (see item 2).

From the analysis of goodwill movement from 2003 to 2007, presented in Table 4, it appears that managers of LRG1 Ltd waited until the company's performance was getting better than the previous year before reporting goodwill impairment losses. Thus, the impairment losses reported by LRG1 Ltd in 2006 and 2007 are considered as delayed in reporting goodwill impairment losses.

Table 4. Analysis of goodwill movement for LRG1 Ltd from 31 December 2003-2007

	Pre-FRS 3 (RM)			Post-FRS 3 (RM)	
	2003	2004	2005	2006	2007
1. Goodwill data					
(a) Opening goodwill balance	-	587 872	587 872	589 889 ⁴	393 950
(b) Additions	587 872	-	109 196	-	-
(c) Goodwill impairment	-	-	(109 196) ⁵	(195 939)	(393 950)
(d) Closing goodwill balance	587 872	587 872	587 872	393 950	-
2. Segment result					
Impaired goodwill is allocated to the Electrical & Mechanical engineering CGU	4 505 161	4 098 834	(16 222 151)	(14 152 837)	408 468
3. Financial performances					
(a) Operating income	5 620 000	(1 421 000)	(17 991 000)	(13 044 000)	(9 131 000)
(b) Profit/(loss) from ordinary activities pre-tax & pre-goodwill impairment loss	13 546 000	1 192 000	(38 393 000)	(19 596 000)	5 302 000
(c) Net income available to equity holders pre-goodwill impairment loss	11 220 000	(1 524 000)	(38 574 000)	(20 577 000)	4 013 000
(d) Basic EPS (cents)	70.12	(2.93)	(74.39)	(38.89)	5.01
4. Market-to-book ratio					
	2.05	0.80	0.81	2.28	2.17

LRG2 Ltd is the second case of a company that delayed reporting goodwill impairment loss. Table 5 shows that the company acquired goodwill amounting to RM40 876 000 in 2004 (see item1b). At the end of the year, the

segment to which the goodwill is allocated reported a negative result (see item 2). Likewise, the market-to-book ratio was less than one (see item 4). The poor financial performance of the CGUs containing goodwill and the company's market capitalization, which prolonged to 2006, also affected the overall performances of the company. In 2006, the net income available to equity holders (pre-goodwill impairment loss) was reduced to negative RM41 642 000 and the basic EPS dropped to negative 10.93 (see item 3d). Within 2005 to 2006, LRG2 Ltd was expected to report goodwill impairment losses, yet none were reported. In 2007, when the market-to-book ratio rose above one and its financial performance improved compared to the previous year, the company reported goodwill impairment loss amounted to RM13 000 000 000 (see item 1c). Again, in 2008, the same amount of goodwill impairment loss was reported.

Table 5. Analysis of goodwill movement for LRG2 Ltd from 31 December from 2003-2008

	Pre-FRS 3 (RM'000)			Post-FRS 3 (RM'000)		
	2003	2004	2005	2006	2007	2008
1. Goodwill data						
(a) Opening goodwill balance	400	402	40 876	40 876	40 876	27 876
(b) Additions	2	40 876	-	-	-	-
(c) Goodwill impairment	-	(402)	-	-	(13 000)	(13 000)
(d) Closing goodwill balance	402	40 876	40 876	40 876	27 876	14 876
2. Segment result						
Impaired goodwill is allocated to a						
Bio-healthcare CGU	-	(1 381)	(3 462)	(6 214)	(6 027)	(5 364)
3. Financial performance						
(a) Operating income	44 838	50 048	39 947	(5 411)	5 459	63 507
(b) Profit/(loss) from ordinary activities pre-tax & pre-goodwill impairment loss	22 242	40 963	25 155	(13 238)	1 841	47 597
(c) Net income available to equity holders pre-goodwill impairment loss	5 807	18 293	4 962	(41 642)	(19 422)	15 835
(d) Basic EPS (cents)	1.63	4.83	1.28	(10.93)	(8.39)	0.73
4. Market-to-book ratio						
	1.22	0.83	0.63	0.79	1.26	1.04

When LRG2 Ltd reported goodwill impairment losses in 2007 and 2008, the company disclosed in the Notes to the financial statement that the impairment losses were based on the assessment of future trends in the bio-healthcare industry (i.e. the CGU containing goodwill). If this is the case, the company should have reported goodwill impairment loss at least in 2006 as the CGU was not performing for the past three years (see item 2). Thus, LRG2 Ltd illustrates a company that delayed in reporting goodwill impairment losses. What is interesting for LRG2 Ltd is that in 2008, the company disclosed the sensitivity analysis stating that if the discount rates were to increase by 2% or the future planned revenues were to reduce by 2%, an additional goodwill impairment loss of RM14 876 000 would be recognized. It appears that the company planned to fully impair its goodwill in the next year (i.e. 2009) because by recognizing goodwill impairment loss amounted to RM14 876 000, the goodwill balance becomes nil (see item 1d). LRG2 Ltd is added as part of the discussion in this study as it demonstrates that the goodwill impairment losses reported were small and too late. On May 7, 2009, the company was de-listed by Bursa Malaysia stock exchange pursuant to Paragraph 8.15(6) of the Listing Requirements (compliance with the shareholding spread requirement due to take-over offer) (Bursa Malaysia, 2009). The case of delayed in reporting goodwill impairment losses for LRG2 Ltd has not captured the external auditor's attention, as in the audit report for 2007 and 2008, the auditors provided clean opinions regarding the company's goodwill.

These two companies (i.e. LRG1 Ltd and LRG2 Ltd) provided evidence of companies that delayed reporting goodwill impairment losses. Such delayed reflects the exercise of managerial discretion in terms of timing their reporting of the impairment losses. This finding is consistent with Hayn and Hughes (2006), who find that goodwill write-off of 1 276 acquisitions by US listed companies from 1988-1998, lag behind the economic impairment of goodwill. Hilton and O'Brien (2009) opine that one of the reasons for companies to inflate the asset values (by not reporting the impairment losses when they are due) is because of the desire to create an 'illusion of financial strength'. Perhaps, this is also what drives the two companies discussed above to delay in reporting their goodwill impairment losses.

5. Summary and Conclusion

The present study has addressed two research objectives. First, it has examined the appropriateness of the declined in the market capitalization below the book value of the net assets as a proxy for an indication that goodwill may be impaired. Using the findings from the first research objective, the study has explored cases of late reporting of goodwill impairment losses by Malaysian listed companies. Two primary findings are obtained. First, results show that as a stand-alone, the declined in the market capitalization below the book value of the net assets is not an ideal proxy for an indication that goodwill may be impaired. This is because it does not fully reflect the condition of the CGUs containing goodwill, disclosed in the Notes to the financial statement. Second, results also show that when the declined in the market capitalization is examined in relation to the financial performance of companies and their segment results, it becomes a useful starting point in identifying cases of late reporting of goodwill impairment losses by Malaysian listed companies.

The results of this study contribute to the literature on managerial discretion by showing that the market capitalization, which has been applied by studies that examined listed companies in developed markets, is a useful starting point in identifying cases of companies that delayed reporting their goodwill impairment losses in the emerging market of Malaysia. Our study also contribute to the literature by showing the degree of discretion managers have in determining the timing and amount of goodwill impairment losses reported after the implementation of FRS 3. To get a more comprehensive view of the cases of late reporting of goodwill impairment losses, future work could examines motives for the late reporting. Finally, this study provides important implications for policy makers and relevant authorities. To enhance the quality of financial reporting, the relevant authorities need to closely monitor the disclosure of goodwill impairment by listed companies in the emerging market of Malaysia.

Acknowledgements

We gratefully acknowledge the financial support from the RACE research grant via the Universiti Utara Malaysia.

References

- Abdul Majid, J. (2013). *Accounting choices relating to goodwill impairment: Evidence from Malaysia* (Unpublished PhD thesis). University of Glasgow, Scotland, United Kingdom.
- AbuGhazaleh, N. M., Al-Hares, O. M., & Roberts, C. (2011). Accounting discretion in goodwill impairments: UK evidence. *Journal of International Financial Management & Accounting*, 22(3), 165-204. <http://dx.doi.org/10.1111/j.1467-646X.2011.01049.x>
- Beatty, A., & Weber, J. (2006). Accounting discretion in fair value estimates: An examination of SFAS 142 goodwill impairments. *Journal of Accounting Research*, 44(2), 257-288. <http://dx.doi.org/10.1111/j.1475-679X.2006.00200.x>
- Bursa Malaysia. (2009). *Delisting of THG from the official list of Bursa Malaysia Securities Berhad*. Retrieved from <http://www.thgroup.com.my/News/070509.html>
- Comiskey, E. E., & Mulford, C. W. (2010). Goodwill, triggering events, and impairment accounting. *Managerial Finance*, 36(9), 746-767. <http://dx.doi.org/10.1108/03074351011064636>
- EFRAG. (2013). *Questionnaire on the subsequent measurement of goodwill. Feedback statement*. European Financial Reporting Advisory Group (EFRAG). Retrieved from http://www.efrag.org/files/EFRAG%20public%20letters/IFRS%203%20PIR/Feedback_statement_goodwill.pdf
- Ernst & Young. (2007). *IAS 36 Impairment testing: Practical issues*. Retrieved from <http://www.ey.com/BE/en/Issues/IFRS/IFRS>
- Ernst & Young. (2008). Impairment of fixed assets and goodwill. In *International GAAP 2008. Generally Accepted Accounting Practice under International Financial Reporting Standards* (pp. 1033-1108). United Kingdom: John Wiley & Sons Inc.
- Ernst & Young. (2011). Impairment of fixed assets and goodwill. In *International GAAP 2011. Generally Accepted Accounting Practice under International Financial Reporting Standards* (pp. 1075-1166). United Kingdom: John Wiley & Sons Inc.
- Fox III, R. G. (2008). *Remarks before the 2008 AICPA National Conference on current SEC and PCAOB developments*. Speech by SEC staff. Retrieved from <http://www.sec.gov/news/speech/2008/spch120808rgf.htm>

- FRC. (2008). *Review of goodwill impairment disclosures. October 2008*. Financial Reporting Council. Retrieved from <http://www.frc.org.uk/press/pub1744.html>.
- Hayn, C., & Hughes, P. J. (2006). Leading indicators of goodwill impairment. *Journal of Accounting, Auditing & Finance*, 21(3), 223-265.
- Hilton, A. S., & O'Brien, P. (2009). Inco Ltd.: Market value, fair value, and management discretion. *Journal of Accounting Research*, 47(1), 179-211. <http://dx.doi.org/10.1111/j.1475-679X.2008.00314.x>
- Hoogervorst, H. (2012). *The imprecise world of accounting*. Speech delivered at the International Association for Accounting Education & Research (IAAER) conference, Amsterdam, 20 June 2012. Retrieved from <http://www.ifrs.org/Alerts/Conference/Pages/HH-speech-Amsterdam-June-2012.aspx>.
- IASB. (2006a). IFRS 3 *Business Combinations*. In *International Financial Reporting Standards as at 1 January 2006* (pp. 273-394). International Accounting Standards Board (IASB), London: IASCF Publications Department.
- IASB. (2006b). *IAS 36 Impairment of Assets*. In *International Financial Reporting Standards as at 1 January 2006* (pp. 1449-1595). International Accounting Standards Board (IASB), London: IASCF Publications Department.
- Jacobs, S. C. (2008). *Current developments in the division of corporation finance*. National conference on current SEC and PCAOB developments. Retrieved from <http://www.sec.gov/news/speech/2008/spch120908wc-slides.pdf>
- KPMG. (2014). *Who cares about goodwill impairment? A collection of stakeholder views*. Retrieved from <http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/Who-cares-about-goodwill-impairment-O-201404.pdf>
- Lapointe-Antunes, P., Cormier, D., & Magnan, M. (2008). Equity recognition of mandatory accounting changes: The case of transitional goodwill impairment losses. *Canadian Journal of Administrative Sciences*, 25(1), 37-54. <http://dx.doi.org/10.1002/CJAS.41>
- Latham & Watkins. (2009). Declining market capitalizations and the impairment of goodwill. *Client Alert* 806, 1-5.
- Li, Z., Shroff, P., Venkataraman, R., & Zhang, I. (2011). Causes and consequences of goodwill impairment losses. *Review of Accounting Studies*, 16(4), 745-778. <http://dx.doi.org/10.1007/s11142-011-9167-2>
- MASB. (2006). *FRS 136 Impairment of Assets*. Reporting Foundation and Malaysian Accounting Standards Board (MASB). Kuala Lumpur.
- Morck, R., Yeung, B., & Yu, W. (2000). The information content of stock markets: why do emerging markets have synchronous stock price movements?. *Journal of Financial Economics*, 58, 215-260. [http://dx.doi.org/10.1016/S0304-405X\(00\)00071-4](http://dx.doi.org/10.1016/S0304-405X(00)00071-4)
- Murphy, M. (2012). SEC makes Barnes & Noble justify unimpaired goodwill. *The Wall Street Journal CFO report*.
- Pricewaterhouse Coopers. (2009). *TS insights. Market turmoil and goodwill implications - a study of the market response to goodwill impairment announcements*. Retrieved from http://www.pwc.com/en_US/us/transaction-services/assets/ts-insights-goodwill-impairments.pdf
- Ramanna, K., & Watts, R. L. (2012). Evidence on the use of unverifiable estimates in required goodwill impairment. *Review of Accounting Studies*, 17, 749-780. <http://dx.doi.org/10.1007/S11142-012-91885>
- Regions Financial Corporation. (2009). *Note 10. Intangible assets*. Retrieved from <http://www.sec.gov/Archives/edgar/data/1281761/000119312509121765/filename1.htm>

Notes

Note 1. Speech delivered at the International Association for Accounting Education & Research (IAAER) conference, Amsterdam, 20 June 2012 (Retrieved from <http://www.ifrs.org/Alerts/Conference/Pages/HH-speech-Amsterdam-June-2012.aspx>).

Note 2. The Malaysian Accounting Standard Board (MASB) has a convergence policy towards the international accounting standards issued by the IASB. Nonetheless, the implementation dates of these standards by MASB

differ from the IASB. As a result, IFRS 3 and IAS 36 issued by the IASB are renamed to FRS 3 and FRS 136, respectively by the MASB.

Note 3. In this paper, the name of the company is anonymized because of the critical comments made about it, which could be priced sensitive if quoted out of context of the study.

Note 4. The company has restated its opening goodwill balance in 2006 from RM587 872 to RM589 889 without any information on the difference of RM2 017 disclosed in the Notes to the financial statement.

Note 5. Goodwill impairment loss of RM109 196 is because of a subsidiary acquired, which led to the creation of new goodwill upon acquisition. Thus, the goodwill impairment loss is immediately upon acquisition.

Appendix A

An illustrative example of poor disclosure (Group 1)

Goodwill

	<u>Group</u> 2007 RM(millions)	<u>Group</u> 2006 RM(millions)
Balance at 1 January – at cost	26 349	26 349
Less: Accumulated impairment loss	(1 475)	-
Balance at 31 December	24 874	26 349

Goodwill arose from acquisition of an overseas subsidiary in previous year.

Appendix B

An illustrative example of disclosure wherein the market-to-book ratio reflected the stated reason for reporting goodwill impairment (Group 2)

Goodwill

	<u>Group</u> 2007 RM(millions)	<u>Group</u> 2006 RM(millions)
Balance at 1 January – at cost	26 349	26 349
Less: Accumulated impairment loss (note a)	(1 475)	-
Balance at 31 December	24 874	26 349

(a) Impairment tests for goodwill

The Group undertakes an annual test for impairment of its cash-generating units. Based on the impairment test, an impairment loss of RM1 475 million has been recorded in the Consolidated Income Statement for goodwill arising from acquisition of an overseas subsidiary. No impairment loss was required for the carrying amounts of the remaining goodwill assessed as at 31 December 2007 as their recoverable amounts were in excess of their carrying amounts.

Goodwill is allocated to the Group's cash-generating units identified according to the business segment and the country of operations. The following cash-generating units, being the lowest level of asset for which there are separately identifiable cash flows, have carrying amounts of goodwill that are considered significant in comparison with the Group's total goodwill.

	2007 RM (millions)	2006 RM (millions)
Cellular		
Malaysia	23 627	23 627
Indonesia	1 247	2 722
	24 874	26 349

Appendix C

An illustrative example of disclosure wherein the market-to-book ratio conflicted with the stated reason for reporting goodwill impairment (Group 3)

Goodwill

	<u>Group</u> 2007 RM(millions)	<u>Group</u> 2006 RM(millions)
Balance at 1 January – at cost	26 349	26 349
Less: Accumulated impairment loss	(1 475)	-
Balance at 31 December	24 874	26 349

Impairment testing for cash-generating units containing goodwill

For the purpose of impairment testing, goodwill is allocated to the Group's cash-generating units identified according to the business segment and the country of operations. The aggregate carrying amount of goodwill as at 31 December 2007 is RM24 874 millions, which is allocated to the cellular divisions in Malaysia and Indonesia.

These divisions' impairment test was based on its value-in-use. The value-in-use calculation applies a discounted cash flow model using the bio-healthcare division's pre-tax cash flow projections based on financial forecasts covering a five-year period. Cash flows beyond the five-year period are extrapolated using estimated growth rates.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

An Empirical Investigation of the Relationship between Economic Growth, Urbanization, Energy Consumption, and CO₂ Emission in GCC Countries: A Panel Data Analysis

Mohammad Asif¹, Raj Bahadur Sharma¹ & Anass Hamad Elneel Adow¹

¹ College of Business Administration, Prince Sattam bin Abdulaziz University, Al Kharj, Kingdom of Saudi Arabia

Correspondence: Mohammad Asif, College of Business Administration, Prince Sattam bin Abdulaziz University, Al-Kharj-11942, Kingdom of Saudi Arabia (KSA). E-mail: asifalig71@gmail.com

Received: April 27, 2015 Accepted: May 21, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p270

URL: <http://dx.doi.org/10.5539/ass.v11n21p270>

Abstract

The faster growing energy consumption and urbanization are supporting economic growth but are contributing in the environmental degradation. The existing empirical literature has been remained silent on this serious issue in case of GCC countries. The present study captures these rectangular relationships amongst these variables in the GCC countries by using panel unit root and cointegration tests for a period 1980-2011. The study finds the first difference stationarity and existence of cointegration among the concerned variables. Further, urbanization has the positive impact on CO₂, energy consumption and economic growth. Economic growth has a positive impact on CO₂ and has a negative impact on energy consumption. Energy consumption has a positive impact on CO₂ and CO₂ has a positive impact on energy consumption and economic growth. The causality tests also confirm the direction of relationships in the most of GCC countries in the country-specific analysis. The results of the study suggest the urban planning and clean energy consumption to avoid the pollutant emissions and to achieve sustainable development for GCC countries in the long run.

Keywords: carbon dioxide emission, energy consumption, economic growth, urbanization

1. Introduction

The Gulf Co-operation Council (GCC) (Note 1) countries are one of the world's most urbanized economic regions in the world. According to a Qatar National Bank (QNB) study, the GCC gross domestic product (GDP) is predicted to reach \$ 1.5 trillion in 2013, and on average its per capita income was as high as US \$19,800 in 2008 (Note 2). Consequently, the region has witnessed strong surge in urbanization process with the use of all modern amenities and modern life style enjoyed by its citizens. The average urbanization rate is more than 70% and countries like Kuwait and Qatar are 100% urbanized (UN Habitat, 2012). According to UN (Habitat, 2012), GCC countries are home of about 39 million population of which around 67% live in Saudi Arabia. The possible explanations of rapid growth of urbanization in GCC are internal migration and huge inflow of expatriate workers coming mainly from neighbouring and South Asian region. The high growth rate of population in some of the GCC countries like Saudi Arabia and Oman have also forced these economies to undertake prudent urban development measures to revive the infrastructure facilities in the existing cities. It is noteworthy that due to welfare oriented concentrated development in most of the GCC countries, it is expected that this region will be able to achieve The Arab Millennium Development Goals (MDGs). Despite these rosy economic scenarios, there is increasing concern that the high rate of consumption of energy is expected to aggravate the problem of environmental degradation in GCC. As the recent Figures of average energy consumption in GCC indicate that there is increasing trend in energy consumption and CO₂ emission. This realization has prompted us to probe the cumulative influence of population explosion, energy consumption, and urbanization on CO₂ emanation. Subsequently, the present study attempted to address the following significant questions as well First, how are urbanization, energy consumption and carbon emissions are interrelated? Second, how far emissions can be explained by factors like urbanization and economic growth? Third, assuming that urbanization and high energy consumption contribute to carbon emission, what policy measures could be recommended for these economies? So far many studies have examined the energy-growth relationship in case of GCC countries but there are very limited study that has examined the relationship amongst energy consumption urbanization and carbon emission

in the context of GCC. The incorporation of macroeconomic variables like economic growth, population growth and urbanisation help in finding out the relationship more robustly.

The study is structured along the following lines: Section 2 discusses the background of the study. A review of the literature follows in section 3. Section 4 enlists the objectives of the study. Section 5 deals with the mode of data collection, models and methodology. Section 6 analyzes the collected data to interpret findings. Section 7, the concluding section, offers suggestion for modifications and based on the conclusion drawn in section 6.

2. Stylized Facts of the GCC Countries

There is a positive relationship between energy consumption and CO₂ emanation in case of GCC. The distribution of energy consumption and carbon emission exhibit an interesting trend (See Figure 1). A careful study of Figure 1 reports that energy consumption and carbon emission increased by 12.36 % and 6.65% respectively from 2008 to 2011. Similarly, in CO₂ emission, UAE is the highest emitting country followed by Oman and Saudi Arabia during 1980-1985 (see Figure 3). If we look at Figure (2), it appears that the distribution of energy consumption has not been even across countries in GCC. Among six member countries of GCC, the highest energy consuming country appears to be UAE followed by Oman. Bahrain appears to be the only country which has relatively stabilized its energy consumption. Similarly, in CO₂ emission, UAE is the highest emitting country followed by Oman and Saudi Arabia. If we look at Figure (4), it appears that the distribution of energy consumption has not been even across countries in GCC. During 1980-1995, UAE was the biggest energy consumer followed by Oman and Saudi Arabia. While, during 1986-1990, the growth declined sharply in UAE and Saudi Arabia. Similarly, during 1991-1996, Kuwait was the largest consumer of energy followed by Qatar. But during 2008-2011, the growth in energy consumption has increased sharply in Oman, Saudi Arabia and UAE. While, Bahrain, Kuwait and Qatar have stabilized the growth in energy consumption. Overall it can be said that though there is increasing trend in growth rate of energy consumption among GCC consumption, it has stabilized over the year.

Analysing the average growth of carbon emission in the same dimension (see Figure 5), the results indicate that among GCC countries, during 1980-1985, UAE was the largest emitter of carbon followed by Oman and Saudi Arabia while lowest emitting countries were Kuwait and Qatar. But in 1986-1990, the trends seem to be different as there is sharp decline in carbon emission during this period. Saudi Arabia appears to be least emitting country followed by Kuwait and Bahrain. Among GCC countries, the largest emitter is Oman followed by UAE and Qatar. During 2008-2011, Oman and UAE exhibit the highest growth in carbon emission followed by Saudi Arabia. To sum up, the analysis of individual countries clearly demonstrate the healthy relationship between energy consumption and CO₂ emanation in GCC. After analyzing all the results, it appears that there is common trend of rising level of energy consumption and carbon emanation. The obvious factors that could explain such relationship could be the increase in the growth rates of population and rapid urbanization. As mentioned above, GCC economic region has one highest urbanized areas in the world. The average population growth rate in this region is fastest in the world. Looking at Figure (6), it can be seen that among GCC countries, the highest growth rate of population appears to be in Qatar followed by Kuwait, Saudi Arabia and UAE. Qatar observed the highest growth during 2005-2010 of around 10% followed by UAE more than 5% in 1995-2000. But it is projected that by 2030, the population growth trend of these countries will see the considerable decline since the low growth trend has already started.

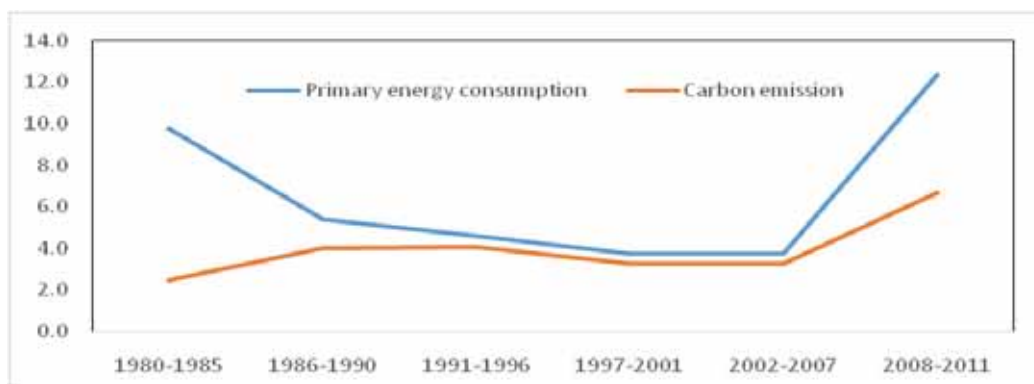


Figure 1. Average trend in energy consumption and carbon emission in GCC countries
Source: Energy Information Administration (EIA)

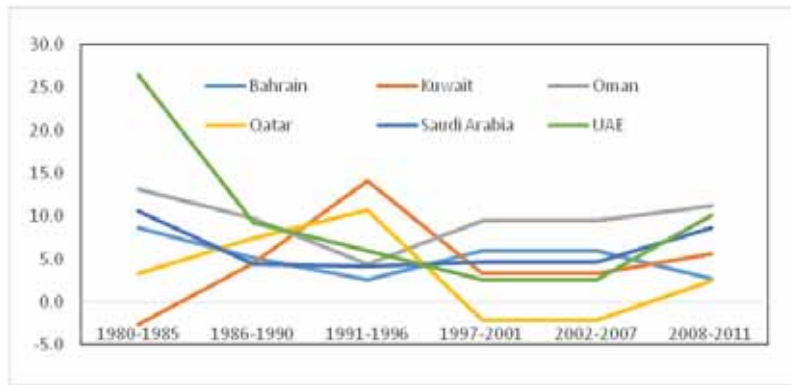


Figure 2. Average growth rates of energy consumption in GCC countries
Source: Energy Information Administration (EIA)

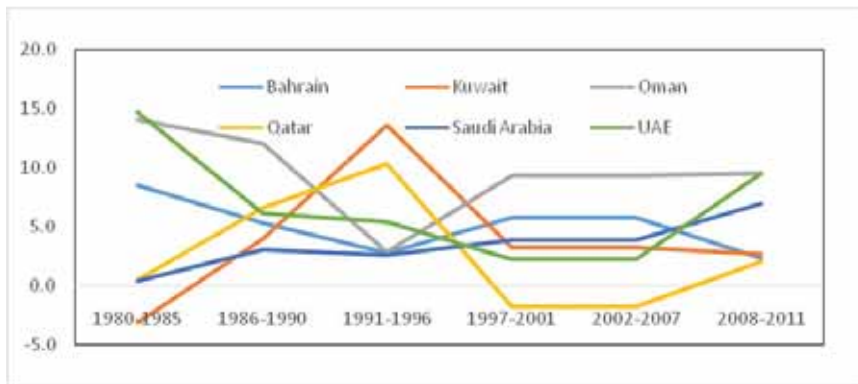


Figure 3. Average growth rates of carbon emission in GCC countries
Source: Energy Information Administration (EIA)

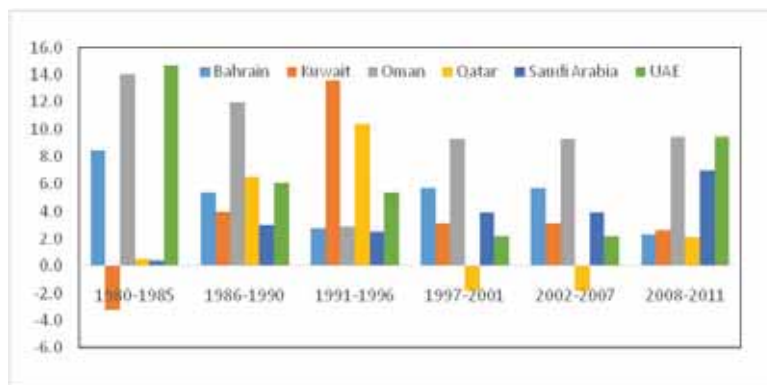


Figure 4. Average growth rate of energy consumption in individual countries of GCC
Source: Energy Information Administration (EIA)

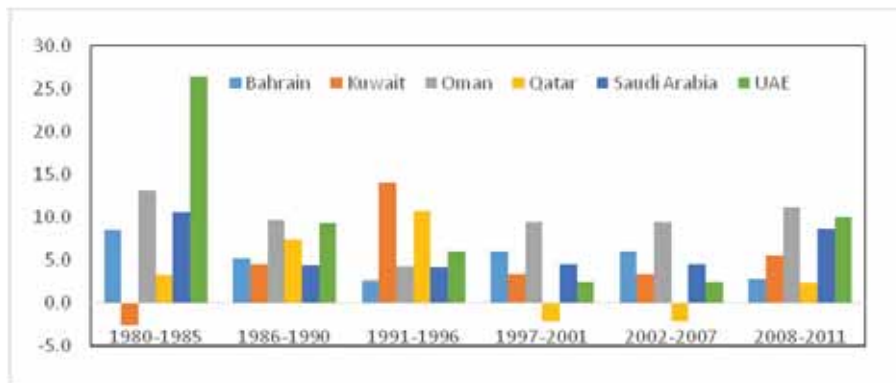


Figure 5. Average growth rate of carbon emission in individual countries of GCC
Source: Energy Information Administration (EIA)

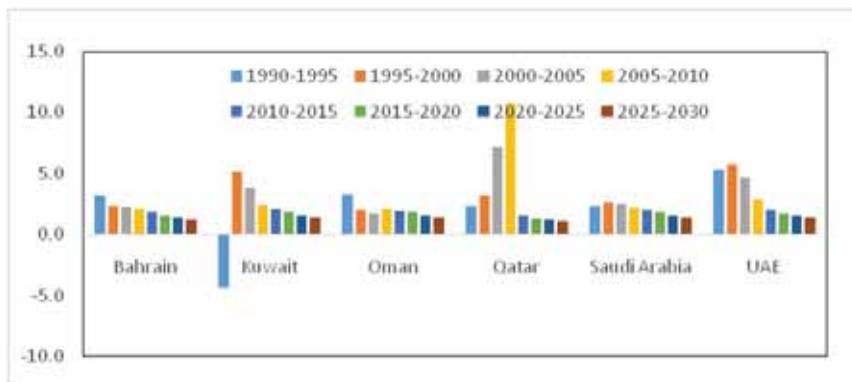


Figure 6. Growth rate of population in GCC countries
Source: State of Arab Cities 2012/2013, UN Habitat

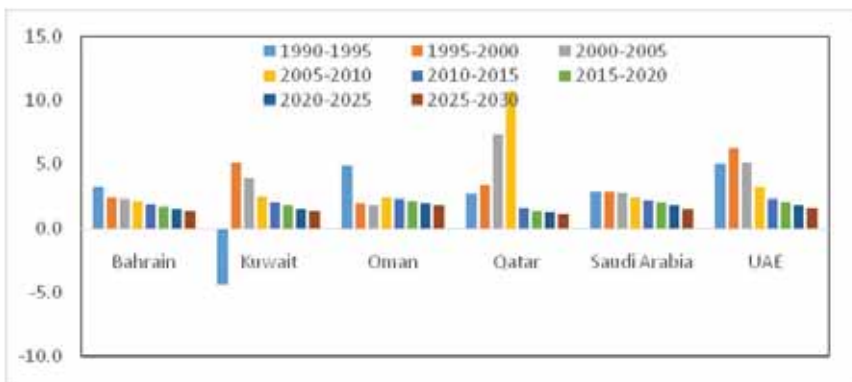


Figure 7. Growth rate of urbanization in GCC countries
Source: State of Arab Cities 2012/2013, UN Habitat

3. Review of Literature

In the literature, the examination of relationship between urbanization and environmental issues such as energy consumption and carbon emission has been one of the important topics of research with mixed empirical results. Some studies have shown that there is direct and positive relationship between urbanization and carbon emission because rapid urbanization augments the demand for energy consumption, generating more emissions (Jones, 1991; Parikh & Shukla, 1995; Cole & Neumayer, 2004; York, 2007). Nevertheless, some researchers argue affirm that urbanization reduces carbon emission significantly because it implies creation of new amenities and public goods such as public transport and better living standards. These developments lead to better use of energy and low rate of emission (Newman & Kenworthy, 1989; Liddle, 2004; Chen et al., 2008). Despite these agreements, some of the major studies in recent years are examining the relationship between urbanization, energy consumption and CO₂ emission are (Wei & Liu, 2007; Liu, 2009; Liu & Xie, 2009; Parshall, et al., 2010; Donglan et al., 2010; Poumanyong & Kaneko, 2010; Xiangyang & Guiqiu, 2011; Liu et al., 2011; Hossain, 2011; Li et al., 2012; Zhang & Lin, 2012; Shahbaz & Lean, 2012; Poumanyong et al., 2012; Al-mulali et al., 2012; Wang et al., 2013; Jones, 1991) empirically examined the effect of urbanization on Carbon emission for a large basket of developing economies. Based on its empirical results, the study reported that there is significant impact of urbanization in CO₂ emission. Parikh and Shukla (1995) in their studies have discussed the impact of development transition on energy used. Their focus is based on the highlighting the variation in energy requirements with the process of development in general and urbanization in particular. His period of study ranges between 1965-87 taking into account of developed and developing countries using the double logarithmic regression model based on ordinary least square estimate on the pooled time series and cross section data, they have established that urban population increases per capita fuel consumption and carbon emission. In case of large countries such as China and United States, the studies of (Donglan et al., 2010; Parshall et al., 2010; Li et al., 2012; Zhang & Lin, 2012; Wang et al., 2013) reported strong evidence of urbanization on energy consumption and subsequently on carbon emission. Zhang and Lin (2012) have highlighted the relationship between urbanization, energy consumption and CO₂ emission not only at national level but also at regional levels in china. The result shows that urbanization has increased energy consumption and CO₂ emission in China but

their effects varies across the regions. Khathlan Al Khalid et al. (2012) reported a positive relationship between carbon emission and economic growth in the long run in case of Saudi Arabia. They find that in the short run energy conservation policies and controlling carbon dioxide emissions are likely to have no adverse impact on economic growth in Saudi Arabia but highlighted that long run income leads to greater carbon dioxide emissions in the country. Their study has used multivariate model analysis techniques for investigation. Most studies in the literature have highlighted the role of urbanization in energy consumption and carbon emission. Very limited attention has been paid on examining these relationships in the context of Middle East and North African (MENA) countries and GCC countries.

In a recent attempt, study by (Al-Mulali et al., 2013) examined the relationship between urbanization, energy consumption and CO₂ emission in case of Middle East and North Africa (MENA) countries, covering the sample period of 1980-2009. Using dynamic panel data models and Vector Error Correction Model (VECM) based panel Granger causality, the study reported strong relationship among sample variables. Based on the empirical results, the study found strong evidence of impact of urbanization on energy consumption and subsequently on carbon emission. Based on its findings, the study suggested that the slowdown in urbanization process may help these economies to control upon carbon emission related pollution. To the best of our knowledge and similar to our objectives of this study, this is the only study that covers almost all the GCC countries. But this study fails to provide a deeper understanding about GCC countries carbon emission related issues. The study also uses the data up to 2009 and hence ignores many recent developments and policy measures to curb on carbon related pollution. The present study aims to fill these research gaps.

The findings of the present study are expected to add value to the existing literature in several ways: First, the outcome of this study provides contemporary overview about the impact of recent surge in economic activities and urbanization on the environment degradation of GCC countries. This is important because this will further guide the policy makers and concerned stakeholders to tackle the issue of climate change. Second, in the literature, very few studies have studied the role of energy consumption in driving economic growth for GCC countries. This study attempts to add value to the literature by examining this relationship especially at the time when economic growth of GCC economies are heavily dependent upon energy consumption. Most of the GCC economies are striving to reduce their oil-dependence and there is heavy investment made to diversify the economic activities with more focus on increasing the manufacturing base and adoption of import substitution policy. Third, after the Kyoto protocol, climate change has become one of the most debatable topics among academia, researchers and urban planners. Hence, understanding the various channels of CO₂ may help in curbing the emission of greenhouse gas. In this process, this study provides important policy direction by highlighting the inter-relationship between urbanization and CO₂ emission in GCC countries. Fourth, the study is particularly important for urban planners, because it may provide important policy guidance to either slow down the urbanization process or reduce the level of pollution by investing heavily in clean energy technology.

A close reappraisal of existing literature reveals that the literature on this subject is limited and little has been done to establish the relationship between urbanization, economic growth energy consumption, CO₂ emission for GCC countries. From policy perspective, this study is important as it promises to bring new insight by discovering the association between the energy consumption, CO₂ emission and urbanization and provides the answer to the question of whether urbanization is a vital cause of the energy consumption and CO₂ emission rise in the GCC countries. Globally, there is increasing concern regarding the adverse effect of climate change on the living things. Efforts are continuously made to undertake necessary policy measures to keep the healthy relationship between energy consumption and economic growth. There is still lack of unanimous debate on the sustainability of this relationship. In recent years, this issue has garnered the attention of researchers and policy makers due to the rapid urbanization process and higher economic growth found in case of emerging economies and Gulf region. Consequently, these economies have also witnessed enormous rise in CO₂ emissions.

Nevertheless, one has to investigate the impact of urbanization on energy consumption and carbon emission for different levels of economic growth and development as variation across levels are not clear. Therefore, it is imperative to undertake further studies with careful consideration of different development stages.

4. Objectives of the Study

In the light of above discussions and outcomes, the important objectives of this study are as follows:

- 1) To explore the association between energy consumption, economic growth, CO₂ emanation, and urbanization in the GCC countries.
- 2) To investigate whether urbanization is a major cause of the energy consumption and CO₂ emission increase in the GCC countries.

- 3) To provide an overview about the energy policy of GCC countries from regulatory perspective.
- 4) To provide policy suggestions on the need to reduce the CO₂ emission in case of GCC countries.

5. Data and Methodology

We have used the following economic indicators in order to fulfill the objectives of this study. Total primary energy consumption (in quadrillion Btu) with total carbon dioxide emission from the energy consumption measured in million metric tons have been retrieved from the Energy Information Administration. Gross Domestic Product (GDP) at constant 2005 US \$ is used to proxy the economic growth of GCC. For the urbanization level of GCC, total urban population (in millions of people) are sourced from the World Development Indicators (WDI), of World Bank. Only four countries of GCC namely Bahrain, Oman, Saudi Arabia and United Arab Emirate (UAE) are considered for our analysis according to data accessibility for the 1980-2011. All variables have been converted into the log form to avoid the problem of heterokedasticity.

5.1 Estimation Technique

It has been suggested through recent literature that panel unit root tests are more powerful than unit root based on single time series. Two types of panel unit root test: Levin, Lin and Chu (2002), Breitung (2000), Im, Pesaran and Shin (2003) and Fisher-ADF test based on Augmented Dicky Fuller test and Fillips Perontest have been used. As per the model specification, both LLC and Breitung test consider a general unit root process over the cross sections sample. For all these tests it is considered that there is unit root presence in case of null hypothesis while there is no unit root with the alternative hypothesis. Considering the empirical literature, we undertake the model as follows.

$$\begin{aligned}
 LEM_{it} &= \beta_0 + \beta_1URBAN_{it} + \beta_2GDP_{it} + \beta_3ENC_{it} + \mu_{it} \\
 LENC_{it} &= \beta_0 + \beta_1URBAN_{it} + \beta_2GDP_{it} + \beta_3EM_{it} + \mu_{it} \\
 LGDP_{it} &= \beta_0 + \beta_1URBAN_{it} + \beta_2ENC_{it} + \beta_3EM_{it} + \mu_{it}
 \end{aligned} \tag{1}$$

Where URBAN represent the urban population which has been used as an indicator of urbanization. EM is the CO₂ emission and ENC is energy consumption. GDP is GDP growth rate. t denotes time and i denotes the cross section (countries).

5.2 Panel Unit Root Tests

According to Cointegration technique irrespective of non- stationary time series, their linear combinations might be stationary. Therefore, before employing Panel cointegration techniques it is necessary to evaluate the stationarity of variables. The panel unit root tests have higher power than the unit root test based on the individual time series. Panel unit root test offers additional information through pooled cross-section time series to increase test power. Therefore, panel unit root tests are applied to assess the null hypothesis that the process is non- stationary against the alternative that the panel series is stationary. The panel unit tests of all variables are verified both in levels and in first differences in Table (1).

5.3 Panel Cointegration Test

When the variables are stationary at the first difference, the (Pedroni, 1999, 2001) heterogeneous panel cointegration test is used to probe long run relationship between economic growth, urbanization, energy consumption and CO₂ emission. The test permits for cross section mutual dependence with different individual effects. The model is projected as follows:

$$\begin{aligned}
 LEM_{it} &= \alpha_i + \delta_i t + \gamma_{1i}URBAN_{it} + \gamma_{2i}GDP_{it} + \gamma_{3i}ENC_{it} + \varepsilon_{it} \\
 LENC_{it} &= \alpha_i + \delta_i t + \gamma_{1i}URBAN_{it} + \gamma_{2i}GDP_{it} + \gamma_{3i}EM_{it} + \varepsilon_{it} \\
 LGDP_{it} &= \alpha_i + \delta_i t + \gamma_{1i}URBAN_{it} + \gamma_{2i}ENC_{it} + \gamma_{3i}EM_{it} + \varepsilon_{it}
 \end{aligned} \tag{2}$$

Where $i=1 \dots N$ for each country in the panel and $t=1 \dots T$ refers to the time period. The parameters α_i is the country specific intercept or fixed effects parameter which is allowed to vary across individual country and δ_i is deterministic time trend which are specific to individual countries to the panel. ε_{it} denotes the estimated residuals which represent deviations from the long-run relationship. All variables are expressed either in natural logarithms or percentage of GDP so that γ 's parameters of the model can be interpreted as elasticities. To test for the null hypothesis of no cointegration $\rho_i = 1$, the following unit root test is conducted to the residuals as follows:

$$\varepsilon_{it} = \rho_i \varepsilon_{it-1} + \omega_{it} \quad (3)$$

Pedroni (1999, 2001) puts forward two tests for cointegration. The panel tests are based on within dimension approach which comprise four statistics: panel v, panel ρ , panel PP and panel ADF statistics. They essentially integrate the autoregressive coefficients across different countries for the unit root tests on the estimated residuals. Secondly, they also considers common time factors and heterogeneity across countries. Moreover these tests are built on the between dimension approach which includes three statistics: group ρ , group PP and group ADF statistics. They include averages of the individual autoregressive coefficients associated with unit root tests of the residual of each country in the panel data set. The seven statistics for each panel data set reject the null hypothesis of no cointegration at the given level of significance. Following Pedroni (1999, 2001) the heterogeneous panel and heterogeneous group mean panel cointegration statistics for the multivariate panel regression are calculated as follows.

Panel v- statistic:

$$Z_v = \left(\sum_{i=1}^N \sum_{t=1}^T \widehat{L}_{11i}^{-2} \widehat{\varepsilon}_{it-1}^2 \right)^{-1}$$

Panel ρ -statistic:

$$Z_\rho = \left(\sum_{i=1}^N \sum_{t=1}^T \widehat{L}_{11i}^{-2} \widehat{\varepsilon}_{it-1}^2 \right)^{-1} \sum_{i=1}^N \sum_{t=1}^T \widehat{L}_{11i}^{-2} (\widehat{\varepsilon}_{it-1} \Delta \widehat{\varepsilon}_{it} - \widehat{\lambda}_i)$$

Panel PP-statistic:

$$Z_t = \left(\widehat{\sigma}^2 \sum_{i=1}^N \sum_{t=1}^T \widehat{L}_{11i}^{-2} \widehat{\varepsilon}_{it-1}^2 \right)^{-1/2} \sum_{i=1}^N \sum_{t=1}^T \widehat{L}_{11i}^{-2} (\widehat{\varepsilon}_{it-1} \Delta \widehat{\varepsilon}_{it} - \widehat{\lambda}_i)$$

Panel ADF-statistic:

$$Z_t^* = \left(\widehat{s}^{-2} \sum_{i=1}^N \sum_{t=1}^T \widehat{L}_{11i}^{-2} \widehat{\varepsilon}_{it-1}^{*2} \right)^{-1/2} \sum_{i=1}^N \sum_{t=1}^T \widehat{L}_{11i}^{-2} (\widehat{\varepsilon}_{it-1}^* \Delta \widehat{\varepsilon}_{it}^*)$$

Group ρ -statistic:

$$\bar{Z}_\rho = \sum_{i=1}^N \left(\sum_{t=1}^T \widehat{\varepsilon}_{it-1}^2 \right)^{-1} \sum_{t=1}^T (\widehat{\varepsilon}_{it-1} \Delta \widehat{\varepsilon}_{it} - \widehat{\lambda}_i)$$

Group PP-statistic:

$$\bar{Z}_t = \sum_{i=1}^N \left(\widehat{\sigma}^2 \sum_{t=1}^T \widehat{\varepsilon}_{it-1}^2 \right)^{-1/2} \sum_{t=1}^T (\widehat{\varepsilon}_{it-1} \Delta \widehat{\varepsilon}_{it} - \widehat{\lambda}_i)$$

Group ADF-statistic:

$$\bar{Z}_t^* = \sum_{i=1}^N \left(\sum_{t=1}^T \widehat{s}_i^{-2} \widehat{\varepsilon}_{it-1}^{*2} \right)^{-1/2} \sum_{t=1}^T (\widehat{\varepsilon}_{it-1}^* \Delta \widehat{\varepsilon}_{it}^*)$$

Where $\widehat{\varepsilon}_{it}$ is the estimated residual from Eq. (3) and L_{11i} is nuisance parameter corresponds to the number specific long-run conditional variance for the residuals. Similarly, $\widehat{\sigma}_i^2$ and \widehat{s}_i^2 (\widehat{s}_{it}^{*2}) are, respectively, long-run and contemporaneous variances for individual i . The other terms are also defined by (Pedroni, 1999) with appropriate lag length using Kernel estimator such as Newey- West method. The panel v-statistics is a one-sided test for which greater positive values reject the null of no cointegration. For the rest of the statistics divergence to

negativity is sufficiently high, which means that large negative values reject the null hypothesis. The critical values are also computed and tabulated by (Pedroni, 1999) using standard assumptions regarding the data.

5.4 Panel FMOLS and DOLS Estimates

Subsequently estimating the cointegration, the study estimated the long-run relationship among economic growth, urbanization, energy consumption and CO₂ emission by applying Fully Modified Least Square (FMOLS) and Dynamic Ordinary Least Square (DOLS) technique (see Pedroni1999, 2001; Kao & Chiang 2001). This is mainly because it is always a case that in case of panel data, the OLS estimator is biased and inconsistent especially when it is applied to co-integrated panel series. In this regard, the FMOLS method not only produces consistent estimates in small samples but also controls for the likely endogeneity of the regressors and auto correlation .Our models in general form are as follows as suggested in (Pedroni, 2001);

$$Y_{it} = \alpha_i + \beta_i X_{it} + u_{it} , i= 1, 2 \dots N, t= 1, 2, \dots, T, \tag{4}$$

Where Y_{it} is dependent variable and X_{it} independent variable. All variables are in natural log. The variables Y_{it} and X_{it} are cointegrated with slopes β_i , which may or may not be homogeneous across i .

$$Y_{it} = \alpha_i + \beta_i X_{it} + u_{it} + \sum_{k=-ki}^{ki} \tau_{ik} \Delta X_{it-k} + u_{it} , i= 1,2 \dots N, t= 1,2, \dots, T, \tag{5}$$

In case of strong relationship, null hypothesis be $H_0 : \beta_i = 1$ for all i . Let $\xi_{it} = (u_{it}, \Delta X_{it})$ be a stationary vector including the estimated residuals and difference

$$\Omega_{it} = \lim_{T \rightarrow \infty} E \left[T^{-1} \left(\sum_{t=1}^T \xi_{it} \right) \left(\sum_{t=1}^T \xi_{it} \right)' \right]$$

in X_{it} . Let be the long run covariance related to vector process which can be disintegrated into $\Omega_i = \Omega_i^* + \Gamma_i + \Gamma_i'$ where Ω_i^* is the contemporary covariance and Γ_i is a weighted sum of auto covariances. The panel FMOLS estimator for the co-efficient β is given as follows:

$$\hat{\beta}_{NT} = N^{-1} \sum_{i=1}^N \left(\sum_{t=1}^T (X_{it} - \bar{X}_i)^2 \right)^{-1} \left(\sum_{t=1}^T (X_{it} - \bar{X}_i) Y_{it}^* - T \hat{\tau} \right) \tag{6}$$

Where $Y_{it}^* = (Y_{it} - \bar{Y}_i) - \frac{\hat{L}_{21i}}{\hat{L}_{22i}} \Delta X_{it}$ and $\hat{\tau} = \hat{\Gamma}_{21i} + \hat{\Omega}_{21i}^0 - \frac{\hat{L}_{21i}}{\hat{L}_{22i}} (\hat{L}_{22i} + \hat{\Omega}_{22i}^0)$. The associated t -statistics follow

normal distribution.

We can also construct the group mean panel dynamic ordinary least square (DOLS) estimator as $\hat{\beta}_{GMD} =$

$$N^{-1} \sum_{i=1}^N \left[\sum_{t=1}^T Z_{it} Z_{it}' \right]^{-1} \left[\sum_{t=1}^T Z_{it} \tilde{Y}_{it} \right]$$

where Z_{it} is a $2(k+1) \times 1$ vector of regressors $Z_{it} = X_{it} - \bar{X}_i,$

$$\Delta X_{it-k} , \dots, \Delta X_{it+k} \text{ and } \tilde{Y}_{it} = Y_{it} - \bar{Y}_i .$$

5.5 Causality Analysis

After analyzing the long-run coefficients, we now establish the causal relationship among sample variables. For this, the study applies the panel Granger causality test of Dumitrescu and Hurlin (2012). Before applying this model, the study analyses the order of integration by applying panel unit root tests. As shown in Table (1), the results indicate that there is unit root at level and all the sample variables achieve stationarity at first difference. Dumitrescu and Hurlin (2012) proposed a panel causality test based on the individual Wald statistic of Granger non-causality averaged across the cross-section units. The testing procedure considers the heterogeneity of

causative relationships and the heterogeneity of the regression model used for testing Granger causality. The linear panel regression model followed by Dumitrescu and Hurlin (2012) is as follows:

$$\Delta EM_{i,t} = \phi_i + \sum_{i=1}^l \alpha_i^j \Delta EM_{i,t-i} + \sum_{i=1}^l \beta_i^j \Delta X_{i,t-i} + \varepsilon_{i,t} \tag{7}$$

$$\Delta ENC_{i,t} = \phi_i + \sum_{i=1}^l \alpha_i^j \Delta ENC_{i,t-i} + \sum_{i=1}^l \beta_i^j \Delta X_{i,t-i} + \varepsilon_{i,t} \tag{8}$$

$$\Delta GDP_{i,t} = \phi_i + \sum_{i=1}^l \alpha_i^j \Delta GDP_{i,t-i} + \sum_{i=1}^l \beta_i^j \Delta X_{i,t-i} + \varepsilon_{i,t} \tag{9}$$

Where ΔEM appears as first difference of carbon emission variable which is explained by first difference of explanatory variables (ΔX) as URBAN, ENC and GDP. Similarly in equations (8) and (9), the dependent variables are first difference of ENC and GDP with explanatory variables as URBAN, EM and interchange of ENC and GDP. According to Dumitrescu and Hurlin (2012) the construction of a model based on homogenous panel assumption does not provide adequate causal evidence between two variables if there is presence of any kind of heterogeneity across individuals in the data. Thus, in order to take this into account, the causality model proposed an average Wald statistics that has the null of no causal relation for any of the cross section units ($H_0: \beta_i = 0 (i = 1, \dots, N)$), against the alternative hypothesis that causal relationships occur for at least one sub-group of panel. ($H_1: \beta_i = 0 (i = 1, \dots, N_1); \beta_i \neq 0, (i = N_1+1, N_1+2, \dots, N)$). The rejection of null hypothesis with $N_1 = 0$ indicates that X Granger causes EM for all I in equation (7). While, rejection of the null hypothesis that $N_1 > 0$ suggests that causal relations vary from one individual sample to another. In this situation, the average of Wald statistics given by Dumitrescu and Hurlin (2012) assumes the following.

$$W_{N,T}^{HNC} = \frac{1}{N} \sum_{i=1}^N W_{i,T} \tag{10}$$

Where $W_{i,T}$ is the individual Wald statistics for the i th-cross section unit.

6. Empirical Results

In this section, the study discusses the empirical results for GCC countries. A precondition for applying the Pedroni panel cointegration test is to prove that variables contain a panel unit root. At first stage, the study applies three unit root tests viz., Im-Pesaran-Shin (IPS), ADF-Fisher and PP-Fisher tests. The results of unit root are shown in Table (1), the results overwhelmingly reject the present of unit root at first difference. However, all the variables achieve stationarity at their first differences. The results suggest that cointegration can be applied to examine the long-run relationship.

Table 1. Panel unit root test results

Variable	Im.Pesaran and Shin (IPS)		ADF - Fisher Chi-square		PP - Fisher Chi-square	
	Level	First difference	Level	First difference	Level	First difference
LEM	2.091	-5.444**	2.508	43.818**	4.871	79.581**
LENC	0.730	-6.167**	4.354	51.119**	12.557	120.93**
GDP	3.479	-4.613**	2.572	37.512**	9.097	43.276**
URBAN	2.804	-5.610**	1.167	46.811**	9.402	26.137**

Note: ** shows the level of significance at 5% level of significance.

6.1 Panel Cointegration Tests Results

After proving that all variables under study are stationary at first difference, we move to test whether there is a long- run relationship between the variables through the cointegration test.

Table 2. Panel cointegration test results

Test statistics	Model 1	Model 2	Model 3
Panel v-Statistic	-1.849 [0.967]	1.079 [0.140]	0.813 [0.208]
Panel rho-Statistic	-1.583 [0.056]**	-4.287 [0.000]**	0.668 [0.748]
Panel PP-Statistic	-6.707 [0.000]**	-9.018 [0.000]**	-1.340 [0.090]*
Panel ADF-Statistic	-2.903 [0.001]**	-9.252 [0.000]**	-1.612 [0.054]**
Group rho-Statistic	-0.804 [0.210]	-2.912 [0.001]	1.296 [0.903]
Group PP-Statistic	-8.944 [0.000]**	-9.475 [0.000]**	-1.307 [0.096]*
Group ADF-Statistic	-3.142 [0.000]**	-9.603 [0.000]**	-1.444 [0.074]*

Note: Values in parentheses are p-values. ** and * denote the level of significance at 5% and 10% and better, respectively.

Therefore, in order to establish the long-run relationship, the study applies the Pedroni cointegration test. As mentioned above, we have applied panel cointegration test on three models. The results of models (1, 2 & 3) in Table (2) suggest that the cointegration results vary among cointegration statistics. More specifically, five out of seven statistics reject the null of no cointegration in case of all models, implying that there is long-run relationship among the variables to be examined.

6.2 Fully Modified OLS (FMOLS) and Dynamic OLS (DOLS) Test Results

After examining the cointegration relationship, the study now analyses the results of long-run coefficients by applying FMOLS and DOLS on three different models. In the first model, the study estimates the long-run coefficients of CO₂ emissions (LEM in this case) with respect to LURBAN, LGDP and LENC (see Table 3). Analyzing the FMOLS results, it appears that all the variables like LURBAN, LGDP and LENC show direct and positive relationship with LEM. The results suggest that in case of GCC countries, there is positive and significant impact of LURBAN on LEM, as the FMOLS results reveal, a 1% increase in urbanization rate leads to 0.09% increase in energy emission. Similarly, a 1% increase in LGDP and LENC leads to about 0.16% and 0.72% increase in LEM, respectively. Accordingly, DOLS results demonstrate that LGDP and LENC have positive and statistically significant sign. LURBAN has negative and statistically significant sign. The results imply that in case of GCC countries, the prominent factors like LURBAN drives the LEM (Carbon emission), indicating an urgent need to undertake policy measures. As expected, the results of LGDP and LENC are not surprising as these variables reveal positive relationship with LEM. Analyzing these results individually, the results suggest that with the exception of Bahrain in GCC countries, Oman, Saudi Arabia and UAE exhibit direct and positive relationship between LURBAN and LEM. Considering the magnitude of coefficient of LURBAN, UAE appears have the highest magnitude followed by Saudi Arabia and Oman. The coefficients reveal that among four GCC countries, a 1% increase in urbanization leads to more than 0.20% increase in emission in case of UAE. Similarly, Saudi Arabia and Oman exhibit 0.09% and 0.07% increase in emission cause by 1% increase in urbanization in FMOLS model. In case of DOLS model coefficients of LURBAN, LGDP and LENC are statistically significant in sample countries except UAE. Only LENC is positive and significant in case of UAE. Notably, in FMOLS model, the coefficients of Urbanization (LURBAN) in case of Saudi Arabia, Bahrain and Oman are not statistically significant, implying that the Urbanization is not the significant and only factor of increase in emission. Analyzing the LGDP as a proxy of affluence and growth, the results reveal that in case of GDP augments the carbon emission in case of all sample GCC countries except UAE. A 1% increase in GDP leads to 0.05% increase in emission in Bahrain, 0.22% in Oman, 0.48% increase in Saudi Arabia and 0.09% decrease in UAE in FMOLS model. In DOLS model coefficients of GDP are significant and positive except in UAE. Seemingly, energy consumption also increases the emission in case of all GCC countries in FMOLS model as well as DOLS models except in Oman where it has negative relationship in DOLS. A 1% increase in energy consumption leads to 0.93% increase in carbon emission in case of Bahrain followed by 0.80% in Oman, 0.68% in UAE and 0.42% in Saudi Arabia, while 1% increase in energy consumption leads to a 0.87% increase in emission in Bahrain, 1.47% in Saudi Arabia and 0.67% in UAE but 1.47% decrease in Oman according to

DOLS. The results imply that in case of GCC countries, the highest carbon emitting factor is high energy consumption followed by GDP and Urbanization. Therefore, it can be concluded that urbanization alone should not be considered as the only factor for rise in carbon emission.

Considering the case of energy consumption in GCC, it appears that on the whole, urbanization does not significantly affect the energy consumption, though the result is insignificant in FMOLS model but statistically significant in DOLS model. There is negative and insignificant relationship between energy consumption and GDP in FMOLS but negative and statistically significant. However, energy consumption impacts significantly the increase in carbon emissions in FMOLS as well as DOLS model. Analyzing individually, it appears that among sample countries, urbanization significantly impacts the energy consumption in case of Oman, Saudi Arabia and UAE, while in case of Bahrain it is not significant according to FMOLS model. Notably, in case of Oman and UAE, a high rate of urbanization leads to reduction in energy consumption. Like for example, a 1% increase in urbanization leads to 0.27% and 0.17% decrease in energy consumption in case of UAE and Oman, respectively in FMOLS. This result is consistent except for UAE in DOLS model. The possible explanation in this regard could be because of energy efficient use of technology and design and development of energy saving urban infrastructure. However, the results of Urbanization in case of Saudi Arabia and Bahrain appears to be positive. A 1% increase in urbanization leads to 0.46% and about 0.02% increase energy consumption in Saudi Arabia and Bahrain, respectively in FMOLS. Results are not consistent in DOLS. Considering the energy-growth framework, it appears that there is positive relationship between energy consumption and economic growth in case Oman and UAE and negative relationship between energy consumption and economic growth in Bahrain and Saudi Arabia in FMOLS model. But these variables are negatively related in all countries in case of DOLS model. The results reveal that in case of Bahrain, Saudi Arabia, a 1% increase in GDP leads to about 0.036%, and 0.36% decrease in energy consumption, respectively but for Oman and UAE, 1% increase in GDP leads to about 0.10% and 0.12% increase in energy consumption respectively. These relationships are well established and are in line with large number of studies. Carbon emission exhibits the positive and significant impact in case of all sample GCC countries both in FMOLS and DOLS models.

Considering the third model in which economic growth (LGDP) is dependent variable, the FMOLS and DOLS model results suggest that the group statistics of GCC countries indicate positive and significant relationship between urbanization and economic growth. The results of FMOLS model reveal that a 1% increase in urbanization leads to 0.53% increase in GDP and 0.80% increase in GDP in DOLS model, which is quite attractive and concern policy suggestions. The magnitude appears to be true because most of sample GCC countries are highly urbanized. Particularly countries like UAE, Bahrain and Oman, urban amenities play significant role in driving the economy. Similarly, carbon emission exhibits positive and significant relationship between carbon emission and GDP in both the models. The results reveal that a 1% increase in carbon emission leads to 0.05% increase in economic growth in FMOLS model and 0.08% increase in economic growth in DOLS model. It may be noted that the result is complementary to the model 1 (in which carbon emission is considered as dependent variable) which suggested that 1% increase in GDP leads to about 0.17% increase in emission. The results imply that in case of GCC countries, there is bi-directional and positive relationship between carbon emission and economic growth.

Analyzing individually, the results in FMOLS suggest that there is positive impact of urbanization on economic growth in case of Bahrain, Oman and UAE. Whereas, Saudi Arabia exhibits negative relationship. Interpreting the coefficients individually, the results indicate that given the small size of economies like Bahrain, Oman and UAE, a 1% increase in urbanization leads to 0.72%, 0.41% and more than 1.24% increase in economic growth of Bahrain, Oman and UAE, respectively. In case of DOLS model there is positive impact of urbanization on economic growth in Bahrain and UAE and negative relationship in Oman and Saudi Arabia. This is not surprising because the economic prospect of most these three economies rely on the development of tourism and highly concentrated urban development. Especially in case of UAE, the result is not surprising as rapid pace of urbanization has yielded positively as far as economic growth is concerned. In case of Saudi Arabia, the result appears to be surprising as it indicates that there is inverse relationship between high urbanization and economic growth. The statistically insignificant result of FMOLS indicates that a 1% increase urbanization leads to 0.25% decrease in economic growth. The possible explanation could be because Saudi Arabia is the largest country by geography and its economy is mainly driven by booming oil sector and enormous domestic demand of good and services.

Analysing the variables such as energy consumption and economic growth, there is no statistically significant relationship between these variables. Analysing individual y, the result suggests that there is positive impact of energy consumption on economic growth in case of UAE where as in other countries, the relation is not

statistically significant as per FMOLS. But in case of DOLS model the result is different. Energy consumption has positive relationship with economic growth in Oman and UAE and but inverse for Bahrain and Saudi Arabia.

To summarize, the results suggest that in case of sample GCC countries, factors like urbanization and economic growth impact significantly the emission of Greenhouse gases.

6.3 Causality Results

The estimated results of causality are shown in Table (5) which indicates that in case of Bahrain there is one way causality moving from urbanization to carbon emission, implying that rapid growth in urbanization causes the carbon emission issue in case of Bahrain. While, in case of Oman it is quite opposite, emission appears to cause the urbanization, implying that high rate of growth of carbon emission may thwart the urbanization activities. However, in case of Saudi Arabia, feedback hypothesis appears to be applicable. As the results indicate the directional causality between carbon emission and urbanization. This means that there is need to tradeoff between urbanization and carbon emission. In case of UAE, it appears that there is no causal relationship between carbon emission and urbanization. This is surprising and it is in contrast with the results of FMOLS. Considering urbanization and energy consumption, it appears that out of four countries of GCC, there is only one way causality moving from energy consumption to urbanization in case of Oman and from urbanization to energy consumption in case of Saudi Arabia. While, UAE and Bahrain exhibit no relationship. This is again in contrast with the findings of FMOLS. Analyzing the causal relationship between energy consumption and GDP growth, the results indicate that among sample countries, Bahrain exhibits uni-directional causality moving from GDP growth to energy consumption, Oman exhibits bidirectional causal relationship, Saudi Arabia exhibits unidirectional moving from energy consumption to GDP growth and UAE shows the bilateral causal relationship. These results imply that there exists causal relationship between energy consumption and economic growth. Hence, it can be said that energy-growth framework is applicable in case of sample GCC countries. Lastly, we analyze the relationship between carbon emission and GDP growth, the results indicate that among GCC countries, it is the GDP growth that causes carbon emission in case of Bahrain and Oman. While, UAE exhibits unidirectional causal relationship moving from carbon emission to GDP growth, implying that in case of UAE, high carbon emission may cause its high economic growth trajectory. Surprisingly, Saudi Arabia exhibits no causal relationship between carbon emission and economic growth. The result appears to be in contrast with the findings of FMOLS.

Table 3. Panel long-run estimators

<i>LEM as Dependent variable</i>			<i>LENC as Dependent variable</i>			<i>LGDP as Dependent variable</i>		
	FMOLS	DOLS		FMOLS	DOLS		FMOLS	DOLS
BAHRAIN			BAHRAIN			BAHRAIN		
LURBAN	-0.017	-0.570**	LURBAN	0.029	0.613**	LURBAN	0.727**	1.685**
LGDP	0.051	0.457**	LGDP	-0.036	-0.432**	LENC	-0.782	-3.753**
LENC	0.934**	0.873**	LEM	1.034**	1.054**	LEM	1.307	3.631**
OMAN			OMAN			OMAN		
LURBAN	0.073	0.754**	LURBAN	-0.173*	-0.479**	LURBAN	0.418**	-0.432**
LGDP	0.228	4.087**	LGDP	0.109	-1.572**	LENC	0.190	0.186
LENC	0.808**	-1.778**	LEM	1.030**	2.183**	LEM	0.239	0.621
SAUDI ARABIA			SAUDI ARABIA			SAUDI ARABIA		
LURBAN	0.097	-1.127**	LURBAN	0.461**	0.479	LURBAN	-0.255	-0.122
LGDP	0.486**	0.257**	LGDP	-0.360**	-1.890**	LENC	-0.466	-1.052**
LENC	0.423**	1.479**	LEM	1.065**	2.389**	LEM	1.641**	2.110**
UAE			UAE			UAE		
LURBAN	0.206**	0.098	LURBAN	-0.271**	0.189**	LURBAN	1.244**	2.080**
LGDP	-0.093**	0.035	LGDP	0.122**	-0.261**	LENC	1.796**	3.716**
LENC	0.684**	0.679**	LEM	1.427**	1.202**	LEM	-2.975**	-6.022**
GROUP			GROUP			GROUP		
LURBAN	0.090**	-0.211**	LURBAN	0.012	0.201**	LURBAN	0.533**	0.803**
LGDP	0.168**	1.209**	LGDP	-0.041	-1.039**	LENC	0.185	-0.226**
LENC	0.712**	0.313**	LEM	1.139**	1.707**	LEM	0.053**	0.085**

Note: ** and * indicate the level of significance at 5% and 10% and better, respectively.

Pesaran's test of cross sectional independence = -1.140, Pr = 1.7456

To summarize, it can be said that in case of sample of GCC countries, there are two factors that are of major concerns i.e. urbanization and carbon emission and energy-growth relationship. These two frameworks need to be further investigated considering the increasing concern of climate change and economic development of this particular countries. Though the empirical exercise conducted in this study needs further investigation as the results of FMOLS and causality results differ from each other in some cases.

Table 4. Panel causality test results

		Cross section units			
Null hypothesis		Bahrain	Oman	Saudi Arabia	UAE
LEM	→ LURBAN	1.326	6.806**	7.764***	3.164
LURBAN	→ LEM	7.914***	2.294	10.284***	2.239
LENC	→ LURBAN	0.856	9.054***	1.919	2.063
LURBAN	→ LENC	5.039	3.797	6.499**	0.977
LENC	→ LGDP	0.152	3.248**	4.051***	7.449***
LGDP	→ LENC	6.125***	4.013***	2.329	2.521*
LEM	→ LGDP	0.011	0.451	0.013	4.295***
LGDP	→ LEM	9.717**	4.587**	0.426	0.087

Note: denote the null hypothesis of no causality between variables. ***, ** and * denote rejection of the null hypothesis at the 1%, 5% and 10% and better, respectively.

Table 5. Summary of causality results

		Cross section units			
Null hypothesis		Bahrain	Oman	Saudi Arabia	UAE
LEM	→ LURBAN	No	Yes	Yes	No
LURBAN	→ LEM	Yes	No	Yes	No
LENC	→ LURBAN	No	Yes	No	No
LURBAN	→ LENC	No	No	Yes	No
LENC	→ LGDP	No	Yes	Yes	Yes
LGDP	→ LENC	Yes	Yes	No	Yes
LEM	→ LGDP	No	No	No	Yes
LGDP	→ LEM	Yes	Yes	No	No

Note: denote the null hypothesis of no causality between variables.

7. Conclusion and Discussion

In this study we use the panel data of carbon emission, energy consumption, urbanization and economic growth of four GCC countries namely Bahrain, Oman, Saudi Arabia and UAE. This study finds a long-run relationship between energy consumption, carbon emission, urbanization and economic growth with varying degree for a panel data in GCC countries over the period 1980-2011. Urbanization, economic growth and energy consumption have a positive and statistically significant impact on carbon emissions for the group of countries. Since, the fact is that increase in urbanization and real economic growth requires more energy consumption leading to high generation of carbon emission and greenhouse effect. In case of GCC countries, the prominent factor like urbanization drive the carbon emission. There is urgent need of policy measures in this regard. From the further finding, it has been inferred that the highest carbon emitting factor is high energy consumptions followed by GDP growth and urbanization. In case of energy –growth framework, there is positive relationship between energy consumption and economic growth. This result corroborates the large number of studies. Similarly, there is positive and significant relationship between urbanization and economic growth, probably, most of GCC countries are highly urbanized. Further it has been found that there is bi-directional and positive

relationship between carbon emission and economic growth in case of GCC countries. If we see the causal relationship, Saudi Arabia has bidirectional relationship between carbon emission and urbanization. This bidirectional relationship is also found between economic growth and energy consumption in case of Oman.

The findings of this study will provide policymakers some understanding about the relationship between the carbon emission, energy consumption, urbanization and economic growth and designing of policies to tackle the environmental problems without creating hindrance for the growth of urbanization and economic growth. Further study is required to know the impact of different stages development on energy use and carbon emission.

Acknowledgment

This article is the part of the research project financed by the Prince Sattam bin Abdulaziz University, Al Kharj, Kingdom of Saudi Arabia. The researchers are thankful to the Scientific Research Deanship for financial support. All errors are, of course, our responsibility.

References

- Al-mulali, U., Che Sab, C., & Fereidouni, H. (2012). Exploring the bi-directional long run relationship between urbanization, energy consumption, and carbon dioxide emission. *Energy*, *46*, 156-167.
- Al-mulali, U., Fereidouni, H. G., Lee, J. Y., & Sab, C. N. (2013). Exploring the relationship between urbanization, energy consumption, and CO₂ emission in MENA countries. *Renewable and Sustainable Energy Reviews*, *23*, 107-112. <http://dx.doi.org/10.1016/j.energy.2012.08.043>
- Baltagi, B. (2005). *Econometric analysis of panel data*. England: John Wiley & Sons Ltd.
- Chen, H., Jia, B., & Lau, S. S. Y. (2008). *Sustainable urban form for Chinese compact cities: challenges of a rapid urbanized economy*. *Habitat Int.* *32*(1), 28-40. <http://dx.doi.org/10.1016/j.habitatint.2007.06.005>
- Cole, M. A., & Neumayer, E. (2004). *Examining the impact of demographic factors on Air Pollution, Population and Environment*, *26*, 5-21. <http://dx.doi.org/10.1023/B:POEN.0000039950.85422.eb>
- Donglan, Z., Dequn, Z., & Peng, Z. (2010). Driving forces of residential CO₂ emissions in urban and rural China: an index decomposition analysis. *Energy Policy*, *38*, 3377-3383. <http://dx.doi.org/10.1016/j.enpol.2010.02.011>
- Dumitrescu, E.-I., & Hurlin, C. (2012). Testing for Granger Non-Causality in Heterogeneous Panels. *Economic Modelling*, *29*, 1450-1460. <http://dx.doi.org/10.1016/j.econmod.2012.02.014>
- EIA. (2012). *International Energy Statistics*. Washington, USA: *International Energy Statistics*.
- Hossain, M. (2011). Panel estimation for CO₂ emissions, energy consumption, economic growth, trade openness and urbanization of newly industrialized countries. *Energy Policy*, *39*, 6991-6999. <http://dx.doi.org/10.1016/j.enpol.2011.07.042>
- Jones, D. W. (1991). How urbanization affects energy-use in developing countries. *Energy Policy*, *19*, 621-630. <http://dx.doi.org/10.1016/0301-4215%2891%2990094-5>
- Kao, C., & Chiange, M. H. (2001). On the estimation and inference of a cointegrated regression in panel data. In B. H. Baltage, T. B. Fomby, & R. C. Hill (Eds.), *Nonstationary Panel, Panel Cointegration, and Dynamic Panels* (Vol.15, in: *Advances in Econometrics*, pp. 179-222). Emerald Group Publishing Limited United Kingdom,
- Khalid, K. A., Alam, M. Q., & Javid, M. (2012). Carbon Dioxide Emission, Energy Consumption and Economic Growth in Saudi Arabia: A Multivariate Cointegration Analysis. *British Journal of Economics, Management & Trade*, *2*(4), 327-339. <http://dx.doi.org/10.9734/BJEMT/2012/1673>
- Li, Y., Zhou, Y., Shi, Y., & Zhu, X. (2012). Investigation of a coupling model of coordination between urbanization and the environment. *Journal of Environmental Management*, *98*, 127-133 <http://dx.doi.org/10.1016/j.jenvman.2011.12.025>
- Liddle, B. (2004). Demographic and per capita environmental impact: using panel regressions and household decompositions to examine population and transport popul. *Environ.*, *26*(1), 23-29.
- Liu, L., Wu, G., Wang, J., & Wei, Y. (2011). China's carbon emissions from urban and rural households during 1992-2007. *Journal of Cleaner Production*, *19*, 1754-1762. <http://dx.doi.org/10.1016/j.jclepro.2011.06.011>
- Liu, Y. (2009). Exploring the relationship between urbanization and energy consumption in China using ARDL (autoregressive distributed lag) and FDM factor. *Energy*, *34*, 1846-1854 <http://dx.doi.org/10.1016/j.energy.2009.07.029>

- Liu, Y., & Xie, Y. (2009). Asymmetric adjustment of the dynamic relationship between energy intensity and urbanization in China. *Energy Economics*, 36, 43-54 <http://dx.doi.org/10.1016/j.eneco.2012.12.003>
- Newman, P., & Kenworthy, J. (1989). *Cities and automobile dependence: a source book Aldershot*. Hants, England.
- Parikh, J., & Shukla, V. (1995). Urbanization, energy use and greenhouse effects in economic development. *Global Environmental Change*, 5, 87-103. <http://dx.doi.org/10.1016/0959-3780%2895%2900015-G>
- Parshall, Gurney, K., Hammer, S., Mendoza, D., Zhou, Y., & Geethakumar, S. (2010). Modeling energy consumption and CO2 emissions at the urban scale: methodological challenges and insights from the United States. *Energy Policy*, 38, 4765-4782. <http://dx.doi.org/10.1016/j.enpol.2009.07.006>
- Pedroni, P. (1999). Critical values for cointegration tests in heterogeneous panels with multiple regressors. *Oxford Bulletin of Economics and Statistics*, 61, 653-670. <http://dx.doi.org/10.1111/1468-0084.0610s1653>
- Pedroni, P. (2001). Purchasing power parity tests in Co-integrated panels. *Review of Economics and Statistics*, 83, 727-731.
- Poumanyong, P., & Kaneko, S. (2010). Does urbanization lead to less energy use and lower CO2 emissions? A cross-country analysis. *Ecological Economics*, 70, 434-444. <http://dx.doi.org/10.1016/j.ecolecon.2010.09.029>
- Poumanyong, P., Kaneko, S., & Dhakal, S. (2012). Impacts of urbanization on national transport and road energy use: evidence from low, middle and high income countries. *Energy Policy*, 46, 26-277. <http://dx.doi.org/10.1016/j.enpol.2012.03.059>
- Shahbaz, M., & Lean, H. (2012). Does financial development increase energy consumption? The role of industrialization and urbanization in Tunisia. *Energy Policy*, 40, 473-479. <http://dx.doi.org/10.1016/j.enpol.2011.10.050>
- UN-Habitat. (2012). *The States of Arab Cities, 2012* (2nd ed.).
- Wang, P., Wu, W., Zhu, B., & Wei, Y. (2013). Examining the impact factors of energy-related CO2 emissions using the STIRPAT model in Guangdong Province. *Applied Energy*, 106, 65-71. <http://dx.doi.org/10.1016/j.apenergy.2013.01.036>
- Wei, Y., & Liu, L. (2007). The impact of lifestyle on energy use and CO2 emission: an empirical analysis of China's residents. *Energy Policy*, 35, 247-257. <http://dx.doi.org/10.1016/j.enpol.2005.11.020>
- World Bank. (2008). *World Development Indicators*. Workbook, Washington D.C.
- Xiangyang, D., & Guiqiu, Y. (2011). China's greenhouse gas emissions' dynamic effects in the process of its urbanization: a perspective from shocks decomposition under long-term constraints. *Energy Procedia*, 5, 1660-1665. <http://dx.doi.org/10.1016/j.egypro.2011.03.283>
- York, R. (2007). Demographic trends and energy consumption in European Union Nations, 1960-2025. *Soc. Sci Res.*, 36(3), 855-872. <http://dx.doi.org/10.1016/j.ssresearch.2006.06.007>
- Zhang, C., & Lin, Y. (2012). Panel estimation for urbanization, energy consumption and CO2 emissions: a regional analysis in China. *Energy Policy*, 49, 488-498. <http://dx.doi.org/10.1016/j.enpol.2012.06.048>

Notes

Note 1. The GCC is comprised of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates.

Note 2. Occasional Paper Series, no-92, July 2008 European Central Bank.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Modern Tax System of the Republic of Kazakhstan

M. Arzayeva¹, A. Mustafina¹ & D. Sadykhanova¹

¹ al-Farabi Kazakh National Univeristy, Almaty, Kazakhstan

Correspondence: M. Arzayeva, al-Farabi Kazakh National Univeristy, Almaty, Kazakhstan. E-mail: info@kaznu.kz

Received: May 3, 2015 Accepted: June 10, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p285

URL: <http://dx.doi.org/10.5539/ass.v11n21p285>

Abstract

Globalization of the world economy, which is the process of internationalization and integration of all aspects of economic life, is increasing interdependence and interrelation of the various spheres of the world economy.

With globalization, there is a certain harmonization of tax systems and tax policies. There will be a unification of the tax systems of different countries, requiring coordination of key indicators and mechanisms of taxation of-tion, taxation of investment activity.

The Republic of Kazakhstan, having overcome all the difficulties of transition, began to implement industrial and innovation strategy aimed at diversifying the economy. One of the major trends in the implementation of these tasks is the dynamic economic development in accordance with the requirements of globalization.

Taxes are one of the important tools of government regulation, as the national economy and international integration processes. Under the new conditions the transformation of the tax system of Kazakhstan becoming objective. Therefore, the study of the current state of the tax system and the search for new evidence-based approaches to improve it is an objective necessity.

In the transition to market one of the main tasks of economic reforms carried out in Kazakhstan was the creation of a new type of tax relations between the state and the taxpayer, which is mainly provided through the tax system. Create tax system had virtually from scratch, in the absence of sufficient domestic experience.

This article deals with the historical background and economic entity, as well as the structure of the tax system of the Republic of Kazakhstan. The analysis and the evaluation of a modern tax system of Kazakhstan has been held. Based on the experience of economically developed foreign countries, highlights the impact of globalization on the tax system.

Keywords: taxes, tax system, the tax mechanism, harmonization of tax relations

1. Introduction

Tax is the main financial source of existence of any state. After all, the state should have the funds for the maintenance of its system, the expenses incurred in the course of their duties. State the same activity by its nature refers to management activities, during which the new value in the form of goods or services is not created. Specific work of civil servants, as well as the entire state apparatus, in general, does not create such a product (goods or services), which are the expression of the value of money. Because of this, the state is forced to search for them on the side. There are many methods of making money on the centralized state needs, but the main ones are the taxes. The concept of tax was formed for centuries. To date, in principle, everyone has at least a general idea of the tax and will be able to name a number of its characteristic features: commitment, gratuitous and irrevocable, money (property) nature, payment of taxes to the state income tax, and the need in the formation of the state budget. All these signs reveal only certain aspects of the concept of tax on certain of its parameters, its general essential characteristics.

Despite the long history of taxation, numerous developments on taxation, the question about the concept of "tax" remains controversial. To understand the essence of taxes are important works of English economists Adam Smith (1723-1790 gg.) And David Ricardo (1779-1823 gg.). Adam Smith (1935), whose views were formed the cornerstone of the foundation of tax systems of almost all modern states, said: "Taxes for whoever pays them - a sign of freedom, not slavery".

Modern Kazakh scientists V. D. Melnikov and V. D. Lee (2001) identified taxes as compulsory payments imposed by the state, levied in certain sizes and in a timely manner.

Tax Code of the Republic of Kazakhstan adopted on 12 June 2001, defines taxes as a statutory state unilaterally mandatory cash payments to the budget made in certain sizes, bearing irrevocable and gratuitous character.

2. Method

The purpose of the study is identification of provisions of tax policy, strengthening effect on improving the efficiency of the economy by improving and practical application of new methods of tax administration.

It is necessary to study the following objectives:

- to analyze the effectiveness of existing theoretical and methodological principles of the tax system and to justify the importance of fiscal policy as a factor of economic growth of economic entities formed with the criteria characterizing the social importance of tax policy;
- to develop measures of tax incentives aimed at boosting investment in the first place innovation activities of economic entities in the light of current trends in the development of tax policy as an important element of economic policy, based on domestic and taking into account international experience;
- to identify the main directions of state tax policies to help regions on the basis of the proposed harmonization of the areas of distribution mechanisms of government assistance to the regions;
- to identify ways of harmonization the process of reforming the tax policy pursued with the norms of various branches of law, to investigate the feasibility of constructing a system of pre-trial settlement of disputes, development of unified decision-making mechanisms;
- to develop measures to enhance the effectiveness of tax policy on the basis of mutual influence of fiscal policy on the functioning of the branches of the economy (for example, the taxation of natural resources) as one of the priorities of fiscal policy;
- to develop a methodology and to identify the components of the tax evaluation of the region's potential, the advantage of which is to reduce the data requirements for the measurement of the tax potential; justify the submission of theoretical and methodological concept of "tax administration", its methods and forms, as a basic tool of practical implementation of tax policy;
- to expand the understanding of the system elements forming this concept, identify problems and suggest promising directions of development of tax administration in Kazakhstan, including to develop recommendations for the use of this tool as a built-in mechanism to counter the advantages of subjects receiving non-competitive economy;
- to identify existing inconsistencies of current and strategic goals of fiscal policy in the field of tax administration, organize existing and develop new ways of using modern information technologies;
- to explore the essence of the concept of tax optimization and minimization in order to detect tax offenses;
- to develop ways of increasing the efficiency of tax control: the creation of a system of effective planning field tax audits and the selection of taxpayers to hold them;
- to develop methods and algorithms for building a system of pre-audit analysis; develop methods to counteract the artificial migration of taxpayers as a way of avoiding taxation.

The subject of research is the totality of economic relations between the subjects of taxation in the process of implementation of state tax policy, their evolution and the prospects for improvement.

The object of the research is determined activity of the state and the tax authorities in the planning, regulation and control in the process of tax revenues to budgets of all levels and state extra-budgetary funds. The object of the study was also in the activities of state bodies on the implementation and improvement of the tax control and the modernization of the tax authorities.

Theoretical and methodological basis of the research are the fundamental assumptions of economics, the dialectical method of cognition, a systematic approach to analyzing the economic situation, the works of the founders of the science of the above taxes and local scientists, as well as achievements of domestic and foreign theory and practice in the field of finance and taxes (Barrios, 2014).

The study is based on the methodology of scientific knowledge, systems analysis, and theory of taxation. Used methods are the scientific abstraction, generalization, comparison, analysis and synthesis, group, formalization, historical and logical analysis of the theoretical and practical material.

Information and empirical base of the study served as a legislative and regulatory, methodological, methodical and instructional materials; statistics tax, financial bodies and statistics; data from international, all-Kazakhstani, republican specialized periodicals; materials of international and all-Kazakhstani scientific and practical conferences, seminars and symposia; theoretical and practical materials contained in the works of Kazakhstan and foreign experts on taxation.

The scientific novelty of the thesis is to develop the scientific problem of the influence of tax policy on the efficiency and pace of economic development and the creation of conditions aimed at boosting investment and innovation activities of businesses, in order to solve social problems through the progressive development of theoretical, scientific and practical methods and tools for the optimal combination of tax and the mobilization of non-tax areas of government revenue.

The concept and proved the best mechanism for the effect of tax policy on economic and social development of the country by means of theoretical and methodological and practical solution to the problem of influence of tax policy on the security of the regions own resources, through the development of forecasting techniques and the use of tax potential of the region to increase tax revenues; by developing a system of incentives and regulation of the expanded reproduction of capital in the industry overflow example of branch management; by addressing the problem of the use of reserves of the existing system of tax administration in the area of tax control, particularly in terms of organizing and conducting the tax control.

3. Results

In summary, we can give the following definition of taxes. Tax - a compulsory payments imposed by law, imposed on businesses and individuals in a certain size, in certain terms in the state budget.

The essence of the taxes shown through its' functions:

Historically, the first is the fiscal function of taxes, providing the money is transferred to the state budget. Fiscal function of taxes is common to all states in all periods of its existence and development. With the help of public money funds are formed and created the material conditions for the implementation and functioning of the state.

The second function of taxes - regulatory - arises from the expansion of the state's economic activity. It targets the development of the national economy in accordance with the adopted programs. It uses a variety of forms of taxes, change their rates, methods of collection, benefits and discounts. These regulators affect the structure and proportions of social reproduction, the amount of savings and consumption.

The control function of taxes is to provide a certain objective possibilities for the implementation of state control over the formation of its financial base, impact on the reproductive process. The existence and effect of the control functions are laid objective conditions for the organization and conduct of fiscal control over all economic processes within the state.

The tax functions are modified together with the state and the role it seeks to play in the national economy, and also depend on the model of the economy. But in all circumstances, taxes are a source of the state's existence and way of financing its activities.

The economic essence of taxes is that they are a part of the production relations to withdraw a certain percentage of national income from businesses and the population, which is accumulated by the state to perform its functions and tasks.

The collection of all taxes imposed by the state, organizational forms and methods of their construction, the tax mechanism and tax authorities of a tax system.

There are different definitions, that scholars - economists give to the tax system in the economic literature.

In the financial and credit encyclopaedic dictionary, compiled under the editorship of Professor A.G. Gryaznova, the tax system provides the following definition: "the tax system - a set of tax forms and methods of their establishment, modification and cancellation, payment and application of measures for their payment, tax control, as well as the prosecution and the application of sanctions for violation of tax legislation (Gryaznova, 2004).

Here are the following elements of the tax system: a set of tax principles of the tax system, method of payment and methods of forming taxes, order changes and cancellations tax forms tax control.

The dictionary of banking and financial terms compiled by Kazakhstan authors, the tax system is defined as a combination of three factors: taxes, fees and charges; laws and by-laws and institutional infrastructure charges and taxes (Mamyrova, 1999).

Renowned scientist A.B. Zeynelgabdin provides the following definition to the tax system: "The tax system is a set of state financial relations with legal entities and individuals, taxes and fees, forms, methods and means of taxation, legal acts on the latter, and a set of controls and tax services, to govern the financial relationship" (Zeynelgabdin, 1995).

In our opinion, all statements are correct, however, from the standpoint of the substance and content of taxes we think, the position of A. B. Zeynelgabdina increasingly characterizes the economic content of the tax system. The tax system is a complex structure consisting of several components. First of all, a set of financial relations arising between the state and taxpayers about the formation of a centralized state income, i.e. taxes.

Another component of the tax system - tax mechanism, ie. E. A set of methods and techniques of taxation, as well as regulatory and legislative acts; The next important element of the tax system: a set of controls and tax services.

Each of the constituent elements of the tax system in some way affects the efficiency of the tax system, they must be considered as a whole and in the interaction.

A comprehensive study of all the elements of the tax system in the Republic of Kazakhstan in modern conditions, no doubt, allows to evaluate the country's fiscal system, identify its shortcomings, to make recommendations to improve the taxation mechanism contributing to create a competitive tax system.

Laws of formation of the tax system determine the basic principles and rules for the functioning of economic relations, the observance of which makes it possible to use existing economic potential of society and neutralize the possible negative effects of taxation. Incorrectly formulated principles of taxation distorts the causal relationships, lead to the concentration of the elements of subjectivity in the taxation system and the instability of the entire socio-economic system. In this connection, the formulation and implementation of the principles of taxation must be in accordance with the laws of a tax policy that provides a robust tax systems at different levels in a little predictable changes in the market economy. Taxation system, built in accordance with the principles that reflect the objective requirements of linking the formation of the tax system with qualitative and quantitative parameters of general economic development, will reduce or neutralize the negative effects of the current system of taxation. Creating a system of taxation is also based on internal conditions, particularly the development and economic interests of each country, that is, take into account specific features.

In countries experiencing the bourgeois revolution at the end of the XVIII century, went into practice the principles of universality of taxes, their proportionality.

The progressive development of the theory of tax at the time was associated with the formation of the classical school of finance, which was based on classical political economy. The most significant work in the field of taxation in this period was known book of Adam Smith, "The Wealth of Nations" (1776). In it, the author wrote: "The citizens of the state should, if possible, and accordingly their ability to be involved in the content of the government, ie, respectively, income, how they enjoy under the protection of the state. Tax, which is obligated to pay every single person should be precisely defined, and not arbitrary. Term of payment, method of payment, the payment amount - all this must be clearly and definitely for the payer and for every person. Where it does not, every person liable to this tax is given to a greater or lesser extent, in the power of tax collectors, which can burden the tax for every failed him payer.

The exact definition of what each individual person must pay taxes on the issue of taxation is a matter of such importance that a considerable degree of irregularity, as, according to scientists, it is clear from the experience of all peoples is much lesser evil than a very small degree of uncertainty . Every tax ought to be levied at the time and in the manner, when and how the payer should be most convenient to pay it. Every tax ought to be so conceived and designed so that it took and kept out of the pockets of the people as little as possible over and above what it brings to the state budget. "The tax may take or keep out of the pockets of the people much more than what he brings to the state treasury in the following ways: firstly, its collection may require a larger number of officials whose salaries are able to absorb most of the amount that brings the tax, and extortion which may be chargeable to the people of an additional tax. Second, it can interfere with the position of the labor population and let him deal with those fisheries that provide livelihood and work of many people. Obliging people to pay, it can thereby reduce or even destroy the funds that would enable them to these payments with greater ease. Third, confiscation and other penalties faced by poor people who try to evade taxes, it is often ruining them and thus destroys the benefits that society could gain from the application of their capital. Unreasonable tax creates a great temptation to smuggling and penalties for smuggling should be strengthened in accordance with the temptation. Contrary to all the usual principles of justice law first creates the temptation, and then punishes those who yield to it and that it increases the punishment accordingly to the very circumstance which, of course, would

be to soften it - namely, respectively, the temptation to commit a crime. The apparent validity and usefulness of these provisions drew the attention of more or less all the nations" (Smith, 1935).

So, from the above quotation we can derive four basic principles of Adam Smith, not outdated and to our time:

1. The principle of justice, claiming universality and uniformity of taxation tax between citizens in proportion to their income. The principle of equity in taxation is considered in 2 ways:

- a) the achievement of "horizontal equity" - income nalo-payers should be taxed uniformly on equal terms;
- b) compliance with the "vertical equity" - taxation of income should be done with the use of differential rates on a progressive scale for the redistribution of the income;

2. The principle of certainty, which requires that the sum, method and time of payment were exactly known in advance to the payer;

3. Principle convenient to assume that the tax should be levied at such time and in such a way that pose the greatest convenience to the payer;

4. The principle of economy (the principle of cheapness), is to reduce the costs of collecting the tax, in the rationalization of the tax system.

Down at the time the tax system was slightly streamlined tax-paying unit and characterized by almost no data to determine the financial situation of the various categories of taxpayers, which determines a very primitive methods of taxation.

Principles formulated by A. Smith, with universal, universal, refined and developed by D. Ricardo, A. Wagner, N. Turgenyev, A. Sokolov, M. Alexeenko, P. Samuelson, B. Tverdokhlebov, T. Yutkina.

After studying the existing views of scientists on the principles of the tax system, we propose the following set of tax rules which should be taken into account in the national tax system: the classical principles (equity, uniformity, convenience, low cost); economic and functional principles, which include stable-ness, stability, ban retroactive tax laws; the pursuit of universal taxation; enter only the redistribution of income tax forms; one-shot collection of taxes; neutrality, transparency, discrete tax (object rates); equal to the voltage of the tax burden for all subjects of taxation; the unity of the tax system. The basis of the modern tax system in the Republic of Kazakhstan on the following principles:

1. The principle of compulsory taxation

The taxpayer is obliged to execute arising before the state tax liabilities in accordance with the assessive legislation in full and on time.

2. The principle of certainty of taxation

Taxes and other obligatory payments to the budget of the Republic of Kazakhstan should be defined. Certainty is the possibility of establishing tax in the tax laws of reason and order of appearance, performance and termination of tax liability of the taxpayer.

3. The principle of fair taxation

Taxation in the Republic of Kazakhstan is universal. Tax benefits of individual character are prohibited.

4. The principle of transparency of tax laws

Normative legal acts regulating the issues of taxation, must be published in the official publications.

In establishing the tax to the state face a number of questions which can not be done without taxation. These are the questions: Who will be the taxpayer? For what? In connection with what? What is a person to pay tax? In what time frame should pay taxes? And so on.

Reform of the tax and fiscal system of Kazakhstan on the eve of the XXI century has highlighted the need to further develop theoretical research in the field of taxation and taxation. History of the tax system of the USSR, especially in the period of the New Economic Policy (NEP), once again shows us that new - it is well forgotten old. Creating and reforming domestic tax system in a market economy requires a careful study of the experience of financial reforms in the late XIX century and early XX century, which allows us to efficiently and effectively use the experience of developed foreign countries in taxation.

Creating a tax system based on new principles - the process is extremely complex, multi-step, calculated over a long period. One of the problems in the tax system of modern Kazakhstan, in our opinion, is the lack of serious theoretical basis of taxation. In the socialist era, the problem is actually seriously no one did. This had its reasons.

Under the rule of socialist property and planned economy, when it was established goal - the creation of the world society without a single tax, tax relationship developed, and there was no need for the study of taxes and taxation.

The tax system is complex, multi-faceted system consisting of several independent components, which in turn are closely linked, which aim to balance the interests of the state and taxpayers. Nature, structure and role of the tax system is determined by the socio - economic structure of society. Organization and objectives of the tax system are determined by the state, taking into account the achieved level of development of the productive forces and production relations.

In the construction of the tax system has a range of special significance taxes, management techniques, i.e., specific tax mechanism. The tax system should be free from the few effective tax collection which is more expensive, much higher than the amount of tax revenue. Kazakhstan's tax system has negative results of such minor taxes and fees were operational in 1992-1995.

The main problem of creating an efficient tax system has always been considered the choice of sources of taxation and tax rates which depend on the establishment of a real tax regime. In this case, it should be noted that any tax should bear the burden of regulating and stimulating inherent tax as an economic category. To the tax system to function realistically, with a certain effect, considerable importance is the establishment of an appropriate tax mechanism.

Radical changes in the economy of Kazakhstan took place the last twenty years, and raised the tax system of Kazakhstan. The tax system of the Republic of Kazakhstan got its start in 1992, its development has gone through several stages, change it seriously: the tax legislation enshrines the principle of taxation, a mechanism of taxation, a system of tax administration, tax worked out the relationship between the state and taxpayers. All this led to the creation of the tax system of the country on a completely new basis, and close to the international standards.

Globalization of the world economy is a process of internationalization and integration of all aspects of economic life, comprehensive interdependence and interrelation of various spheres of the world economy. As a result, the global economy will gradually become a single market of production factors.

Economic globalization creates additional problems in conducting financial and tax policy.

With globalization, there is a certain harmonization of tax systems and tax policies, will unify the tax systems of different countries, requiring coordination of key indicators and mechanisms of tax systems, tax law in different countries, the problems of double taxation, taxation of investment activity.

Economic integration within the European Union demonstrates that taxes under state regulation began to play a qualitatively new role, ie, have appeared outside the tax function. A new feature of the tax can be characterized as an integration function, aimed at regulating foreign trade and foreign trade operations. Taxes are one of the tools for creating a common economic space of the associated regional economic and political interests.

In this respect the policies of developed countries can not be an example for Kazakhstan. It is common knowledge that these countries are exporters of capital and technology, it is beneficial global openness of national markets, they are in favor of preferential taxation of its citizens and capital operating in other countries, and are not afraid to use it at higher rates as part of their tax systems (which are compensated comfortable living conditions and high levels of social benefits for the citizens of these countries).

4. Conclusion

The practice of tax law and the theoretical conclusions obtained in the study allow us to conclude that, in spite of its positive role in the development of the tax process (Weber, 2014).

Kazakhstan Tax Code does not fully take into account all the realities and peculiarities of the current conditions of economic performance, the legal environment of society.

An important conclusion is that the understanding of the tax authorities as exclusively fiscal authorities does not correspond to modern realities. The challenges facing the tax authorities of the Republic of Kazakhstan are not only monitoring, but first and foremost to ensure the receipt of current payments. Posing the question in this way allows us to formulate objectives of the state tax authorities, monitor their performance, and analyze the results. Solutions to these problems have been developed in the consideration set of problems related to the implementation of tax administration.

As noted earlier, the successful resolution of a number of problems raised would not be possible without addressing the theoretical and practical aspects of issues related to tax administration.

To solve this problem, you must go beyond the understanding of the tax administration only as a system of organizational measures. It is advisable to consider the system (Lang, 2014) of tax administration as a system of government over the complex tax relations.

In this regard, persuasively argues that tax administration - is the most severe social sphere, and therefore weaknesses in the functioning of its negative impact on society as a whole, going beyond just tax relations.

The conditions of the tax administration: the legislative and regulatory framework (Gorazda, 2014), organizational, methodological and logistical framework, grounded influence of the conditions for the control of receipt of payments in the budget for the efficiency of tax administration.

It is displayed imperfection of the organizational structure of tax control subjects, methodological flaws in the software, the low level of development of information and automation.

The current practice summarizes of cooperation of tax authorities with the government, law enforcement agencies and banks in the area of tax control in order to improve its effectiveness.

As one of the most important ways to improve the organization of the tax administration considered to ensure the quality and efficiency of tax control through standardization work. The paper provides concrete developments in this field, formulated clear goals and objectives of the tax administration, presented the process of the administration of its components. The emphasis, in my opinion, should be done with modern control system of tax relations. Without fail, the system should have a clear feedback for a speedy response to changing operating conditions.

Despite significant progress, which reached as the tax authorities for the collection of funds in the budget and improve the monitoring and collection of taxes, the level of these achievements is still insufficient. That is why today at the forefront of the organization of the tax, which includes a set of goals and objectives, ranging from automation and computerization of the tax inspector to test new methods of control and work with taxpayers.

On the level of the tax administration are affected by numerous factors, objective and subjective. The study identified the causes that have a negative impact on the efficiency of tax administration and complicating the work of his subjects in modern conditions.

The solution of the problem is in estimating the parameters of the tax system by examining indicators of the tax burden and to identify the tax potential of the regional economy.

In a broad sense "tax capacity" - is the aggregate amount of taxable resources of the territory. In a narrow, practical, the sense of "tax capacity" is the maximum amount of taxes and levies, calculated in terms of the current legislation.

The magnitude of the tax potential of the area is influenced by many factors - both objective and subjective. The former include the current tax legislation, the level of economic development of the region, its branch structure, the level and dynamics of current prices, volume and structure of exports and imports, etc.

Subjective (Hemmelgarn, 2014) include the regional state tax policy, the number of privileges, postponements, and others.

Accurate assessment of tax capacity to be applied by the authorities in drafting the budgets of various levels in the coming period, and can play an important role in improving the planning of budget revenues.

The analysis of conceptual and methodological approaches to the determination of the tax potential of regions creates prerequisites for the synthesis of their most rational elements, determining the functional dependencies between selected macroeconomic indicators and the status of the tax base and to develop on this basis the corresponding algorithms for objective evaluation of the tax potential in the sectors of the economy and regions of the country. Thus, it will create a reliable base for the growth of tax revenues and improve collection of tax payments and increased efficiency of the system of fiscal planning and forecasting (Cannas, 2014).

Determination of tax potential of the territory to a large extent can help to create a sustainable regulatory framework of the planned regional services on taxes and fees, in turn, provides them with ample opportunity to objectification and streamline the process of obtaining the most suitable for the socio-economic development of the region's tax revenue, increasing incentives taxpayers.

It should be noted that each of the above areas to increase the tax base includes a whole range of problems, deciding who can achieve expansion of tax potential of the region and improve the efficiency of its use

The solution to this problem is possible only in the process of reforming the tax system. Moreover, the analysis carried out in two areas: scientific-theoretical and economic value of the options for reform, and the feasibility of

the reforms, the possible outcomes and consequences, both for the subjects of economic life, and for the state as a whole (from the political, social and economic points of view).

In the analysis of the first direction is given classification and grouping of existing reform options, which in itself makes them more understandable and accessible, and the second direction are the practical observations and assessed the possible effects of their (reform options) implementation.

The analysis shows that most of the options to reform the tax system in Kazakhstan is not enough to take into account the conditions in which is the economy of our country, its political system. Also, do not sufficiently developed market institutions and developed the ideology of reform, which is also important. Offered by both domestic and foreign scholars and practitioner's reform projects often solve only a narrow set of issues and problems, sometimes based on narrow corporate interests, or are, in fact, the populist gestures. Given all this, such projects, despite a number of positive ideas and proposals will be now and in the present circumstances the economy nonviable, detached from the practice and interests of the social strata.

Continued use in practice applied in the paper research method of estimation and forecasting of tax resources and tax capacity will significantly increase the accuracy of forecasts. Also advantage of the method is that it can be applied in a situation of lack of data on individual taxes.

Of considerable interest, in my opinion, is the theoretical and practical study of this category as a tax base in the region. The author has developed a complex multilevel system of self-classification of regions in terms of the tax base.

Thus, the work as a whole is a scientific and practical study of the tax system of the Republic of Kazakshtan in the dynamics of its development, the aggregate of problems and solutions. Research produced both general theoretical areas and on specific issues, which resolved the problem posed to the applicant.

References

- Giuseppina, C. et al. (2014). *Financial activities taxes, bank levies and systemic risk*. European Commission. Luxembourg: Publications Office.
- Gryaznova, A. G. (Ed.). (2004). *Financial and Credit Encyclopedic Dictionary* (p. 607). Finance and Statistics.
- Mamyrova, N. K. (Ed.). (1999). *Dictionary of banking and financial terms* (p. 712). Almaty. Economy.
- Marcin, G., & Benito, D. E. (2014). Destination principle in intra-community services and the "fixed establishment" in the VAT: a comparative study of Polish and Spanish law. *Intertax*, 42(2), 122-135.
- Melnikov, V. D., & Lee, V. D. (2001). *The general course of Finance* (p. 116). Almaty.
- Michael, L., & Lejeune, I. (Eds.). (2014). *Improving VAT-GST: designing a simple and fraud-proof tax system*. Amsterdam: IBFD.
- Olaf, W. T. et al. (2014). *Behavioural economics and taxation*. European Commission. Luxembourg: Publications Office.
- Salvador, B. et al. (2014). *Effective corporate taxation, tax incidence and tax reforms: evidence from OECD countries*. European Commission, Luxembourg: Publications Office.
- Smith, A. (1935). *The Wealth of Nations* (pp. 341-343).
- Thomas, H., & Teichmann, D. (2014). Tax reforms and the capital structure of banks. *International Tax and Public Finance*, May 2014.
- Zeynelgabdin, A. B. (1995). *The financial system: the economic content and use of the mechanism*. Almaty, Karzhy-Karazhat.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Developing the Therapeutic Relationship Assessment Tool of Nursing Students in the Northeastern Region of Thailand

Somjittra Nawa¹, Pattanusorn Stabhonwong¹ & Kanchana Chaipan²

¹ Psychology and Guidance branch, Faculty of Education, Mahasarakham University, Thailand

² Educational Psychology, Faculty of Education, Khonkaen University, Thailand

Correspondence: Somjittra Nawa, Faculty of Education, Mahasarakham University, Talaad subdistric, Muang, Mahasarakham, 44000, Thailand. Tel: 66-91-862-0041. E-mail: Nawa375@gmail.com

Received: May 4, 2015 Accepted: June 8, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p293

URL: <http://dx.doi.org/10.5539/ass.v11n21p293>

Abstract

The research aims at confirming factors, investigating sub-factors of the therapeutic relationships of nursing students, and developing the therapeutic relationship assessment tool. The samples were 400 nursing students in the Northeastern region of Thailand. The LISREL8.72 model was employed for data analysis. The research findings showed that the therapeutic relationship assessment tool consisted of five key factors with 16 sub-factors, and the 57-item-assessment tool with a 0.95 reliability index was assessed by the experts and confirmed by the empirical data. Therefore, the therapeutic relationship assessment tool is practical and appropriate for nursing students.

Keywords: therapeutic relationship, nursing student, assessment tool, development

1. Introduction

In Thailand, the mental patients have increased gradually approximate 1.4 million. The Ministry of Health stated that more 9 million people in Thailand had mental health problems in 2013. However, only 1.7 million patients were treated well (Office of the National Social Economic Development (2014). Chanokreuthai Chuenarom (2009) states that Psychiatrist plays an important role in taking care of the mental health patients which the mental health treatment is different from the physical treatment of the patients. The patient himself is a major person for the efficient treatment. It is necessary to establish the relationships between patients and psychiatrists focusing on awareness of the problems and need of the patients for both physical and mental treatment. Peplau, (1952) described nursing as...A significant, therapeutic, interpersonal process. It functions co-operatively with other human processes that make health possible for individuals in communities. An educative instrument, a maturing force that aims to promote forward movement of personality in the direction of creative, constructive, productive, personal, and community living.

The literature review shows that nursing students have encountered the problems of building nurse-client relationship. Panthila Itharat (2000) states that most of nursing students have been afraid of being hurt by the mental health patients, and they really worried about slow response and communication with the patients. Suwimol Jodpimai, Thaweewan Buphatha and Cholthicha Cholsawat (2011) claim that most of nursing students had problem of theoretical application to practice, and they have not got any field experience in mental health treatment. They had problems of communication with the patients, and they also could not identify physical problems of the patients.

The therapeutic relationship assessment is an important method for the treatment of mental health problems. Sawitri Yeanbuasri (1997) constructed the relationship assessment tool for the treatment of nursing students, and ability assessment form for the solution of relationships. Patara-ampai Pipatnanon and Ampaipan Pumsrisawat (1996) assessed the relationship of nursing students for the treatment by observing and recording techniques. Spreng et al. (2009) studied on the client care in Toronto, Canada, developed the assessment and validity of the factors in client care assessment. However, the study did not cover relationship assessment for the treatment of the mental health patients. McGuire – Snieckus et al. (2007) studies the new relationship assessment model for the treatment of mental health patients in local mental health treatment centers by using psychological principles and a test.

According to the previous research, it is obvious that there have been a few studies on relationship assessment for the treatment of the mental health problems. The author conducted research on confirming factors, investigating sub-factors of the therapeutic relationships of nursing students constructing and developing the therapeutic relationship assessment tool of nursing students.

2. Method

Phase 1: Confirming factors and investigating sub-factors in the therapeutic relationships

The author studied theories and research on definitions and factors in the therapeutic relationships. The focus group technique for five experts was employed for designing a conceptual framework. The guidelines for the therapeutic relationship factors of College of Nurse of Ontario revised (2006) and investigating sub-factors in the therapeutic relationships. The outcomes of phase 1 were five key factors major with 16 sub-factors. The focus group activities took two hours. The results of focus group and literature review were analyzed and synthesized for key factors and sub-factors in the therapeutic relationship assessment tool.

Phase 2: Developing the therapeutic relationship assessment tool

The therapeutic relationship assessment tool was a five rating scale assessment form with 78 items consisting of 56 inductive questions and 22 deductive questions adopted from Likert, Boonchom Srisa-ard (2002). The content validity and the index of Item Objective Congruence; IOC) was assessed by five experts. The IOC index of the assessment form was .50-1.00. The outcomes of phase 2 was a qualified 75-item assessment tool.

Phase 3: Trying out of the assessment tool

The assessment tool was tried out to 60 nursing students. Pearson's Correlation Coefficient was employed for the discrimination analysis. The reliable index of corrected item-total correlation was .20-1.00. The internal consistency was assessed by Cronbach method Suchira Patrayutawat (2002).

Phase 4: Confirming key factors in the therapeutic relationships

The assessment tool was implemented to 2,665 sample subjects consisting of 2nd, 3rd, and 4th year nursing students from 11 higher education institutions in the northeast of Thailand under Office of the Higher Education Commission, the Ministry of Education in 2013. They were selected by the simple random sampling method from four universities in the northeast of Thailand. The LISREL 8.72 model was employed for confirmatory factor analysis of the assessment tool Joreskog; & Sorbom (1992).

The summary of conceptual framework are presented in the Figure 1.

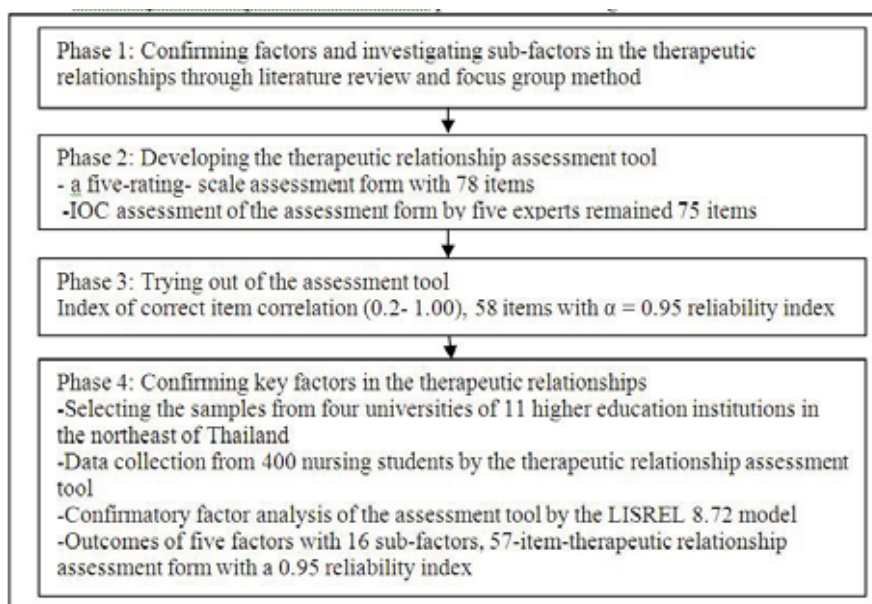


Figure 1. Summary of research framework

3. Results

Phase 1: Confirming key factors and investigating sub-factors in the therapeutic relationships

The guidelines for the therapeutic relationship factors of College of Nurse of Ontario revised (2006), literature review and assessment of the experts were used to confirm the key factors and investigating sub-factors in the therapeutic relationship. The five factors with 16 sub-factors are presented in the Figure 2.

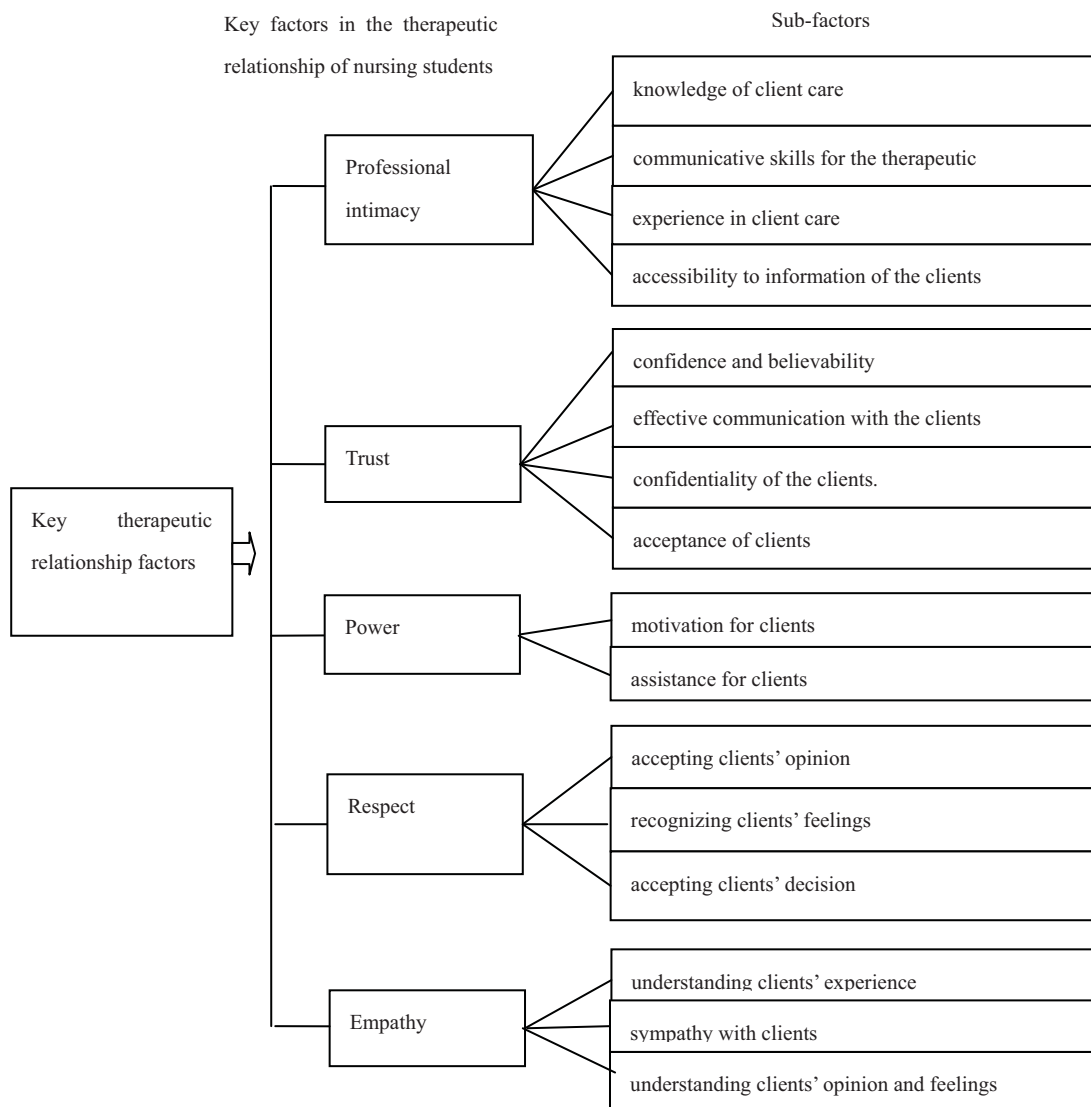


Figure 2. Five key relationship factors and sub-factors in the therapeutic relationship of nursing students

Phase 2: Developing the therapeutic relationship assessment tool

78 questions were constructed and the IOC index of the therapeutic relationship assessment tool was assessed by the experts. After that 75 questions were selected accordance with the reliable IOC index (.5-1.00).

Phase 3: Trying out of the assessment tool

The questions were tried out to 60 nursing students for assessing and developing the therapeutic relationship assessment tool, and 58 questions were selected accordance with the reliable index of the corrected item-total correlation (.20 -1.00) with a .95 reliability index of Cronbach.

Phase 4: Confirming key factors in the therapeutic relationships

The results of confirmatory factor analysis of the therapeutic relationship assessment tool are presented as follows:

The index of correlation coefficient analysis of the sub-factors in the therapeutic relationship assessment tool of nursing students is shown in Table 1.

Table 1. Index of correlation coefficient of the sub-factors in the therapeutic relationship assessment tool of nursing students

Therapeutic relationship Factors		Relationship Factors in the Treatment															
		Professional intimacy				Trust				Power		Respect		Empathy			
		KN	SK	EX	IN	CN	CO	CON	ACC	MO	ASS	AC	ACE	UNC	UN	SYM	OPI
Professional intimacy	KN	1.000															
	SK	.357**	1.000														
	EX	.402**	.490**	1.000													
	IN	.350**	.350**	.448**	1.000												
Trust	CN	.397**	.423**	.448**	.426**	1.000											
	COM	.475**	.366**	.437**	.415**	.537**	1.000										
	CON	.329**	.401**	.426**	.443**	.472**	.506**	1.000									
	ACC	.440**	.451**	.565**	.506**	.552**	.557**	.555**	1.000								
Power	MO	.398**	.476**	.582**	.453**	.466**	.507**	.499**	.628**	1.000							
	ASS	.335**	.345**	.451**	.397**	.411**	.418**	.340**	.494**	.494**	1.000						
Respect	AC	.346**	.451**	.533**	.385**	.445**	.453**	.428**	.625**	.590**	.496**	1.000					
	ACE	.409**	.446**	.442**	.421**	.443**	.552**	.465**	.576**	.526**	.468**	.541**	1.000				
	UNC	.267**	.440**	.507**	.336**	.407**	.355**	.367**	.555**	.514**	.471**	.558**	.525**	1.000			
Empathy	UN	.269**	.422**	.342**	.334**	.311**	.314**	.367**	.518**	.398**	.392**	.529**	.464**	.458**	1.000		
	SYM	.387**	.375**	.385**	.325**	.330**	.522**	.388**	.479**	.446**	.379**	.527**	.599**	.351**	.394**	1.000	
	OPI	.431**	.299**	.348**	.338**	.307**	.509**	.342**	.479**	.444**	.373**	.450**	.575**	.368**	.434**	.565**	1.000

**p < .01

The results indicated that 16 sub-factors were positively related to each other at the .01 level of the statistical significance. The highest index of the sub-factors was motivation for clients and accepting clients (.628). Whereas, the lowest index of the sub-factors was understanding of the clients' experience and communicative skills for the treatment (.267).

The results of the confirmatory factor analysis indicated that the model was developed 18 times and 33 questions were deleted based on the LISREL 8.72 model. The therapeutic relationship assessment tool with 57 items of nursing students is showed in Table 2.

Table 2. The consistency of the therapeutic relationship assessment model with the empirical data

	Index	Criteria
χ^2	103.08	No significanc
P	0.04949	<.05
df	81	-
χ^2/df	1.27	< 2.0
Goodness of Fit Index)GFI(	0.97	Close to 1.0
Adjusted Goodness of Fit Index)AGFI(	0.95	Close to 1.0
Comparison of Fit Index)CFI(	1.00	Close to 1.0
Root Mean Squared Residual)RMR(	0.011	Close to 0.0
RMSEA)90%(	0.026	Close to 0.0

The results indicated that the average reliable level of the therapeutic relationship assessment model of nursing students was 103.08 with the .049 level of the statistical significance. Whereas, the index of relative chi-square was 1.27 without statistical significance. In conclusion, the results revealed that the overall reliable level of the assessment model was high.

Additionally, the Goodness of Fit Index was .97, the Adjusted Goodness of Fit Index was .95. The Comparison of Fit Index was 1.00. The results revealed that the model was appropriate for practical application accordance with the empirical data. Moreover, the RMSEA index was .026, which the index confirmed the appropriateness of five key factors with four sub-factors in the therapeutic relationship assessment of nursing students. The sub-factors included confidence, believability, communication with clients for facts, Confidentiality of the clients, and acceptance of clients. Two sub-factors of the power over assistance for clients consisted of empathy for clients, assistance for clients. Three sub-factors of respect for clients included accepting the opinions of clients, accepting the feelings of clients, accepting clients' decision. Three sub-factors in client care consisted of understanding of clients' experience, real sympathy on clients, accepting opinion and feelings of clients. The diagram of five key factors in the relationship assessment model is shown in Table 3.

Table 3. Values of the second confirmatory factors assessed by the LISREL model (n=400)

Therapeutic relationship factors	B	SE	t-value	R ²
Professional intimacy	0.95	0.09	10.70	0.91
Trust	0.95	0.07	13.09	0.90
Power	1.00	0.06	17.92	1.01
Respect	0.97	0.06	16.83	0.94
Empathy	0.92	0.07	13.18	0.85

Table 3. showed that the value of overall factors was positive at the .05 level of the statistical significance. The results revealed that five key factors indicated the therapeutic relationships of nursing students. Regarding each factor, the findings showed that the two highest values of the power over clients were assistance for clients was 1.00. The values of respect on clients, the professional intimacy, trust and empathy were .97, .95, .95 and .92 respectively. The average index of the reliability was high (R²). The indices of Standardized Factor Loading, Standard Error (SE), t-value and reliability are showed in Table 4.

Table 4. Indices of Standardized Factor Loading (B), Standard Error (SE), t-value and reliability for the second confirmatory analysis (n = 400)

Therapeutic relationship factors	B	SE	t value	R ²
Professional intimacy				
-knowledge of client care	0.54	0.03	9.52	0.29
-communicative skills for the treatment	0.65	0.03	9.52	0.42
-experience in client care	0.75	0.04	10.30	0.56
-accessibility to information of the clients	0.60	0.04	9.09	0.36
Trust				
-confidence and believability	0.64	0.03	12.71	0.41
-effective communication with clients	0.66	0.03	12.71	0.43
-confidentiality of the clients.	0.66	0.05	11.25	0.43
-acceptance of clients	0.85	0.04	13.60	0.72
Power				
-motivation for clients	0.78	0.03	12.93	0.60
-assistance of clients	0.63	0.30	12.90	0.40
Respect				
-accepting the opinions of clients	0.77	0.03	14.75	0.59
- accepting the feelings of clients	0.73	0.03	14.75	0.54
-accepting decision of clients	0.71	0.03	14.32	0.51
Empathy				
-understanding clients' experience	0.68	0.04	10.33	0.46
-sympathy with clients	0.61	0.04	10.33	0.38
- understanding clients' opinion and feelings	0.62	0.03	10.42	0.38

Results of the appropriateness assessment of Chi-Square = 103.08 df = 81
p = 0.04949 GFI = 0.97 AGFI = 0.95 RMR = 0.0027 CFI = 1.00 RMSEA = 0.26

Table 4. showed the second confirmatory factor analysis of five key factors. The first factor consisted of four sub-factors: knowledge of client care, communicative skills for the treatment, experience in client care and accessibility to information of the clients. The average index of the sub-factors were .54-.75. Four sub-factors of the second factor were confidence and believability, effective communication with clients, confidentiality of the client, and accepting clients. The average index of the sub-factors were .64-.85. Two sub-factors of the third factor were motivation for clients and assistance of clients. The average index of the sub-factors were .63-.78. Three sub-factors of the fourth factor were accepting opinions, feelings and decision of clients and accepting decision of clients . The average index of the sub-factors was .71-.77. Three sub-factors of the fifth factor were understanding clients' experience, sympathy whit clients and Understanding clients' opinion and feelings. The index of the overall sub-factors was .61-68.

The index of prediction coefficient for 16 sub-factors was .29-.72. The factors consisted of accepting clients, motivation for clients, accepting the opinions of clients, experience in client care, understanding clients' opinion and feelings, accepting decision of clients, sympathy for clients, effective communication with clients, confidentiality of the clients., knowledge of client care, confidence and believability, shared goals, knowledge of client care, accepting decision for clients, understanding the opinions and feelings of clients, accessibility to clients and communicative skills for the treatment respectively.

Table 5. Reliability index of the therapeutic relationship assessment of nursing students

Therapeutic Relationship	Reliability Index of Cronbach
Professional intimacy	0.78
Trust	0.84
Power	0.81
Respect	0.82
Empathy	0.85

Table 5. revealed that the highest reliability indices of the five key factors in the therapeutic relationships were empathy, trust, respect, power and professional intimacy assessment were .85, .84, .82, .81 and .78 respectively. The overall index of the therapeutic relationship was .95.

4. Discussion

The focus group discussion was employed to confirm five key factors the guidelines of College of Nurse of Ontario revised 2006 (2013) and investigating in the therapeutic relationship sub-factors. The research participants of the focus group consisted of one psychiatrist doctor, two psychiatrist nursing lecturers, one psychiatrist nursing and one psychologist. The discussion took two hours and was recorded. The analysis of the focus groups found five key factors and 16 sub-factors in therapeutic relationship assessment consisted of professional intimacy, trust, power, respect and empathy. Four sub-factors in professional intimacy were knowledge of client care, communicative skills for the treatment, experience in client care and accessibility to information of the clients. College of Nurse of Ontario revised 2006 (2013) claims that nursing practitioners take an important role for client care of mental and social factors, the activities should be planned for client care. Accessibility to information and confidentiality of the clients also affect the relationship between clients and nursing practitioners. Mohr (2009) states that professionalism is the ability of nurse practitioners in applying theories to practice for building professional relationship. Four sub-factors of the second factor consisted of confidence and believability, effective communication with the clients, Confidentiality of the clients. and accepting clients. Nurse Association of New Brunswick, (2000) states that the trust of clients is important for building the relationships between clients and practitioners. Mohr (2009) states that the key factors of the trust consisted of clear communication with clients, Confidentiality of the clients., and accepting clients. Two sub-factors of the power included motivation for clients and assistance of clients. Nurse Association of New Brunswick (2000) claims that nurse practitioners have more power than clients. The power of nurses are from their job/position, and knowledge. The nurses are a major person to take care of clients with professional skills, knowledge, clear information of clients and required services. Three subfactors of the respect consisted of accepting the opinions, feelings and decision of clients. Nurse Association of New Brunswick (2000) states that the respect on each other shows status and value of human being, and the respect is necessary to establish the relationships between nurses and clients. Varcarolis et al. (2006) recommend that positive regard is important for clients, and the physical manners show more respect than verbal manners. The physical manners included of attitudes towards the service/treatment, empathy, and refusing a decision of clients. Vedebeck (2009) claims that the positive regard is identified by naming correct clients, taking time, listening to and giving quick response. Three sub-factors of the empathy consisted of understanding experience of clients, sympathy for clients and accepting the feelings of clients. Varcarolis et al. (2006) claim that empathy refers to the understanding of the opinions and feelings of clients. The empathy for clients involves communicating with clients, checking data of clients, clear understanding of the psychiatric treatment, including opinions and feeling of the clients Vedebeck (2009) defines the empathy for clients that the empathy is the attempt of understanding of ideas, meanings, feelings of clients, and the nurses are an important person to clarify their ideas and understandings.

The index of the relationship assessment tool analyzed by the LISREL 8.72 model was 103.08. The value of the statistical significance was .04949. The index of relative chi-square was 1.27 Nonglak Wiratchai (1998). The results indicated that the IOC index of the assessment model was significantly supported by the empirical data. The Adjusted Goodness of Fit Index was .95. The Comparison Fit Index was 1.00. Supamas Ungsuphachok, Somthawill Wjitwana and Ratchaneekul Pinyopanuwat (2011) conclude that the IOC indices of the model were supported by the empirical data. The Adjusted Goodness of Fit Index and Comparison of Fit Index was .95. Root Mean Squared Residual was 0.011 and the index of RMSEA was 0.026. The IOC index of RMSEA and RMR indicated that five key factors: Professional intimacy, Trust, Power, Respect and Empathy are practical and appropriate for the therapeutic relationship assessment of nursing students.

The reliability index of the model was .95, and the index of Internal Consistency was 0.78-0.85 Suchira Patarayutwat. (2002) Mcguire - Snieckus (2007) developed the therapeutic relationship assessment tool of the

experts and clients. Spreng and other (2009) states that the therapeutic relationship assessment is necessary for the treatment of nursing students.

5. Conclusion

The study shows that the therapeutic relationship assessment tool with 57 items consists of five key factors with 16 sub-factors. The LISREL .8.72 model was employed for confirmatory factor analysis of construct validity. The assessment model is significantly supported by the empirical data. The therapeutic relationship assessment tool was assessed by the experts and construct validity with appropriate reliability index. Therefore, the therapeutic relationship assessment tool is practical and appropriate for nursing students.

References

- College of Nurses of Ontario Practice Standard. (2013). *Therapeutic Nurse- Client Relationship. Revised 2006*. College of Nurses of Ontario. Retrieved from http://www.cno.org/Global/docs/prac/41033_Therapeutic.pdf
- Ithirat, P. (2000). *The Complementary Texts for "Nursing for Mental Health Clients": Tool for the Mental Health Treatment of Nurse*. The Department of Psychiatry, Faculty of Nursing khonkaen University .
- Jodpimai, S., Bupatha, T., & Cholsawat, C. (2011). The Effects of Computer Assisted Instruction on the Topic of "Establishing the relationship and Conversation for the treatment of the Mental Health Clients" on the Learning Achievement of Nursing Students. *Journal of Nurses*, 60(5).
- Joreskog, K. G., & Sorbom, D. (1992). LISREL VII. *Analysis of Linear Structural Relations*. Mooresville, IN Scientific Software.
- Mcguire-Snieckus, R. (2007). A new scale to assess the therapeutic relationship in community mental health care: STAR. *Psychological Medicine*, 37, 85-95. Retrieved from http://webpace.qmul.ac.uk/rmccabe/publications/2007/2007_A_new_scale_to_assess_the_therapeutic_relationship_STAR.pdf
- Morh, W. K. (2009). *Therapeutic Relationships and Communication in Psychiatric-Mental Health Nursing* (7th ed.). China: Wolters Kluwer Health.
- Nurse Association of New Brunswick. (2000). *Standard for the Therapeutic Nurse-Client Relationship*. Nurse Association of New Brunswick. Retrieved from http://www.nanb.nb.ca/PDF/practice/Standards_for_the_therapeutic_Nurse-Client_Relationship_English.pdf
- Office of the National Economics and Social Development Board. (2014). *Social Situation and outlook in the 3rd Quarter of 2014*.
- Patarayutwat, S. (2002). *Guidelines for Psychological Test* (1st ed.). Bangkok: The Department of Psychiatry, Faculty of medicine, Mahidol University.
- Register Nurse Association of Ontario Revised 2006. (2013). *Establishing therapeutic relationships*. Retrieved from <http://www.rnao.org>
- Spreng, R. N. (2009). The Toronto Empathy Questionnaire: Scale development and initial validation of a factor-analytic solution to multiple empathy measures. *J. Pers. Assess.*, 91(1), 62-71. Retrieved from <http://www.tandfonline.com/doi/full/10.1080/00223890802484381>
- Srisa-ard, B. (2002). *Basic Research* (7th ed.). Bangkok: Suviriyasarn.
- Ungsuchot, S., et al. (2011). *Analytical Statistics for Social Sciences and Behavioral Science Research: LISREL Program* (3rd ed.). Bangkok: Charoendeemunkhong Publication Limited.
- Varcarolis, M. E. et al. (2006). *Foundations of Psychiatric Mental Health: A clinical approach*. St Louis Saunders Company.
- Vedebeck, S. L. (2009). *Mental Health Nursing*. Uk: Lippincott Williams & Wilkins.
- Wiratchai, N. (1999). *RISREL Model: Analytical Statistics for Research* (3rd ed.). Chulalongkorn University.
- Wongpanarak, N. (2014). Relationship for the Treatment: Practical Application for Nursing Process. *Journal of the Thai Army Nurse*, 15(2).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

On the Mistranslation of Cultural Words in the English Versions of *Sun Tzu's Art of War*

Jianchuan Zhou¹

¹ School of Foreign Languages, Nantong University, China

Correspondence: Jianchuan Zhou, School of Foreign Languages, Nantong University, China. E-mail: sudazjc@163.com

Received: May 4, 2015 Accepted: May 29, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p300

URL: <http://dx.doi.org/10.5539/ass.v11n21p300>

Abstract

Sun Tzu's Art of War is originally a book of military science, and its influence has transcended military field and found its way into politics, business, and diplomacy. This book has been translated into English by both Chinese and western scholars. However, it is noticeable that there are many mistranslations in these versions for various reasons. This paper holds three reasons for the mistranslation at large, namely, the translator's compromise to the patrons; misinterpretation of the source text; and the translator's cultural incompetence. Emphasis is laid on the factors concerning the mistranslation of cultural words (or culture-loaded words). Examples are given to illustrate the importance of the translator's cultural competency without which the translation would be incomprehensible and unacceptable. In a global exchange context, more attention to cultural differences may contribute to cultural communication and progress.

Keywords: culture-loaded words, cultural words, mistranslation, *Sun Tzu's Art of War*

1. Introduction

Masterpiece as it is, *Sun Tzu's Art of War* has invited both praise and criticism from the very beginning since its translated versions appeared. Its introduction to Europe began in 1782, when Joseph Amiot, a French Jesuit Father living in China, translated it into French. It was not a good translation because, according to Dr. Giles (1993), "It contains a great deal that Sun Tzu did not write, and very little indeed of what he did." The first English version was published in 1905 in Tokyo by Capt. E. F. Calthrop. However, there were many problems in this version. Omissions were common and difficult passages were distorted. In 1908, a new edition of Capt. Calthrop's was published in London. It was an improvement on the first, with many omissions filled up and mistakes corrected. But new errors were still found in this version. It was not until 1910 when a valuable edition translated by Dr. Giles was published. This edition was highly commemorated, and it established much of the groundwork for later translators. Besides, it was scholarly and presented readers an incredible amount of background information. Different from his predecessors, Lionel Giles exerted much energy on compiling voluminous endnotes and footnotes. It seemed that he wanted to produce a definitive edition superior to the previous versions and perhaps something that would become a standard translation. True, this was the case for almost 50 years. But in 1963 another English version by Samuel Griffith was published, which was valued as an equal to Giles' translation. Though this translation was more lucid than Dr. Giles', it lacked Giles' copious and informative notes.

Chinese scholars also showed great interest in translating this great book. In 1936, Zheng Lin published the first English version translated by Chinese scholars. Zheng's version corrected some mistakes in Giles' version and set a good example for future Chinese scholars. From 1949 to 1979, no influential English versions were made because of ideological reasons; however, two generals, Guo Huaruo and Tao Hanzhang, made very careful notes and put this ancient classic into modern Chinese. It is said that during the Gulf War American navy soldiers were required to take a military book at hand which was translated from General Tao's modern Chinese version. When China carried out the reform and opening policy in 1979, the translation of this book stepped into a new era. Many Chinese scholars published their English versions, for example, Lin Wusun, Yuan Shibin, and Luo Zhiye to name but a few. Mistranslations are also easy to be found in the versions made by Chinese scholars, and the most common ones are caused by a misunderstanding of the original text.

A general review of the translation history of *Sun Tzu's Art of War* keeps us wondering why mistranslations still exist in different editions after so many years of improvement. Many reasons may lead to mistranslation, especially when the original text is written in ancient Chinese even modern Chinese readers have difficulty in reading and understanding. Besides, some translators like Captain Calthrop translated not from the original Chinese text but from a Japanese version which surely increased the possibility of mistranslation. One major mistake these translators committed in common is that they all translated *Sun Tzu's Art of War* with little understanding of Sun Tzu's competitive system. More often than not, careful readers find these versions vague and full of contradictions. They tend to think that these problems come from Sun Tzu, which is not doing justice to him. Literal translation is employed in many versions, but translators have not spent the time necessary to grasp Sun Tzu's philosophy of war that provides the context. Examples of the most common mistranslations are listed in the following part.

2. Common Mistranslation

2.1 Examples of Common Mistranslation

As far as the translation of the title "SunZiBingFa" is concerned, the most common rendition, *Sun Tzu's Art of War*, is something of a mistranslation. It is used in this paper not because it is the best translation but because it is the most widespread. The last two Chinese characters in the title are BingFa whose literal meaning is "military methods" or "army procedures", and the most adequate English translation would be the single word "strategy". The word "strategy" comes from ancient Greek, meaning literally "the thinking of a general". The concept of strategy covers all the essential elements of Sun Tzu's work. The fact that the book is about strategy, not war, explains why its methods apply so well in a wide range of human activities, including achieving success in business and overcoming challenges in life. However, *Sun Tzu's Art of War* sounds more academic and formal than the single word "strategy" does. Thus, the replacement of "*Sun Tzu's Strategy*" with "*Sun Tzu's Art of War*" seems justifiable.

Generally speaking, patrons, especially publishers and booksellers, care much about how many books they can sell, so circulation is their first concern. The best way to catch the eyes of potential buyers is to give books a conspicuous or even sensational title. In order to fulfill patrons' requirements, the translator has to make some adjustments even at the expense of distorting the original. This practice contributes a lot to deliberate mistranslation.

Another kind of mistranslation is those full of contradictions and confusing expressions. Because most translated books are Chinese-English editions, this paper uses the latest Roger T. Ames' version published in 2012 when the original text is cited for the sake of clarity.

Example 1: WeiShiYiQue (Ames, 2012)

Translation: Leave a way of escape to a surrounded enemy. (Yuan, 1998)

The translation of this sentence arouses much suspicion in readers because many translators do not bother to make a helpful explanation. For example, Lin Wusun's translation (2004) is "in surrounding the enemy, leave him an escape route", and Roger Ames' translation (2000) is "in surrounding the enemy, leave him a way out". A careful reader may wonder that why there should be an escape route or a way out for the enemy if they have been surrounded. The real purpose in leaving an outlet is to let the enemy see the possibility of escape and prevent them from fighting desperately so as to reduce the casualties when the final attack is launched. To make this sentence understandable, it is not only necessary but also indispensable to translate it in an explanatory way; otherwise the readers will have difficulty in understanding. For this sentence, Giles' version (1993) is more acceptable and comprehensible. "When you surround an army, leave an outlet free. This does not mean that the enemy is to be allowed to escape. The object is to make him believe that there is a road to safety, and thus prevent him fighting with the courage of despair."

Sun Tzu's Art of War is written in ancient Chinese which is quite different from modern Chinese in many respects. A good translation can only be achieved by a correct understanding of the original text which puts a high demand on the translator's competency in ancient Chinese. In some cases, mistranslation is made owing to an incorrect understanding of the source text.

Example 2: FuYongBingZhiFa, QuanGuoWeiShang, PoGuoCiZhi; QuanJunWeiShang, PoJunCiZhi. (MouGongDiSan) (Ames, 2012)

Translation: Generally in war, the best policy is to take the enemy state whole and intact; to destroy it is not. To have the enemy's army surrender in its entirety is better than to crush it. (Lin, 2004)

In Sun Tzu's opinion, unity is of uttermost importance. He believes it is unity rather than quantity that forms the competitive strength of a nation. Much of the theme is elaborated by Sun Tzu in Chapter 3. What Sun Tzu means is that using your military forces in a united manner is the best way. If you make a false interpretation of this theme, chances are that you will never understand what Sun Tzu is demonstrating in this sentence.

Another reason for mistranslation is the translator's cultural incompetency. Translators without the knowledge of another culture usually apply common sense to interpret the original text which sometimes leads to mistranslation.

Example 3: TianZhe: YinYang, HanShu, ShiZhiYe. (Ames, 2012)

Translation: What is heaven? The heaven means day and night, cold and heat, and the sequence of the Seasons. (Luo, 1996)

The phrase "YinYang" which appears two times in *Sun Tzu's Art of War* is derived from Taoism. It is translated as "day and night" in many versions. As a matter of fact, "YinYang" means the two opposing principles in nature, the former feminine and negative, the latter masculine and positive. The philosophical marrow of "YinYang" is: everything has two sides which are in a continuous motion. These two sides keep breaking the old balance and seeking for a new one. Although "YinYang" has the meaning like "day and night", its connotation goes far beyond this. For example, afternoon is also called "YangZhongZhiYin" during the day time, while the first period of night (before 12 o'clock p.m.) is called "YinZhongZhiYang". The simple translation "day and night" fails to distinguish this difference completely. Furthermore, *Sun Tzu's Art of War* is a book of both military and philosophical values. The philosophical phrase "YinYang" does not have an equivalent expression in the English language. A useful way to deal with the translation of such cultural words is to translate in terms of its Chinese pronunciation like "gongfu" and "dazibao". Meanwhile, a footnote should be carefully added.

2.2 Causes for Mistranslation

In the above examples, mistranslation is mainly caused by three factors, namely, the translator's compromise to the patrons; misinterpretation of the source text; and the translator's lack of knowledge of the source language's culture. In this paper, the last one is elaborated. Different from common mistranslation caused by the translators' linguistic incompetence or carelessness, mistranslation of cultural words is correct on the grammatical level but incomprehensible and ambiguous for the readers.

Although every nation has its unique culture with distinctive history, ways of life, traditions, and customs, there are also many overlaps or similarities between cultures which make cross-cultural communication possible. Admittedly, it is very likely that a translator will commit errors in his translation if he is not frequently exposed to the foreign language's culture or familiar with the cultural differences. When translating foreign cultural words, a translator may be easily affected by his native culture deeply rooted in his mind. Knowledge acquired from his life experience in the native cultural background will sometimes lead to misinterpretations. Cultural mistranslation is prevalent in the circle of translation as a result of increasing cross-cultural exchanges and communication. It can be defined as a kind of under-translation which can not be noticed by literal translation, and a kind of imperfect translation when cultural elements have to be considered. Failure in the process of exchanges and communication between cultures urges translators to shift the focus of their research from linguistic factors to cultural ones.

3. Mistranslation of Cultural Words

As a founder of anthropology, E. B. Taylor (1871) made a classical definition of culture in his *Primitive Culture*: "Culture is that complex whole which includes knowledge, belief, art, morals, law, custom and other capabilities and habits acquired by man as a member of society." Taylor seems to lay his emphasis on the spiritual aspect of culture, yet the material aspect fails to get an equal importance in his definition. Later, Daniel Bates and Fred Plog (1990) proposed a more detailed and comprehensive definition: "Culture is a system of shared beliefs, values, customs, behaviors and artifacts that the members of a society use to cope with their world and with one another, and that are transmitted from generation to generation through learning." This definition covers almost every aspect of culture, paying equal attention to spiritual as well as material components of culture.

Based on the above two authoritative definitions of culture, four sub-systems can be classified in the anthropological sense. The first sub-system is techno-economic system which includes ecology, means of production, exchange and distribution of goods, crafts, technology and science and artifact. The second one is social system which includes social classes and groups, kinship system, politics and law, education, sports and entertainment, customs and general history. The third one is linguistic system which includes phonology and graphemes, morphology and syntax, semantics and pragmatics. The fourth one is ideational system which

includes cosmology, religion, magic and witchcraft, folklore, artistic creations as images, values, cognitive focus and thinking patterns, and ideology.

Examples of the mistranslated cultural words from all the above four sub-systems can be found in the English versions; however, it is beyond the ability of this paper to make a comprehensive study on this topic. Thus, examples are chosen from three catalogues, namely, ecology, religion, and syntax.

3.1 Mistranslation Related to Ecology

Cultural entities always exist in a certain region and inevitably reflect some ecological features which can be embodied by the language. Ignoring these differences caused by ecological elements, a translator will sooner or later commit a mistake. For example, ancient Chinese depended heavily on farming to survive, and they hoped for good weather to bring them a harvest. Naturally, there are many words and expressions with “Tian(sky)” in Chinese. In some cases, we can get a satisfactory translation provided the Chinese “Tian” means “sky” or “weather” such as “TianGaoHuangDiYuan” and “KaoTianChiFan” which can be translated as “An emperor is as far away as sky” and “to depend on weather to live”. In *Sun Tzu's Art of War*, “Tian” altogether appears 36 times. Take its first appearance in the book as an example:

Example 4: YiYueDao, ErYueTian. (Ames, 2012)

Translation: The first of the five criteria is the way (*Tao*), the second is climate. (Ames, 2012)

Literally, “weather”, “climate” and “heaven” carry the meaning that “Tian” contains. However, a comprehensive understanding of “Tian” may be achieved by the explanation in the same paragraph: TianZhe, YinYang, HanShu, ShiZhiYe. Roger Ames's translation is: Climate is light and shadow, heat and hot, and the rotation of the seasons.

It is not difficult to find that “Tian” refers to all the conditions influenced by the changes in heaven. Weather means the state of atmosphere at a given time and place; climate means the meteorological conditions, including temperature, precipitation, and wind, which characteristically prevail in a particular region, thus it contradicts with “change of seasons”. Therefore, they fail to convey the full meaning of “Tian” in this sentence. In fact, “Tian” can not be fully translated by one single word because it follows an explanatory sentence in the original text. However, “sky” may be acceptable for the reason that changes in weather and climate were observed by watching the sky in ancient times. It is probably because heaven also carries such denotation like paradise and gods which are familiar to westerners that some translators choose weather and climate whose meaning is more specific and ambiguity-free.

Cultural mistranslation of “Tian” is also seen in the rendering of “MouShiZaiRen, ChengShiZaiTian” quoted from one of the Four Most Classical Chinese Literary Works---*The Dream of Red Mansions*. The translation of this sentence is a frequently cited example much discussed by translation critics. Hawkes put it into “Man proposes. God disposes”. The reason this version arouses much interest is that it gives readers a false impression that the speaker of this utterance, Lady Liu, is also a Christian. Presumably, the translator wanted to make it easier for the intended readers to understand by transcending the barriers between the two different cultures. The target readers may feel close to the version, but cultural factors in the original text is lost. In this sense, it is better to put it into “Man proposes. Heaven disposes” as what Yang Xianyi did in his version.

3.2 Mistranslation Related to Religion

Religion is the belief in god or gods. In the ancient times when our ancestors have to struggle for living and survival, they build temples or churches to worship the gods and pray for blessings. With the passage of time, the temple which is supposed to be the place where religious rituals are held has changed its original function and turned into a place where emperors offer sacrifices to gods and hold meetings with high officials. Let's take a look at the translation of “Miao (temple)”.

Example 5: FuWeiZhanErMiaoSuanShengZhe, DeSuanDuoYe. (Ames, 2012)

Translation: Now the general who wins a battle makes many calculations in his temple ere the battle is fought. (Giles, 1993)

The Chinese sentence seems clear in meaning, and many translators put “Miao” into “temple” in their translation. In fact, Chinese “Miao” does not evoke the same image as English temple does. Temple refers to “a building dedicated to religious ceremonies or worship” in the Webster Dictionary. The readers may wonder that why the prewar military meeting is not held in the court where a king summons his generals, but in the temple where religious ceremonies are held. In fact, “Miao” does not equal temple in this sentence. In the Xinhua Dictionary, “Miao” also means “royal or imperial court”. For example, “JuMiaoTangZhiGao, ZeYouQiMin” (When serving

the court, I am concerned about the people and their needs.) It happens that in order to pray for victory and blessing from gods, both ancient Chinese and westerners would hold some ceremonies in the temple before a military action is carried out. However, such ceremonies are held after the war decision and strategies have been made in the court by the king and his generals! Therefore, this mistranslation is largely due to the misinterpretation of “Miao”, although it has the same meaning as temple in most cases.

Another mistranslation that has to be mentioned in this sentence is “Suan”. Etymologically, “Suan” is an ancient Chinese calculating tool made of wood, bamboo or bone which looks like a tablet. Later, it is applied to military field to indicate the military conditions. If one side possesses a favorable condition such as a favorable terrain, it will have one tablet of victory. If one side has more tablets than his enemy, it is much likely that this side will win the war. Thus, this sentence should be translated as “If the prewar military meeting held in the royal court indicates a victory, it is because this side has more tablets of victory than his enemy’s”.

3.3 Mistranslation Related to Syntax

Every language has its distinctive features, and effective communication cannot be achieved without taking such features into account. Therefore, an excellent translator will not impose one distinctive linguistic feature on another language, instead, he is ready to make adjustments and translate the message of the source text into the linguistic structure of the target language. In *Translating Meaning*, Nida (1983) points out that “the most important difference between Chinese and English is the difference of hypotaxis and parataxis”, two terms first proposed by Wang Li (1951) in his *Chinese Grammatical Theory*. English highlights hypotaxis, an overt connecting relationship in which conjunction has to appear, while Chinese emphasizes parataxis, a covert connecting relationship in which conjunction does not necessarily appear. This difference often has some influence on the strategies employed by translators.

Example 6: ZhiBiZhiJi, BaiZhanBuDai. (Ames, 2012)

Translation 1: Know the enemy and know yourself; in a hundred battles, you will never be defeated. (Yuan, 1998)

Translation 2: If you know the enemy and know yourself, you need not fear the result of a hundred battles. (Giles, 1993)

The original sentence is a typical example of parataxis where no conjunction is used, yet the relationship between the two parts is obvious: the former becomes the condition of the latter. In the first translation, the translator put it into actually two sentences because semicolon functions as half a period which cut the relationship of the two parts. The second translation has a clear sentence structure and meaning, and realizes the discourse cohesion by employing “if” to introduce a conditional clause which clearly states the relationship of the two parts of the original text.

The difference of parataxis and hypotaxis makes it difficult for translators to realize discourse cohesion and convey to readers the intended meaning of the author. Halliday (1994) put forward two ways to realize discourse cohesion, that is, grammatical cohesion and lexical cohesion. Grammatical cohesion puts its emphasis on the use of coordinating and subordinating conjunctions to make a covert relationship overt. Another method frequently employed by grammatical cohesion is to combine loosely scattered sentences by using such linguistic forms as infinitives, participles and so on. The pervasive “flowing sentences” in Chinese especially deserve the translator’s readiness to use such linguistic forms to make the translated version conform to the grammatical rules of English. Besides grammatical cohesion, lexical cohesion is another way to realize discourse cohesion. Lexical cohesion lays emphasis on the flexible repetition and collocation of certain lexis.

In a word, a translator should be aware of the difference of hypotaxis and parataxis and conscious enough not to impose one syntactic feature on the other. Furthermore, he should be ready to make flexible adjustments for the sake of discourse cohesion so as to avoid the mistranslation that an incompetent translator will sometimes produce.

4. Conclusion

Language is “not only the carrier of the information, but also the carrier of culture.”(Samovar, 1981) Language is not only based on culture, but also reflects cultural realities. On the whole, language and culture have an inseparable relationship between each other. Translation, as a transfer of language, definitely cannot be separated from culture.

To sum up, some enlightenments can be obtained from this topic. First of all, the study of the mistranslation of cultural words will urge translators and researchers to study the similarities and differences between two cultures.

In particular, some scholars put forward the concept of Contrastive Culturology. In addition, translation is actually a process of language fusion and cultural adjustment in which we import alien cultures and export native culture. We should have high awareness and sensitivity toward cultural differences and avoid or reduce the mistranslation of cultural words so as to deepen the mutual understanding of different nations and contribute to cultural communication and progress.

References

- Ames, R. (2000). *The Book of War*. London: Random House.
- Ames, R. (2012). *Sun-Tzu: The Art of Warfare*. Beijing: Zhong Hua Book, Co., Ltd.
- Bates, D. G., & Plog, F. (1990). *Cultural Anthropology* (3rd ed.). New York: McGraw-Hill.
- Giles, L. (1993). *The Art of War*. Changsha: Hunan Publishing House.
- Halliday, M. A. K. (1994). *An Introduction to Functional Grammar*. London: Edward Arnold.
- Lin, W. (2004). *Sun Tzu's Art of War*. Beijing: Foreign Languages Press.
- Luo, Z. (1996). *Sun Tzu's Art of War*. Beijing: China Translation & Publishing Corporation.
- Nida, E. A. (1983). *Translating Meaning*. San Diamas, California: English Language Institute.
- Samovar, L. A. et al. (1981). *Understanding of Intercultural Communication*. Belmont: Wardsworth Publishing Company.
- Taylor, E. B. (1871). *Primitive Culture*. London: John Murray.
- Wang, L. (1951). *Chinese Grammar Theory*. Beijing: The Commercial Press.
- Yuan, S. (1998). *Sun Tzu's Art of War*. Beijing: Foreign Language Teaching and Research Press.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Measuring Market Structures in the Dairy Market in the Czech Republic

Ekaterina Mikhalkina¹, Mansoor Maitah¹ & Karel Šrédl¹

¹ Faculty of Economics and Management, Czech University of Life Sciences, Prague, Czech Republic

Correspondence: Mansoor Maitah, Faculty of Economics and Management, Czech University of Life Sciences, Kamýčká 129, 165 00, Prague, Czech Republic. Tel: 42-022-438-2139. E-mail: maitah@pef.czu.cz

Received: May 9, 2015 Accepted: May 21, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p306

URL: <http://dx.doi.org/10.5539/ass.v11n21p306>

Abstract

The aim of the paper is to illustrate the existing measures of measuring market structures and demonstrate the use of these measures for the selected industry. For the analysis was taken the dairy market in the Czech Republic in the year 2012. This market includes four main stages: milk production; processing and pasteurization of milk; wholesale and retail of milk. The outcome of the analysis determines concentration ratios and types of competition at each stage of the dairy market. Calculations are demonstrated under the Czech antitrust law which operates under the Act no. 143/2001 Coll., On Protection of Competition. Calculations presented in the article can be used by antitrust authorities for evaluating types of competition and concentration ratios within a market. Among the main priorities of the calculations performed in the paper is its simplicity that does not require a large collection of data and complex mathematical calculations.

Keywords: concentration ratio, Herfindahl-Hirshman index, Lerner index, market power, market share, oligopoly

1. Introduction

The article describes indicators for measuring market structures that internationally used by competition authorities in the fight against market failures, mainly in the fight against uncompetitive markets. Imperfect competition may harm consumers, discriminate one producer over another and thus is ineffective and undesirable in each market. Indicators of market concentrations are used by antitrust authorities in identifying the possibility of breaking antitrust laws. Indicators of market concentrations are easily measurable what helps in prediction of possible abuse of a dominant position in a market. Thus, these indicators are an important part of the analysis and examination of the market. Markets with high concentration ratios are suggested to be imperfect. Markets with low concentration ratios are suggested to be perfectly competitive and hence, the intervention of antitrust authorities is futile. Markets with high concentration ratios do not necessary mean that these markets are inefficient, but abuse of a dominant position is easier exactly at these types of markets. If antitrust authorities find a high market concentration, further investigation and exploration should be started. For example, antitrust authorities should identify deeper each company in the market; check its financial documentation, suppliers and customers, evaluate firm's market prices and quantities produced using further methods of financial and strategic analysis.

2. Method

Market power identifies the “degree of a control that has a single company or group of companies over the decision about output and prices in a given market” (Samuelson, 2013). Among the most commonly used indicators for measuring market power are concentration ratios. Because an oligopoly consists of a small amount of larger firms, which produce a larger portion of output in the sector, production and thus revenues are highly concentrated. For example, studies for the oligopolistic competition have proved that in the United States of America there is more than 75 % of the total market is divided among the 10 strongest firms. In some oligopolistic structures just two or four strongest firms hold 90 % of the total market (U.S. Census Bureau, 2009).

The aim of the paper is to illustrate the existing measures of market structures and illustrate the use of these indicators for the selected sectors. For the analysis was taken the dairy market in the Czech Republic for the year

2012. This market includes four main stages: milk production, processing and pasteurization of dairy products, wholesale and retail. The outcome of the analysis will estimate a type of competition and evaluate market concentration ratios at each level of the market. Calculations were conducted in the Czech Republic under the Czech antitrust law. Examples of measuring market concentrations presented in the paper can be also used as an outline for the evaluation of a type of competition for antitrust authorities. Among the priorities for calculations performed in the paper is its simplicity that does not require a large collection of data and complex mathematical calculations. Data for the calculations were taken from the database MagnusWeb for the year 2012.

2.1 Theoretical Aspects

There are absolute and relative indicators for measuring market structures. For example, the number of participants in the market is the absolute indicator. Table 1 shows the existing relative indicators (Morasch, 2002).

Table 1. The overview of relative indicators for measuring market structures

Abbreviation	Measurement
S_i	Market Share
LI	The Lerner Index
CR_n	The Concentration Ratio
HHI	The Herfindahl-Hirschman Index
CV	The Coefficient of Variation

Source: Morasch, 2002

2.1.1 Market Share (S_i)

Market share belongs to the simplest measures of market power and market concentration. Market share is calculated as the ratio of profits, turnover or any other relevant indicator of the firm over total market profits, total market turnover or any other total market relevant indicator. The result is measured in percents:

$$S_i = \frac{\text{Profits}_i \text{ or Turnover}_i \cdot 100}{\text{Profits}_{\text{market}} \text{ or Turnover}_{\text{market}}} \quad (1)$$

The indicator is often calculated for revenues as:

$$S_i = \frac{\text{Revenues}_i \cdot 100}{\text{Total revenues}_{\text{market}}}, \quad (2)$$

where S_i is the market share of the i -th firm.

Another method of measuring market share is the ratio of firm's sales volume over total sales volume in the market, expressed in physical units. This method can distort the data and therefore, can not be applicable as an indicator for measuring market competition. Increasing in a market share is often among one of the main goals of a firm. Determining the total size of the relevant market share and the firm's ratio on the total share is a significant indicator for the evaluation of a firm's operation, its shares and an indicator for potential investors. Between the advantages of this indicator is its independence from political factors, fiscal policies, tax policies and from other macroeconomic indicators of a country. High concentrated markets are supposed to have one or several dominant firms with market shares which are close to 100 %.

2.1.2 The Lerner Index (LI)

The Lerner index expresses the degree of profitability of a firm, not its market concentration. The index also serves to assess the market power of a firm. The Lerner index is calculated as the ratio of the difference between the product's price and the marginal cost to the price of this product. The second method of calculation is the inverse ratio of a firm's demand elasticity on the market:

$$LI = \frac{(P-MC)}{P} = \frac{1}{|E_d|} \quad (3)$$

The Lerner index is calculated for the interval from zero to one. The higher is the value of the index, the greater is a firm's market power. If the index is one, it indicates a monopoly in a market. If the index tends to zero, it indicates the existence of a perfect competition in a market (Holman, 2007).

The invention of the price/cost margin (P-MC)/P as an index of market power is usually credited to Lerner. Some authors state, that it was not Lerner who invented the price/cost margin index and that the generalized version was fully derived even before the Second World War (WWII). They state that priority should be given to Luigi Amoroso, the leading Italian mathematical economist in the interwar decades (Amoroso, 1954). In the latter case some authors also credit Heinrich von Stackelberg and George Stigler for the invention of the price/cost margin index (Giocoli, 2012). Feinberg, Dickson and others authors recommend to use the Lerner index combining seller concentration with buyer concentration, which is usually correlated with the Lerner index and “seems useful as a structural proxy for the degree of monopoly power in force” (Feinberg, 1980) (Dickson, 1979). Practical researches on the Lerner index were conducted by Domowitz, Hubbard and Peterson in 1988, and later in 1993, in which the authors analyzed and calculated the average value of the Lerner index for manufacturing companies in the United States. This value achieved 0.37 which indicated a medium concentrated competition between a monopoly and a perfect competition. The use of the Lerner index is problematic in practice and therefore is used for theoretical aspects (Domowitz, Hubbard & Peterson, 1986).

2.1.3 The Concentration Ratio (CR_n)

The concentration ratio measures the percentage of the market’s total share supplied by its “n” largest firms (Mankiw, 2012). Shares can be measured by revenues, profits, operating profits, turnover or any other relevant indicator. The value of “n” is often four, but may be five, six, eight, twelve or any other small number. The concentration ratio can be expressed as:

$$CR_n = S_1 + S_2 + \dots + S_n = \sum_{i=1}^n S_i, \quad (4)$$

where S_i is the market share of the i-th firm and CR_n is the concentration ratio of n largest firms. The higher is the concentration ratio, the higher is the concentration on the market. For example, if $CR_4 = 80\%$, it means that the four largest firms cover 80 % of the total market share.

The concentration ratio is usually calculated for oligopolistic market structures. One of the advantages of the concentration ratio is its simplicity in application and description. However, the concentration ratio does not provide information about the size of corporations within the peer group (Morasch, 2002). The mathematical problem of the indicator is the use of a simple sum of market shares. For example, if CR_4 is 80 %, it may mean that the strongest firm occupies 71 % of the market and the other three firms have only 3 % of the market. The similar value of the concentration ratio ($CR_4 = 80\%$) can be achieved when each of four strongest firms in a market achieves exactly 20 % from total market shares. Therefore antitrust authorities use concentration ratios of four largest firms on the market along with the Herfindahl-Hirschman index for assessing the degree of market concentration. The Czech Office for Protection of Competition also uses concentration ratios along with the Herfindahl-Hirschman index. For a long-term practice of antitrust authorities, these indicators are supposed to be the most appropriate for measuring market structures.

The following table summarizes the significant intervals of values of concentration ratios, which are used by antitrust authorities and which are also used in the practical part of the analysis. For example, if the CR_4 is close to 0 and less than 40 % (indicating that the four firms own less than 40 % of the market), then the market is considered to be rather competitive. On the other hand, if the CR_4 is close to 100 %, the market structure is determined as a highly concentrated monopoly.

Table 2. The overview of concentration ratios’ intervals

The concentration ratio of four largest firms	Type of market structures
$CR_4 < 40\%$	Perfect competition; monopolistic competition
$60\% > CR_4 > 40\%$	Loose oligopoly
$CR_4 > 60\%$	Tight oligopoly
$CR_1 > 90\%$ ($CR_4 \rightarrow 100\%$)	Monopoly
The concentration ratio of four largest firms	Type of market structures

Source: Merger Assessment Guidelines, 2010

The European Commission and national competition authorities have different rules for the identification of a type of market competition and of a firm’s dominant position on the market. The following Table 3 shows one of the main indicators in assessing the conduct of dominant undertakings.

Table 3. Concentration ratio's criteria in certain countries

Country	The Concentration ratio (CR ₁)
The United Kingdom	> 25 %
The Czech Republic	> 40 %
European Union	≥ 25 %
Country	The Concentration ratio (CR ₁)
The United Kingdom	> 25 %

Source: Merger Assessment Guidelines, 2010 & Office for the Protection of Competition, 2014

The concentration ratio is given by market shares of “n” strongest firms. Perfect competitions and monopolistic competitions are suggested to be “safe” for a market. It means that there are no fines and penalties for these types of a market and therefore regulation is futile. Loose oligopolies may also be legal and “safe” for a market; however, a further investigation should be started for this particular market structure. Tight oligopolies and monopolies are risky and inefficient; therefore, a further investigation is usually started. Antitrust authorities investigate the possibility of the existence of illegal agreements and the possibility of setting prohibited pricing policies for these types of a market.

2.1.4 The Herfindahl-Hirschman Index (HHI)

Antitrust authorities apply the Herfindahl-Hirschman Index (HHI) as a key indicator for measuring market structures. Index was invented and firstly used by Orris C. Herfindahl in his dissertation “Concentration in the U.S. steel industry” in 1950; and independently Albert O. Hirschman implemented the same method of measuring market structures in his book “National power and the structure of foreign trade” in 1945. Therefore the indicator was named as the Herfindahl-Hirschman index (Herfindahl, 1950) (Hirschman, 1945).

The Herfindahl-Hirschman index (HHI) is an indicator of market concentration, which is calculated by squaring the percentage market share of each firm in the market and summing these numbers:

$$HHI = \sum_{i=1}^n S_i^2, \quad (5)$$

where “ S_i ” is the market share of the i -th firm and “ n ” is the number of firms in a market (Holman 2007). For example, in a market with two equal-sized firms with the market share of 50 %, the Herfindahl-Hirschman index equals: $50^2 + 50^2 = 5\,000$. The HHI index for the market consisting of four firms with shares of 30%, 30%, 20% and 20% would be: $900 + 900 + 400 + 400 = 2\,600$.

HHI is calculated in the interval from 0 to 10 000. The higher is the index value, the higher is the degree of a market concentration and thus the market is more inefficient and is more needed in regulation. The index achieves the value of 10 000 if the market is a *pure monopoly* (100*100). Otherwise, the lower is the index the more competitive is the market (if an industry has 1000 companies each with 0.1 % market share, then the index would be only 10). Market structures are distinguished according to the HHI index values for the following types:

Table 4. The HHI index value

The HHI index	Market concentration
<0.01 (or 100)	Highly competitive market
<0.15 (or 1500)	Unconcentrated market
0.15<the HHI index<0.25 (or 1500 to 2500)	Moderate concentration
>0.25 (or 2500)	High concentration

Source: Merger Assessment Guidelines, 2010

Antitrust authorities strictly supervise the markets, which have HHI index values greater than 1500. Mergers and acquisitions, which would increase the HHI index by more than 100 are also strictly controlled by antitrust authorities in the context of compliance with the international competition law.

The Herfindahl-Hirschman index better reflects a concentration in a market than usual indicators of concentration ratios from a mathematical point of view. Economists believe that traditional concentration ratios do not reflect the size of a particular firm within the peer group and therefore do not measure the market power of the largest firms in the market as effectively as the HHI index. The Herfindahl-Hirschman index assigns square weight of companies with a high market share. This difference can be illustrated in the following example: there are two markets with ten firms in each. Market shares for the first market are: 20, 15, 15, 15, 10, 5, 5, 5, 5,

5. Market shares for the second market are: 45, 7, 7, 6, 6, 6, 6, 6, 5. Therefore, the concentration ratios of both markets are similar: $CR_4 = 65\%$. It means that it is a tight oligopoly and antitrust authorities should initiate further investigation of the market. But if we calculate the HHI index of both markets, we shall get:

$$HHI \text{ market } 1 = 20^2 + 15^2 + 15^2 + 15^2 + 10^2 + 5^2 + 5^2 + 5^2 + 5^2 = 1300 \quad (6)$$

$$HHI \text{ market } 2 = 45^2 + 7^2 + 7^2 + 6^2 + 6^2 + 6^2 + 6^2 + 6^2 + 5^2 = 2364 \quad (7)$$

Concentration ratios for both markets are similar, but the HHI index says that the concentration for the second market is larger than the concentration for the first market. In the second market, the largest firm within the market achieves a dominant position that may cause unfair practices within the market. In the first market, four largest firms divide the largest part of the market, where the largest firm owns 20% of the total market share. The next table shows the results of the example.

Table 5. Example of measuring market structures

1 st market	Concentration ratios for the 1 st market	2 nd market	Concentration ratios for the 2 nd market
10 firms	Oligopolistic competition	10 firms	Oligopolistic competition
$CR_4 = 65\%$	Tight oligopoly	$CR_4 = 65\%$	Tight oligopoly
HHI = 1300	Unconcentrated market	HHI = 2364	Moderate concentration

Source: own calculations

The normalized Herfindahl index ranges from 0 to 1 and it is calculated as:

$$H^* = \frac{HHI \cdot \frac{1}{n}}{1 - \frac{1}{n}}, \quad (8)$$

where “ n ” is the number of firms in the market, “ H^* ” is the normalized Herfindahl index and “HHI” is the Herfindahl-Hirschman index.

The HHI index is sensitive to changes in the sizes of the largest firms in the market. For example, it increases if the largest firm gains 10% share at the expense of the second largest firm. Thus, if the relative size of the largest firms is an important determinant for the investigation, the Herfindahl index tends to be more useful than a standard n -firms concentrated ratio.

However, the index is directly dependent on a proper definition of a particular market. The key problems in defining the market is choosing a geographic scope or indicating the market with differentiated products. For example, industry of financial services may contain 6 largest firms with 15% market share. That situation may seem to be a non-monopolistic. However, one of those firms may handle 90% of the checking accounts (and overcharge for them because of its monopoly), and the others may primarily do commercial banking and investments. In this scenario, people would be suffering due to the market dominance by one firm. Another typical problem is connected with a geographic scope. For example, each firm may have 20% market share, but may occupy five areas of the country in which they would be monopoly providers. This factor is important for local businesses — for example, telemarketing services are rather global in scope, while shoe repair services are local.

2.1.5 The Coefficient of Variation (CV)

The coefficient of variation is another relative indicator for the measurement of market structures. It measures the standard deviation of Herfindahl index. The CV is used in case of large quantities of firms in the market. Generally, the coefficient of variation is a normalized measure of dispersion of a probability distribution or frequency distribution. The coefficient of variation is defined as the ratio of the standard deviation σ to the mean μ :

$$c_v = \frac{\sigma}{\mu}, \quad (9)$$

The absolute value of the CV can be calculated as a relative standard deviation (RSD), which expresses the variation as a percentage of the mean:

$$c_v \% = \left(\frac{\sigma}{\mu} \right) \quad (10)$$

The simplest statistic is the mean or average. For example, given the amount of profit for 5 years of a firm: 90, 80, 30, 80, 50, the mean or \bar{x} is $330/5$ or 66. The mean value characterizes the “central tendency” or “location” of the data. The values observed will show a dispersion or distribution about the mean, and this

distribution needs to be characterized to set a range of acceptable control values. The predictable dispersion or standard deviation (σ) can be calculated as follows:

$$\sigma = \sqrt{\frac{\sum(x_i - \bar{x})^2}{(n-1)}} \quad (11)$$

The next table shows the example of calculating the coefficient of variation for a market:

Table 6. Example of calculating the coefficient of variation

x_i	$x_i - \bar{x}$	$(x_i - \bar{x})^2$
90	24	576
80	14	196
30	-36	1296
80	14	196
50	-16	256
Total		
$\sum x_i = 330$	$\sum (x_i - \bar{x}) = 0$	$\sum (x_i - \bar{x})^2 = 2520$

Source: own calculations

Then,

$$\sigma = \sqrt{\frac{\sum(x_i - \bar{x})^2}{(n-1)}} = \sqrt{\frac{2520}{4}} = 25,099 \quad (12)$$

$$c_v = \frac{\sigma}{\mu} = \frac{25,0998}{66} = 0,3803, \text{ or } c_v \% = 38,03 \% \quad (13)$$

The coefficient of variation provides general results about the performance of a method. For example, coefficients of variation of 5 % or less generally give results as a good method performance, whereas coefficients of variation of 10 % and higher are estimated as bad results. However, before judging a coefficient of variation, the mean value should be carefully observed. Therefore, at low concentrations, the CV may be high, and otherwise, at high concentrations the CV may be low. However, it is very useful statistic indicator for comparing the degree of variation from one data series to another, even if the means are drastically different from each other, as far as it is a dimensionless number. That is why this coefficient is used for comparison data sets with widely different means instead of using the standard deviation. This is often the case if the values do not originate from a ratio scale. Moreover, unlike the standard deviation, it cannot be used directly to construct confidence intervals for the mean (Morasch, 2002)

2.2 Empirical Aspects

The analytical part of the paper shows the example of using indicators of market structures for the analyzed industry. For measuring market concentration were used primarily market shares for the selected stages of the dairy market, concentration ratios of four, six and eight largest firms (CR_n) and the Herfindahl-Hirschman Index (HHI).

In the *first stage* of the dairy market stays production of milk or “*raising of dairy cattle*”, which is classified according to the *Czech classification of economic activities* “CZ-NACE” to the section “A” number “01.41”. The result of the analysis is shown in the following table:

Table 7. Market shares for the first stage of the dairy market “raising of dairy cattle” (CZ-NACE, section A, number 01.41), 2012

	Name of a firm	ID number	Revenues (CZK)	Market share (%)
1	ALIMEX NEZVĚSTICE a.s.	25196049	188 818 000	20.30
2	NETIS, a.s.	25838938	147 868 000	15.90
3	Valašské ZOD, družstvo	47151641	72 191 000	7.76
4	Zemědělské družstvo MÍR se sídlem v Ratiboři	151246	72 071 000	7.75
5	Zemědělská a.s. Horní Bradlo	25995421	66 391 000	7.14
6	Ústav pro strukturální politiku v zemědělství, a.s.	25319515	61 211 000	6.58
7	ZEFA Volary s.r.o.	26074303	44 446 000	4.78
8	ZOD Poruba a.s.	47673516	42 649 000	4.58
	Total		695 645 000	74.78

Source: own calculations

Table 7 shows the concentration ratio of eight largest firms in the industry is 74.78 % (CR_8) from total revenues of the peer group. The concentration ratio of six largest firms is 65.42 % (CR_6), and the concentration ratio of four largest firms is 51.70 % (CR_4). The largest company in the industry is “ALIMEX Nezvěstice a.s.” the second largest company is “NETIS, a.s.”, the third largest firm is “Valašské ZOD, družstvo” and the fourth is “Zemědělské družstvo MÍR se sídlem v Ratiboři”. The smallest market share in the “big eight” belongs to the firm “ZOD Poruba a.s.” with its market share of 4.58 %.

There were registered 33 firms within the industry for the year 2012; eight largest firms were presented in Table 7. Total revenues of the industry were 930 214 000 CZK for the analysed year. The procedure of calculating the HHI index is as follows:

1. Identification of firms within the industry and its revenues;
2. Calculation of total industry revenues (930 214 000 CZK) according to the Equation 4: “ $\sum Si$ ”;
3. Calculation of each firm’s market share as it is presented in the Equation 2. For example, for “ALIMEX Nezvěstice a.s.” the market share is calculated as: $(188\,818\,000 \cdot 100) / 930\,214\,000 = 20.3\%$.
4. Calculation of the squared market shares of each firm. For example, for “ALIMEX Nezvěstice a.s.” the squared market share is: $20.3^2 = 412$;
5. Calculation of the sum of the squared market shares as it is presented in the Equation 5: “ $\sum Si^2$ ”.

Thus we have achieved the final value of the HHI index, which is 960.50. This value represents *unconcentrated market*. The concentration ratio of four largest firms reaches 51.70 %, and it highlights the existence of a *loose oligopoly* in the industry. According to the calculated indicators, the antitrust authority should not interfere in the industry “raising of dairy cattle” (CZ-NACE 01.41).

The *second stage* in the dairy market belongs to the industry “*wholesale of dairy products, eggs and edible oils and fats*”, which is classified by the Czech classification of economic activities “CZ-NACE” to the section “G” number “46.33”. The result of the analysis for the year 2012 is given in the following table:

Table 8. Market shares for the second stage of the dairy market “wholesale of dairy products, eggs and edible oils and fats” (CZ-NACE, section G, number 46.33), 2012

	Name of a firm	ID number	Revenues (CZK)	Market share (%)
1	UNILEVER ČR, spol. s r.o.	18627781	4 252 738 000	11.79
2	ALIMPEX FOOD a.s.	47115807	4 205 259 000	11.66
3	Lactalis CZ, s.r.o.	27132471	3 442 151 000	9.54
4	Mlékařské a hospodářské družstvo JIH	60647876	3 231 904 000	8.96
5	Mlékařské hospodářské družstvo Střední Čechy	61462501	1 785 321 000	4.95
6	MILKPOL, SPOL. S R.O.	62917897	1 697 308 000	4.71
7	Morava, mlékařské odbytové družstvo	60742780	1 569 172 000	4.35
8	VIAMILK CZ družstvo	64259439	1 323 609 000	3.67
	Total		21 507 462 000	59.64

Source: own calculations

As we can see from the Table 8, the concentration ratio of eight largest firms in the industry (the CR_8) is 59.64 % from total revenues of the peer group. The concentration ratio of six largest firms is 51.61 %, and the concentration ratio of four largest firms is 41.96 %. The largest firm in the industry is “UNILEVER ČR, spol. s.r.o.”, the second largest firm is “ALIMPEX FOOD a.s.”, the third largest firm is “Lactalis CZ, s.r.o.”, and the fourth largest firm is “Mlékařské a hospodářské družstvo JIH”. The smallest market share in the “big eight” belongs to the firm “VIAMILK CZ družstvo” with its market share of 3.67 %. The firm “UNILEVER ČR, spol. s.r.o.” was excluded from the analysis because a larger part of its revenues belongs to the production and sale of edible oils and fats. Wholesale of dairy products has no effect on the revenues of the firm.

There were 69 firms, which were registered in the industry in 2012. Total revenues of all firms within the industry including the firm “UNILEVER ČR, spol. s.r.o.” was 36 064 547 000 CZK in the year 2012. The procedure of calculating of concentration ratios and the HHI index for the second stage is similar as it was used in the first stage.

The HHI index for the industry “wholesale of dairy products, eggs and edible oils and fats” is 595. This value represents *unconcentrated market*. The concentration ratio of four largest firms reaches 41.96 %, and it

highlights the existence of a *loose oligopoly* in the industry. The concentration ratio of four largest firms without the firm “UNILEVER ČR, spol. s.r.o.” is 35, 2 %, which is less than 40 %. This value represents the existence of perfect competition or monopolistic competition within the industry. According to the calculated indicators, the antitrust authority should not interfere in the industry “wholesale of dairy products, eggs and edible oils and fats” (CZ-NACE 46.33) because its values indicate low concentration and high competition within the market.

The *third stage* in the dairy markets is the “*operation of dairies and cheese making*”, which is classified by the Czech classification of economic activities “CZ-NACE” to the section “C” number “10.51”. The result of the analysis for the year 2012 is given in the following table:

Table 9. Market shares for the third stage of the dairy market “operation of dairies and cheese making” (CZ-NACE, section C, number 10.51), 2012

	Name of a firm	ID number	Revenues (CZK)	Market share (%)
1	MADETA a. s.	63275635	5 064 080 000	15.44
2	Mlékárna Pragolaktos, a.s.	27133079	4 396 583 000	13.40
3	OLMA, a.s.	47675730	3 019 566 000	9.20
4	Danone a.s.	45272972	2 612 690 000	7.96
5	Mlékárna Hlinsko, a.s.	48169188	2 190 758 000	6.68
6	ORRERO a.s.	63319551	1 761 084 000	5.37
7	BEL Sýry Česko a.s.	60714603	1 269 475 000	3.87
8	Moravia Lacto a. s.	49969897	1 259 254 000	3.84
	Total		21 573 490 000	65.76

Source: own calculations

As we can see from the Table 9, the concentration ratio of eight largest firms in the industry (CR_8) is 65.76 % from total revenues of the peergroup. The concentration ratio of six largest firms is 58.05 %, and the concentration ratio of four largest firms is 46 %. The largest firm in the industry is “MADETA a.s.”, the second largest firm is “Mlékárna Pragolaktos, a.s.”, the third largest firm is “OLMA, a.s.”, and the fourth largest firm is “Danone a.s.”. The smallest market share in the “big eight” belongs to the firm “Moravia Lacto a.s.” with its market share of 3.84 % from total revenues of the industry.

There were 53 firms, which were registered in the industry in 2012. Total revenues of all firms within the industry was 32 807 129 000 CZK in the year 2012. The procedure of calculating of concentration ratios and the HHI index for the third stage is similar as it was used in the first stage. The HHI index for the industry “operation of dairies and cheese making” is 741 units. This value represents *unconcentrated market*. The concentration ratio of four largest firms reaches 46 %, and it highlights the existence of a *loose oligopoly* in the industry. According to the calculated indicators, the antitrust authority should not interfere in the industry “operation of dairies and cheese making” (CZ-NACE 10.51) because its values indicate low concentration and high competition within the market.

The *fourth stage* in the dairy markets is the “*retail sale in non-specialised stores with food, beverages or tobacco predominating*”, which is classified by the Czech classification of economic activities “CZ-NACE” to the section “G” number “47.11”. The result of the analysis for the year 2012 is given in the following table:

Table 10. Market shares for the fourth stage of the dairy market “retail sale in non-specialised stores with food, beverages or tobacco predominating” (CZ-NACE, section G, number 47.11), 2012

	Name of a firm	ID number	Revenues (CZK)	Market share (%)
1	Kaufland Česká republika v.o.s.	25110161	48 161 404 000	16.09
2	Tesco Stores ČR a.s.	45308314	44 192 000 000	14.77
3	AHOLD Czech Republic, a.s.	44012373	40 704 556 000	13.60
4	Penny Market s.r.o.	64945880	29 861 067 000	9.98
5	Lidl Česká republika v.o.s.	26178541	24 724 284 000	8.26
6	Globus ČR, k.s.	63473291	24 227 311 000	8.09
7	BILLA, spol. s r.o.	685976	20 546 437 000	6.86
8	SPAR Česká obchodní společnost s.r.o.	27207048	13 188 730 000	4.41
	Total		245 605 789 000	82

Source: own calculations

As we can see from the Table 10, the concentration ratio of eight largest firms in the industry (CR_8) is 82 % from total revenues of the peer group. The concentration ratio of six largest firms is 71 %, and the concentration ratio of four largest firms is 54 %. The largest firm in the industry is “Kaufland Česká republika v.o.s.”, the second largest firm is “Tesco Stores ČR a.s.”, the third largest firm is “AHOLD Czech Republic, a.s.”, and the fourth largest firm is “Penny Market s.r.o.”. The smallest market share in the “big eight” belongs to the firm “SPAR Česká obchodní společnost s.r.o.” with its market share of 4.41 % from total revenues of the market.

There were 437 firms, which were registered in the industry in 2012. Total revenues of all firms within the industry was 299 298 923 000 CZK in the year 2012. The procedure of calculating of concentration ratios and the HHI index for the fourth stage is similar as it was used in the first stage. The HHI index for the industry “retail sale in non-specialised stores with food, beverages or tobacco predominating” is 976. This value represents *unconcentrated market*. The concentration ratio of four largest firms reaches 54 %, and it highlights the existence of a *loose oligopoly* in the industry. According to the calculated indicators, the antitrust authority should not interfere in the industry “retail sale in non-specialised stores with food, beverages or tobacco predominating” (CZ-NACE 47.11) because its values indicate low concentration and high competition within the market. Similar results were presented in the article of Severová, L., Kopecká, L., Svoboda, R. and Brčák, J. “Oligopoly competition in the market with food products” where authors evaluated chain stores in the Czech Republic. They have evaluated ten most significant firms within the industry and none of the analyzed firms met the criterion of a dominant place in the market with market shares more than 40 %. Their analysis was proved by the shares of companies in the Czech food products market, where none of analyzed firms met the criterion of dominance in the market (Severová et al., 2011).

3. Results

The results of the analysis are presented in the following table, which illustrates calculated indicators for measuring dairy market structures.

Table 11. Market shares calculated for all stages of the dairy market, 2012

Industry (CZ-NACE)	Number of firms in the industry	The HHI index	CR_4 (%)	Type of a market structure
01.41	33	960,50	51.70	Unconcentrated market; Loose oligopoly
46.33	69	595	41.96	Unconcentrated market; Loose oligopoly
10.51	53	741	46.00	Unconcentrated market; Loose oligopoly
47.11	437	976	54.00	Unconcentrated market; Loose oligopoly

Source: own calculations

Table 11 shows that the HHI index is smaller than 1 500 for all stages of the dairy markets. Therefore, the values of the index indicate the existence of unconcentrated markets within the analysed industries. Concentration ratios calculated for the stages in the dairy markets are bigger than 40 % and these values indicate the existence of a loose oligopoly in the industries. The absolute number of firms in the industry is the largest in the case of “retail sale in non-specialised stores with food, beverages or tobacco predominating” (CZ-NACE 47.11) where there were 437 active firms in 2012. Generally, all stages have less than 70 firms. This means that evaluation of the market is located on the border between the oligopolistic and the perfect competition. The answer for the question whether a firm can control the market or not depends on the further analysis. However, indicators show a low concentration and a high competition within the market. It means that antitrust authorities should not interfere in industries and the best policy for the analyzed market is the *laissez faire* economics, which implies policy of minimum governmental interference in the economic affairs of individuals and society.

4. Discussion

There are absolute and relative indicators for measuring market structures. Absolute indicators are the simplest ones. If the absolute number of firms is extremely small (1-6 firms), we can assume the existence of imperfect competition in the market; if the absolute number of firms is high, then it is important to examine market shares before determining a market structure. It may happen that one of firms (or group of firms) will have a larger market share than any other firm, and thus may lead to the existence of oligopolies or monopolies in the market. Therefore, in addition to the absolute number of firms in the industry, there are relative indicators, such as: market shares; the Lerner index; the concentration ratio; the Hefindah-Hirschman index; the coefficient of variation.

The relative indicators were mentioned in the theoretical part of the paper. The most common indicators used by antitrust authorities are market shares, the concentration ratio and the Herfindahl-Hirschman index. The use of these indicators was presented in the practical part of the analysis for the Czech dairy market, which contains four stages: milk production; processing and pasteurization of milk; wholesale and retail of milk.

Measurement of market power and market concentration is essential in the issue of antitrust laws, and in further market analysis. The indicators determine a type of competition in a market, its calculation do not require a lot of data and difficult calculations. Not only indicators of measuring market structures, but also a careful market schemes, including an analysis of the biggest firms, customers, existence of substitutes and market effects of international trade are essential for the analysis of market structures. That is why further methods of strategical and financial analysis are also used before determining a type of a market structure.

Acknowledgments

This study is supported by the Internal Grant Agency of Faculty of Economics and Management, Czech University of Life Sciences Prague (Projects No. 20151024 – Models of spatial differentiation and their use in the markets for food production).

References

- Amoroso, L. (1954). The static supply curve. *International Economic Papers (English translation of Amoroso 1930)*, 4, 39-65.
- Department of Justice and the Federal Trade Commission. (2010). *Merger Assessment Guidelines (Horizontal Merger Guidelines U.S.)*. Retrieved from <http://www.justice.gov>
- Dickson, V. A. (1979). The Lerner index and measures of concentration. *Economics Letters*, 3, 275-279.
- Domowitz, I., Hubbard, R. G., & Petersen, B. C. (1986). The Intertemporal Stability of the Concentration-Margins Relationship. *The Journal of Industrial Economics*, 35, 13-34.
- Feinberg, R. M. (1980). The Lerner Index, Concentration, and the Measurement of Market Power. *Southern Economic Journal*, 46, 1180.
- Giocoli, N. (2012). Who Invented the Lerner Index? Luigi Amoroso, the Dominant Firm Model, and the Measurement of Market Power. *Review of Industrial Organization*, 41, 181-191.
- Herfindahl, O. C. (1950). *Concentration in the U.S. steel industry*. Unpublished doctoral dissertation. New York, NY: Columbia University.
- Hirschman, A. O. (1945). *National power and the structure of foreign trade*. Berkeley, California: CA University of California Press.
- Holman, R. (2007). *Mikroekonomie – středně pokročilý kurs* (2nd ed.). Praha: C. H. Beck.
- Mankiw, N. G. (2012). *Principles of Microeconomics* (6th ed.). Cambridge: Harvard University.
- Morasch, K. (2002). *Wettbewerbspolitik und Regulierung*. München: Oldenbourg Verlag.
- Office for the Protection of Competition. (2014). *Office for the Protection of Competition*. Retrieved from <http://www.uojs.cz>
- Samuelson, P. A., & Nordhaus W. D. (2013). *Economics* (19th ed.). Praha: NS Svoboda.
- Severová, L., Kopecká, L., Svoboda, R., & Brčák, J. (2011). Oligopoly competition in the market with food products. *Agricultural Economics*, 12, 580-588.
- Úplné Znění. (2014). *Zákon č. 143/2001 Sb., o ochraně hospodářské soutěže (Act no. 143/2001 Coll., On Protection of Competition)*. Retrieved from <http://www.ins.sagit.cz>
- U.S. Census Bureau. (2009). *American Community Survey*. Retrieved from http://www.census.gov/acs/www/data_documentation/2009_release/

Copyrights

Copyright for this article is retained by the authors, with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

On the Teaching Management Mode of Sino-foreign Educational Cooperation Program in Higher Vocational Colleges

Zhang Li¹ & Lu Yang¹

¹ Nanjing Institute of Industry Technology (NIIT), Nanjing, China

Correspondence: Zhang Li, Nanjing Institute of Industry Technology (NIIT), Nanjing, China. E-mail: 915808642@qq.com

Received: May 10, 2015 Accepted: June 9, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p316

URL: <http://dx.doi.org/10.5539/ass.v11n21p316>

Abstract

In order to further standardize the management of Sino-foreign cooperative education, to improve the co-education quality, a guiding principle has been established in the "Regulation of the People's Republic of China on Chinese-foreign Cooperative Education", which is "opening wider to the outside world, running and managing the co-education programs according to the law, and promoting the development of co-education" (Sino-foreign cooperative education assessment program). The Ministry of education mainly mentioned the quality guarantee system in the process of Sino-foreign cooperative education institution, teaching quality guarantee system is the key process to the feasible evaluation. This paper, based on its author's own experience of managing the Sino-foreign cooperative education program, gives her thought on how to improve the management of sino-foreign co-education. With China's accession to the world trade organization, opening to the outside world has entered a new stage. How to cope with the internationalization trend of China's higher education is an unavoidable and must-considered question (Cai, 2002). As a supplement of China's higher education form, Sino-foreign cooperative education has obtained fast development in our country. To do well in the construction of the international cooperation program, there are a lot of work to do, among which the most important thing is to do well in teaching management. For Sino foreign cooperative education program teaching management has its own characters, we must build appropriate teaching management system and management model.

Keywords: Sino-foreign educational cooperation program, internationalization of education

Sino-foreign cooperative education improves schools' reputation and influence. Based on the previous experiences, we constructed a teaching management system and mode, which played an effective way in running Sino-foreign education programs. By Sino-foreign cooperative education, through our connection with the cooperative schools overseas, we can expand our international influence and reputation (Bai & Zhang, 2005).

1. Construct Teaching Management System of Sino-Foreign Cooperative Education Programs

NIIT has 9 years experience of running Sino-foreign cooperative education in 9 associate degree programs of mechanical engineer and automation, electronics, films and animation, international business, tourism and hotel management with Wigan & Leigh College, Selkirk College, and Sunderland College. Currently, we have 1000 Sino-foreign students. And we provide lots of high-skilled talents.

1.1 Introduce High-Quality Resources, Make Unique Cultivation Plan and Curriculum System of Sino-Foreign Cooperative Education Program

Take our cooperation with Wigan & Leigh College for example, we cooperated to cultivate international high-skilled talents majored in mechanical manufacturing and automation, IT, applied electronics, etc. In this program, some of the professional courses are undertaken by school of mechanic engineer, school of electronics and recourses, and school of Computer science, Bi-lingual courses and English are taught in International Education College.

In this program, students can both have certificate of our school and Wigan & Leigh College. On the one hand, we employed a full set of BTEC related professional curriculum system, teaching mode and teaching materials, to meet the requirements of Wigan & Leigh College; on the other hand, we also employed NIIT-featured courses to optimize the cultivation program. Sino foreign cooperative education program is to introduce the high-quality

educational resources, high-quality courses and advanced teaching concept from outside. we need to perform our teaching procedure on strict accordance with the teaching plan and organize the implementation of teaching training program. The reasonable arrangement of courses, seminars, presentations and practices are all necessary; According to the regulation, the imported core courses taught by foreign teachers should at least account for 1/3.

The program mainly employed BTEC (British business and Technology Education Council) course system, teaching outline, teaching requirements and materials for bilingual teaching. Teachers from Wigan & Leigh college also took part in the teaching procedure. We use very flexible cooperative teaching methods. And students can use any of the following ways to complete their studies:

- (1) After finishing three-year study in our school, students can obtain diploma from our school and from Wigan and Leigh college;
- (2) After two-year in our school, and then study in England for another year to get diplomas from both schools; or study in England for two years to get a bachelor's degree .

For those with outstanding achievements, they can also study at University of Central Lancashire, The University of Salford, or University of Manchester for master degree. In addition, we also signed a cooperation with the University of Sunderland. The school admitted student's credit from our school. And our graduates can enjoy scholarships for bachelor or master degree.

In the process of Sino foreign cooperation in English teaching in recent years, we employed small-class teaching and interactive teaching, with foreign teachers responsible for the training of students' communicative competence, Chinese teachers responsible for English grammar, to strengthen students' listening, speaking, reading and writing competence. In senior years, we employed full English teaching materials and bilingual teaching method, so that the students can meet requirements of further study abroad.

1.2 Strengthen the Quality Control of Teaching Process in Chinese-Foreign Cooperation

A quality control monitoring system is necessary in Teaching management and severance to ensure the teaching quality. Teaching management mainly includes the following several points:

- (1) Strengthen the teachers' teaching quality evaluation

Firstly, we should strengthen the teaching management and quality control of foreign teachers. We set up an engineering program department in cooperation with Wigan & Leigh college, whose leader is responsible for evaluating the foreign teachers' classes, in order to arouse the working enthusiasm of them, and to ensure the teaching quality. In evaluating the foreign teachers, we need a clear division of labor and strengthen the management on the basis of the rules and regulations. At the same time, we pay attention to the management of teaching process, the foreign teacher need to keep records and submit "traces" to our school, with textbooks and teaching syllabus, assignments as a quantitative evaluation index. Those who work hard and have high teaching quality will be given recognition awards.

Secondly, the Bilingual Teachers of our school are also evaluated. We established and perfected the supervision system, inspecting and evaluating teachers' teaching attitude, teaching content, teaching notes, skills, bilingual abilities, etc. at the end of the semester, teachers teaching Bilingual courses are required to submit the bilingual lecture notes, teaching courseware and student work. Once passed the evaluation, they will be given 1.5 coefficient of workload. In a word, the teaching supervision system improves teaching quality in a positive way.

Finally, we need to strengthen the supervision of teaching quality of all related teachers in this program. Relevant departments and schools are responsible for the teaching quality evaluation of teachers teaching in this program. A program leader is designated to take charge in the daily management. Teaching evaluation groups are formed by deputy dean of each department or school and employee in IEC to do the supervision and inspection of the daily operation. IEC will inspect and supervise the process by irregular teaching inspection, discussion, questionnaires and other forms of examination.

The establishment of student evaluation of teaching quality monitoring system is also an important way. Every semester the students held a forum to listen to the views of students. The contents of the forum are to reported to the relevant leaders, and timely feedback to the teachers through the program directors, to help teachers to overcome the weaknesses, and constantly improve the level of teaching.

The standard documents, lesson plans, teaching process, homework and exercises, performance evaluation, printing papers, examination qualification, examination organization, the preservation of papers of the imported curriculum and the core curriculum are all strict with implementation of norms of NIIT.

- (2) Establish the corresponding rules and regulations

In order to reflect the characteristics of the cooperation, Teaching management rules and regulations of Sino-foreign cooperation are all in two versions-Chinese and English, which is convenient for both teachers to understand and carry out. We establish the regulations and teaching management of foreign teachers. As a cooperative education program, which has its own characteristics, great changes have taken place in the school level in structure and mode, which needs to develop sound rules and regulations to restrict and regulate the teaching management. In the implementation of the teaching task, the department contact persons need to communicate with Wigan & Leigh College to discuss about the curriculum, teachers arrangement and schedules, to ensure the smooth implementation of the teaching procedure.

(3) We need to organize students to participate in provincial, national, and world-class skills competition to improve the students' practical ability, to expand the students knowledge and on-the-spot emergency handling ability, to cultivate students' team spirit and creative and enterprising spirit, and to improve the students vocational adaptability; We need to organize industry experts or professors to give lectures to the students to let them understand the latest information and dynamic knowledge, to cultivate students' individuality development and innovation ability.

2. Problems of Sino-Foreign Educational Cooperation Program

2.1 Teaching Evaluation System of Management Is Not Perfect

As a quality management tool, Sino-foreign cooperative education evaluation system has the functions of good guidance, encouragement, supervision of the audit. With these functions, teaching quality assurance system continue to affect the teaching qualities. Sino-foreign cooperation programs has not yet established completely a teaching management system with teaching evaluation-oriented, and cannot meet the needs of different methods of teaching evaluation. Therefore, we should establish an effective and practical evaluation system. Especially in the school management, western countries emphasize process management. Credit system management of Sino-foreign educational program should be in line with international standards. At the same time, the educational administration of the Sino foreign cooperative education should be gradually incorporated into the standard range of full-time students. This is a powerful guarantee for the successful running of Sino- foreign cooperation (Chen, 2005). Student achievement assessment is composed of many factors, performance appraisal should pay attention to the homework and social practice, and have detailed records. If the students take part in the whole learning process, and are qualified, then he mastered the basic professional knowledge (Wang & Zhang, 2009).

2.2 Problems of Teaching Faculties

The building of the contingent of qualified teachers proficient in English is a problem to be solved urgently.

For the foreign teachers: in the current cooperation programs, a large amount of foreign teachers are needed. The employment procedure is too simple, and some not so qualified foreign teachers may be employed. And foreign teachers may not stay for a long time, which may lead to the problem of lack of consistency. The solution to the problem is that to strengthen the management of foreign teachers.

For the Chinese teachers: the bilingual teaching of professional teachers has just started, and teachers are not so fluent in speaking English. Although we have carried out multi-level teacher exchanges and visits, but the number of teachers to go abroad for further study is still small, most of the teachers are lack of international education, and their English level is low, which cannot meet the requirements of bilingual teaching. In the real teaching process, we are facing the problems of having to employ the bilingual teachers from other schools temporary, which may bring other problems. To solve these problems, we need to employ those who are excellent in both English and professional field to be our bilingual teachers. They should have two abilities: one is cooperative ability; the other is learning ability. They can learn from others and improve themselves. In the process of cooperation, teachers can communicate with each other; in addition, we can send teachers to go abroad to study and experience foreign higher vocational education environment, teaching philosophy and methods.

2.3 Problems of Teaching Materials

At present, there are problems of lacking of teaching materials of bilingual courses and IELTS teaching. Most of the foreign teachers did not bring the appropriate teaching materials. It is important to employ original English teaching materials to implement bilingual teaching. On the one hand, the original teaching materials improves abilities in an orderly way and step by step; On the other hand, learning advanced concepts of original materials can improve the domestic teaching materials.

2.4 Problem of Academically Poor Students

Most of the students enrolled by IEC are academically poor. Their scores in the national entrance examination are relatively low. Although we provide teaching assistant for foreign teachers, students' level are different. Therefore, according to the students English level and objectives, hierarchical teaching have also started be implemented in top-up program.

2.5 The Old Talent Cultivation Plan Is not Suitable for the IEC; the Introduction of High-Quality Resources, Reasonable Curriculum Is the Key to Educational Cooperation

The current talent cultivation plan for the majors in IEC is not perfect for the students and the requirements of the cooperative partner. It is not appropriate to simply add English course to the curriculum. Small class teaching plus the original curriculum cannot solve the problem. The curriculum is the key of Sino-foreign educational cooperation. We need to integrate foreign standards with China's education policy, learn from each other, and optimize the talent cultivation plan.

3. Teaching Quality Assessment of the Sino-Foreign Cooperative Educational Program

3.1 Construction of Teachers

First, IEC would form a relatively stable teaching group by employing outstanding teachers from other departments. The relevant departments arrange outstanding Chinese teachers to undertake the teaching, ensure the teaching quality, and receive teaching quality evaluation and examination regularly. The construction of professional personnel need to select and cultivate teachers, and employ overseas talents, including senior management personnel in Sino-foreign cooperative education field.

Second, we would strengthen bilingual teacher training. By sending teachers aboard, in-service education and other forms, to promote teachers to continuously improve the level of foreign language, to undertake the task of bilingual teaching. Establish a long-term contract so that the teachers can visit cooperative schools.

Third: foreign language teachers should have a bachelor's degree or above and the corresponding occupation certificate, and have the basic requirements of more than two years of experiences; Cooperation schools should send a certain number of excellent teachers to teach in the Sino-foreign cooperative education program.

Fourth: foreign teachers should abide by the contract, to ensure teaching quality. If the teachers teach outside the campus without approval and affect the teaching quality, IEC has the right to terminate the contract. For those who are not well-received by the students or evaluation supervisors, and lack of sense of responsibility, IEC also has the right to ask the foreign cooperative institutions to appoint new foreign teachers.

Fifth: foreign teachers should serve the Sino-foreign cooperative education program.

Foreign teachers need to teach at least 12 hours a week. And they are encouraged to give reasonable advises in curriculum setting and teaching arrangements. They are also encouraged to participate in social activities or other activities arranged by the school.

3.2 Archives Management

We need to manage various original teaching documents of Sino-foreign educational program.

3.3 Set Up a Sino-Foreign Cooperative Education Program Curriculum Resources Platform

For a Sino-foreign cooperative education program, curriculums should be able to reflect the characteristics of Sino-foreign education cooperation, to introduce real high-quality courses from outside, to introduce advanced textbooks and materials. The introduction of educational resources should have good effect and radiation effect on our school. Occupation qualification and technical level certification introduced to our school will encourage students to obtain various technical qualification certificate, and enhance their technical ability and employment competitiveness. We will set up a curriculum resources platform for Sino-foreign cooperative education program, including the introducing VLE (virtual network) learning resources, sharing image samples of all courses, samples of students' assignments and textbooks.

3.4 The Social Effect and Characteristics of Sino-Foreign Education Cooperation

The benefits of cooperation between China and foreign countries are comprehensive, including employment rate of students in Sino foreign cooperative education program; students evaluation from their companies and from society. Sino foreign cooperative education programs should have characteristics in the teaching organization, course system, teaching methods, teaching content, teaching management and other aspects, reflected in the running mode, management mode, and cultivation mode.

4. Conclusion

Internationalization is the route one must take to build a domestic first-class and world-renowned vocational college. It is not only the inevitable choice to deepen the connotation construction, content development process, but also a long-term asymptotic, with significant, overall, and profound influence. To improve the Sino-foreign cooperative education level and strengthen the management, quality assurance system is the key. Therefore, the establishment of a quality management system in Sino-foreign cooperative education program is imperative.

References

- Bai, L., & Zhang, C. (2005). On the Sino foreign cooperative education under the background of higher education internationalization. *Liaoning education research*, 12.
- Cai, Y. (2002). The Influence of globalization on Higher Education - on the international Education Cooperation. *Education Development Research*, 22(6).
- Chen, S. (2005). Exploration and Thinking on the management mode of Sino foreign cooperative education. *Higher education research of Science and Engineering*, 3.
- Sino-foreign cooperative education assessment program (for Trial Implementation).
- Wang, J., & Zhang, W. (2009). The exploration of the management mode of Sino-foreign cooperation in higher vocational colleges. *Occupation Technology Education*, 12.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Forms and Mechanisms of Public-Private Partnerships in Innovative Modernization of the Western Europe Economies

Elena N. Zakharova¹, Aleksander A. Mokrushin¹, Anzhela R. Pshizova¹, Saida A. Khatukay¹ & Svetlana K. Chinazirova¹

¹ Adyghe State University, Russian Federation

Correspondence: Elena N. Zakharova, Adyghe State University, 208, Pervomajskaja st., Maikop, 385000, Russian Federation. E-mail: zahar-e@yandex.ru

Received: February 25, 2014 Accepted: March 18, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p321

URL: <http://dx.doi.org/10.5539/ass.v11n21p321>

Abstract

The main purpose of the article is to review the contemporary forms and mechanisms for financing of public-private partnership (PPP) in the context of a new innovation policy of the European countries. The authors reveal the essence and specific features of PPP in innovation sector, and provide a comparative characterization of direct and indirect mechanisms for PPP financing. The authors analyze the innovative development of the EU countries and divide them into several groups depending on their innovation performance. The performed analysis led to the conclusion that the economic crisis and the slow pace of economic redevelopment have a negative impact on the innovation-driven growth of the EU countries. The authors conclude that the decrease in the volume of public resources may have a negative impact on R&D budgets in the EU member countries. Solution to social and economic problems will require a technological breakthrough. To this end, the governments of European innovation-active countries held a "new course" for innovation policy, including the priorities for the development of national systems of innovation measures to enhance and improve the mechanisms for financial support of innovative entrepreneurship.

Keywords: public-private partnership (PPP), R&D spending, testing and evaluation, debt finance, tax incentives, state funding, government and business cooperation forms, innovation policy

1. Introduction

In an open global economy, competitiveness relies on business capacity to create high value-added goods and services. One of the main challenges, facing the economies of the European countries, is the modernization of their industrial base by accelerating innovation. Industrial modernization in Europe requires the successful commercialization of products and services, innovation, and commercial exploitation of innovative production technologies and processes, as well as innovative business models (Butova, Ragulina, & Krivtsova, 2013).

Innovation is an important driver and its importance has become even more significant in recent years. Huge innovation potential can play a critical role not only in economic redevelopment of the country after the crisis, but also to ensure sustainable economic growth (European Commission, 2013).

Innovation development is reflected in official documents of both external and internal strategic planning of Western European countries.

In June 2010 heads of states and governments endorsed the European strategy for 2020, which aims at targeting the European economy. One of the selected targets under the EU strategy "Europe-2020" is focused on the research and innovation. In this regard, the "Europe-2020" highlights three complementary priorities (European Commission, 2010):

-Smart growth: economy development based on knowledge and innovation;

-Innovation: improving the framework conditions and access to finance for research and innovation in order to strengthen the innovation chain and increase the level of investment throughout the EU as part of "Innovation Union" initiative;

-Inclusive growth: development of innovative capacity in European countries, improvement of education outcomes and quality, and use of the economic and social benefits of a digital society.

Important role in innovation policy of the European countries is given to the development of public-private partnership to create new and modernize existing production facilities. Public-private partnership can improve the efficiency and sustainability of public services, such as water supply, sanitation, energy, transport, telecommunications, health, and education. Public-private partnership also allows for a more efficient allocation of risks between the public and private sector organizations, taking into account their ability to manage these risks (World Bank Institute, The WB and Public-Private Infrastructure Advisory Facility (PPIAF), 2012).

2. Methodology

2.1 The Essence and Forms of the Public-Private Partnership Implementation

Currently, there is no unified globally accepted definition of the term "public-private partnership". Sometimes it is used to refer to any association of public and private sectors to achieve public policy goals. The World Bank defines public-private partnerships as a "long-term contractual agreements between the government agencies or authorities and private person to create a state-owned assets or deliver services, wherein a single party bears a significant risk and leadership responsibility» (Posner, Shin Kue Ryu, & Tkachenko, 2009).

In general, public-private partnership describes a project to provide public services or goods that are financed and implemented on a contract basis in the framework of partnerships between government and private business or non-profit enterprise.

Public-private partnership is characterized by the following main features (Seleznov, 2012):

- The parties of the partnership should be represented by both the public and private sectors;
- The relationship between PPP parties should be filed in official documents (agreements, contracts, etc.);
- The relationship between PPP parties should base on partnership and be of equitable nature;
- The parties should have common goals and clearly defined interest;
- The parties should join their contributions to achieve common goals;
- The parties should share the risks and costs, as well as be able to use the results obtained.

There are several means of communication between the state and the private sector. These means can range from privatization, where proprietorship and risks are transferred to the private sector, to conventional procurement models, where government contracts with the private sector are made for individual work or service packages. Normal procurement in the public sector, as a rule, involves risks, associated with the ownership, operations and integration of services. As a rule, public-private partnership does not include service contracts or contracts for the "turnkey" construction, which belong to the category of public procurement projects, or privatization of public enterprises, where the state is constantly represented. However, it should be noted that vertically integrated corporations play a dominant role in the development of territorial economic systems. In many instances, vertically integrated corporations are making a decisive contribution to the formation of territorial budgets, investment attraction, filling local markets, and the development of social and economic infrastructure (Mokrushin, 2011). In this context, forms and methods of public-private partnership with major corporations are in-demand.

Depending on the nature of collaboration and risk sharing between the public and private sectors in the accomplishment of innovative projects, public-private partnership may take a variety of forms. Stage of involvement of the private sector is fixed in the contract or agreement, which also defines the responsibilities of each of the parties and clearly distributes risks. Comparison of the main cooperation forms between government and business is presented in Table 1.

Table 1. Comparison of the main cooperation forms between government and business in the framework of PPP

PPP form	Ownership of assets	Operation and Maintenance	Investments	Commercial risk
Service contract	State	State and private sector	State	State
Management contract	State	Private sector	State	State
Concession	State	Private sector	Private sector	Collective
Lease agreement	State	Private sector	State	Collective

Depending on the final effect and the initiator, four main cooperation forms between the innovative partnership actors can be identified: adoption of technologies, support of demand, concentration of resources, and shopfloor initiative (Sudas & Koryakina, 2014). General characteristics of these cooperation forms are presented in Table 2.

Table 2. Cooperation forms between the public and private sectors in scientific and technological innovation

Form of interaction	Initiator	Final effect
Adoption of technologies	State (State research institutions)	Contract with the "consumer", which adopts the technology, developed at the expense of the state budget
Support of demand	State	Development and/or adoption of technology, important from the state's point of view, with account of business resources and needs
Concentration of resources	State	Intensification of network relationships within the cluster
Shopfloor initiative	Business	Cooperation of public research organizations with private companies that results in the update of the state resource base and practical knowledge about the industry, as well as in the scientific and technical outcomes and professionals training in private companies.

In most countries, the technologies are assimilated based on commercialization and transfer of those ones, which were developed at the expense of the state budget (the sale of patents and licenses, belonging to public research institutions). In addition, this cooperation principle is evidenced when creating companies based on university research and development (spin-off companies).

Cooperation model called "Support of demand" is realized mainly when implementing joint innovation projects, in which the government pursues a goal to achieve the public interest and supports only the priority innovation areas. At that, business gets state support only at the initial R&D stages.

Contradictory interaction of globalization and localization trends results consequently in the formation in the regions of trans-regional territorial industrial clusters and inter-industry structures, integrated horizontally and vertically. These structures provide integrating of local structures into broader reproductive systems, namely inter-regional, national, cross-country, and global systems, and transform regions into world economy business entities (Kerashev & Mokrushin, 2011). Cooperation model "Concentration of resources" is characterized by the creation of clusters and network structures using mechanisms of public-private partnerships. Cluster policy is becoming increasingly common in Western Europe and is focused on supporting of market dynamics and the knowledge exchange between companies and other organizations in the region, as well as in the international value chain of the global networks.

2.2 Financing Mechanisms for Public-Private Partnerships

Business is the main driver of innovation, though as a rule, it is involved in R&D to differentiate from the competitors, to be more successful and increase profits (Kondratyev, 2013). However, the costs and uncertainty of R&D works, as well as the time required to obtain a return on investment, and the likelihood that competitors can steal the obtained research results, reduce business incentives for the development of innovation.

Encouragement of innovative entrepreneurship and creation of conditions for its development is effected through various state mechanisms, including grants and subsidies; debt and participatory finance, and innovation vouchers.

Government finances innovative business through a combination of direct and indirect mechanisms. Direct funding allows governments to form a specific platform for R&D and focus necessary efforts toward projects involving high social returns, though have low profitability, such as "green" technology, i.e. social innovation.

Direct financial support is carried out through public procurement mechanism for R&D, as well as a variety of grants, subsidies, donations, debt and participatory finance, and innovation vouchers.

Grants and subsidies are the most common financing instruments, which are used as seed funding for start-ups and innovative small and medium-sized enterprises (SMEs). They are provided on a competitive basis and in some cases under the terms of private co-financing. Usually, no payoffs are required. Here, the Central Innovation Program for SMEs (Germany) may serve as an example.

The debt finance mechanism includes loans, returnable grants and loan guarantees. Key features of debt finance of innovative business are presented in Table 3.

Table 3. Key features of debt finance of innovative business

Financing instruments	Key features	Examples of some countries
Loans	Certain types of collateral or surety commitment are required. Obligations as debt repayment. The investor /creditor does not receive shares.	Novallia (Belgium), High-Tech Grflnden'onds (Germany), Public Investment Bank (France), British Business Bank
Returnable grants	Return grants must be repaid, partially or completely, sometimes in the form of royalties. May be granted on the basis of private co-funding.	Returnable grants for start-ups (New Zealand)
Loan guarantees and risk-sharing mechanisms	Is widely used as an important tool to alleviate financial difficulties for SMEs and start-ups. In the case of an individual assessment of loans, company's credit information is sent to the bank. Often used in conjunction with the provision of additional services (for example, information assistance, training).	Mutual guarantee schemes (Confidi, Italy), R&I loan services (European Commission), business finance, (Parinership, UK)

The participatory finance tools include: participation in home equity, mezzanine financing, venture capital and funds, and business angels (Kutlaca & Radosevic, 2011). Key features of participatory finance of business innovation are presented in Table 4.

Table 4. Key features of participatory finance of business innovation

Financing instruments	Key features	Examples of some countries
Nonbank financing / owner's equity	New financing channels. Innovative lending of platforms and nonbank debt and participatory finance.	Business, finance, and partnership (UK)
Mezzanine financing	Combination of several financing tools with varying extent of risk and return, which includes elements of debt and equity capital as a single investment tool. It is used at a further stage of enterprise development. More suitable for SMEs with a strong financial position and a moderate pace of increase.	Guarantees for a mezzanine investments (Austria), Ouriertransform (Sweden).
Venture capital and funds	Funds provided by institutional investors (banks, pension funds, etc.) will be invested in the company at the early stages of the expansion. As a rule, more funds are invested in the later less risky stages. They are called the "patient" capital due to the long period of return (10-12 years). The investor gets capital share.	Scottish Co-Investment Fund (UK), Seed Fund (Finland)
Business angels	Provide funding, expertise, and monitoring. As a rule, are invested in the form of groups and networks for early stage start-ups.	Seraphim Fund (UK); IQ Capital Fund (UK); Eurofund (Germany); Inventech (the Netherlands)

The mechanisms of indirect public funding include the following (Farquharson, Torres de Mästle, & Yescombe with Encinas, 2011):

- The corporate income tax incentives. Is used in most countries. It is characterized by a wide range of taxation mechanisms of corporate income tax, including tax incentives for R&D spending, and more rarely tax incentives for IP. For example, SR&ED tax credit (Canada), R&D Tax Credit (France), exemption from income tax on wages (the Netherlands), and the patent box (UK).
- Personal income tax (PIT) and other tax incentives. Are available in many countries. A wide range of tax incentives for R&D, business investments and income that are subject to PIT (value added tax or other taxes, such as consumption, land, or property tax, etc.)

Tax incentives allow one to reduce the R&D spending and innovation costs. Usually, they tend to be more neutral than the direct support of industry, region or company, although this does not exclude some differentiation, often in terms of the company size. Direct subsidies are more focused on long-term research and

R&D. Tax schemes more often encourage short-term applied research and increase incremental innovations, rather than radical breakthroughs.

3. Results

During the period of 2003-2012 gross domestic R&D spending of EU Member States increased by 1.3 times and amounted to 281.9 bln US dollars (Figure 1).

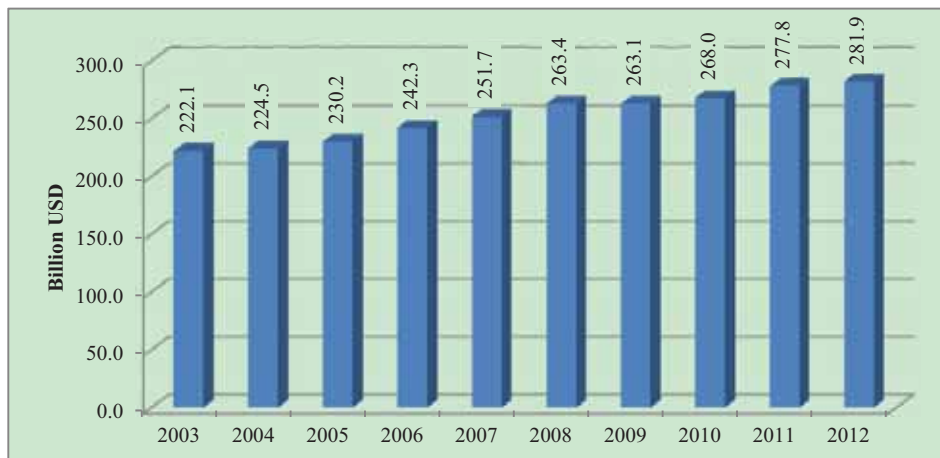


Figure 1. Gross domestic R&D spending in the EU Member States during 2003-2012 (OECD, 2015)

In general, the R&D spending in EU states accounts for 2.02% of GDP (Eurostat, 2014).

The most significant R&D spending in overall GDP is observed in the Nordic countries (Denmark, Finland, and Sweden), as well as in Austria, Germany, and Slovenia (Figure 2).

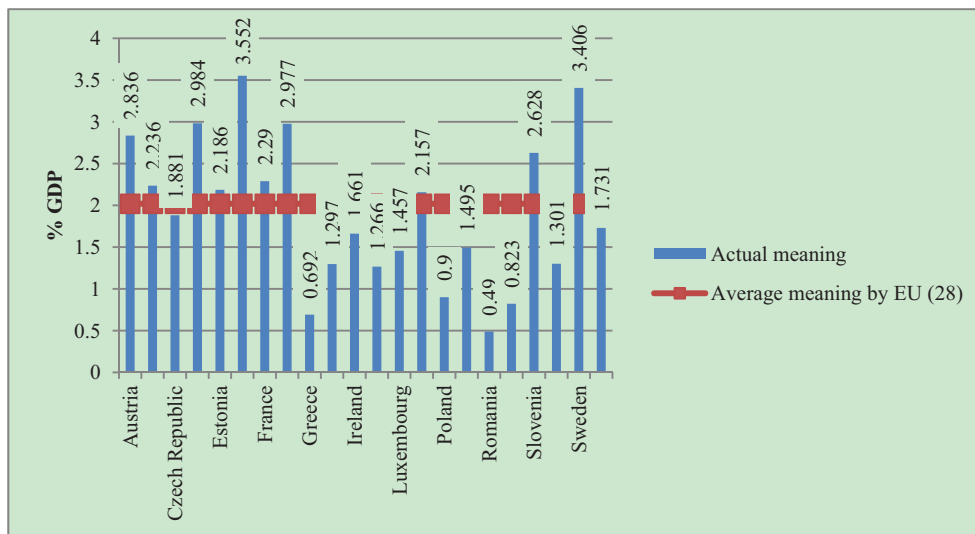


Figure 2. Proportion of gross internal R&D spending

The share of the business sector accounts for 54.9% of total domestic R&D spending. Public funding of R&D ranges from 10 to 20%.

In general, public funding of R&D and innovation has increased over the period of 2006-2013, both in real terms and as a percentage of GDP. In general, during the eight-year period the average annual growth rates of innovation in the EU countries reached 1.7%.

All EU Member States have improved their innovation activity. The growth has been particularly noticeable in Belgium, Estonia, Ireland, and Slovenia, where direct support and tax incentives for businesses ensured almost double increase since 2006. The lowest innovation growth rates were observed in Sweden, the UK and Croatia (Kroll & Stahlecker, 2013).

In 2009, many countries experienced a sharp increase in government funding, though over a short period of time. This was caused by the fact that innovation has been an important part of the economic redevelopment package. State budgetary appropriations or spending on R&D (GBAORD) rose by about 9%.

Most of investments were directed into infrastructure and businesses (credit guarantees to small businesses, the return on R&D tax credits, government procurement, etc.) (European Commission, 2013b). This partially compensated the decrease in enterprises expenditures. For this reason reduction of the total amount of R&D spending in 2009 was not as great as it could be otherwise. However, in 2010 and 2011, as the budgetary constraints were hardened, many countries began to slow down or reduce their spending on R&D (in 2010 GBAORD OECD index decreased by about 4%). The most significant curtailment of spending occurred in France, Finland, Spain and the UK.

Depending on the innovation activity indicators, EU Member States are divided into four groups in terms of their efficiencies:

-Denmark (DK), Finland (FI), Germany (DE) and Sweden (SE) are "Innovation leaders" with innovation activity higher than the EU average;

-Austria (AT), Belgium (BE), Estonia (EE), France (FR), Ireland (IE), Luxembourg (LU), the Netherlands (NL), Slovenia (SI) and the United Kingdom (UK) are "Innovation followers" with innovation activity higher or equal to the EU average;

-The innovation activity in Croatia (HR), Czech Republic (CZ), Greece (EL), Hungary (HU), Italy (IT), Lithuania (LT), Malta (MT), Poland (PL), Portugal (PT), Slovakia (SK) and Spain (ES) is lower than that of the EU average. These countries are "Moderate innovators";

-Bulgaria (BG), Latvia (LV) and Romania (RO) refer to a "Modest innovators", innovation efficiency in these countries is much lower than the EU average.

Sweden is the leader in terms of innovation system efficiency and steadily occupies the first position in the overall EU ranking. It is followed by Denmark, Germany and Finland. The most innovative countries work better than others in all areas: from research and innovative developments to innovation outputs and cost advantages, which reflects the balance of the national science and innovation system (European Commission, 2013c).

Innovation followers are next to innovation leaders. They are characterized by small deviations from the established investment efficiency criteria. This means that the effectiveness of innovation leaders (Sweden, Denmark, Germany, and Finland) differs just slightly. Innovation leaders are mainly on the upper level and definitely above the EU average (Figure 3).

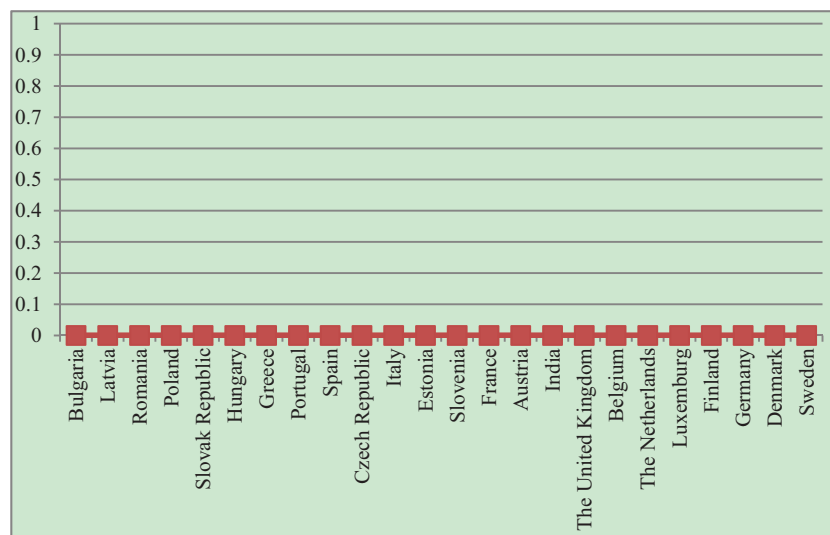


Figure 3. Innovation index (SII) of the EU Member States at the end of 2013 (Garcia Porras, Nicklas, & Jerzyniak, 2014)

However, some other countries achieve the best results in specific individual indicators. Thus, Sweden, Finland, Ireland, and the United Kingdom have a better appreciation of human resources. Denmark, the Netherlands,

Sweden and the United Kingdom have reached the top position in terms of transparency and efficiency of their scientific research system.

Estonia, Finland, Sweden, and Denmark topped the ranking in terms of financial support for innovation. Sweden, Germany, Finland, and Slovenia took first place with respect to investment campaigns. Denmark, the United Kingdom, Belgium, and Sweden are among the top countries in terms of cooperation with business. Denmark, Austria, Germany, and Sweden have reached the top position in relation to intellectual assets. Ireland, Germany, Luxembourg, and Denmark have achieved high performance and good economic impact of innovation.

Innovation activities in Sweden showed steady growth until 2012. However, there was a slight decline in 2013 primarily due to the reduction of venture capital investment. As compared with the EU average, innovative performance in Sweden for the entire period reduced from 148% in 2006 to 135%.

Innovation activity of Denmark has significantly decreased in 2008 (in particular due to a lower share of innovative products and innovative processes, marketing and/or organizational innovators, and innovative SMEs). Despite the subsequent increase in productivity, Denmark failed to reach the level of 2008 (40% above the EU average); at the end of 2013 its innovation index was just 32%.

The relative advantages of Denmark as compared to the EU average concern international scientific collaborative research, public-private partnership, the design of production prototypes, as well as R&D spending in the business sector. Though, in terms of a total number of PhDs and the contribution of high-tech into the export surplus, Denmark's index is below the EU average.

Innovation followers include also highly developed countries of Western Europe, such as the United Kingdom, Germany, and France.

After the recession in 2008, innovation performance in the United Kingdom significantly enhanced during the years of 2009-2010, particularly due to the increase in the number of innovative SMEs. Since 2010, the innovation indicators were quite stable, showing a slight decline in 2013. Though, over the period of 2006-2013 innovation performance in the UK decreased from 120% in 2006 to 111% in 2013 relative to the EU average. Inferiority of the UK innovation policy is the low proportion of innovative products and technologies in total sales (Chernomorova, 2013).

Innovation performance of Germany for the period of 2006-2013 has increased, showing a temporary decline in 2011. In relation to the EU average, innovation performance of Germany decreased from 33% in 2008-2009 to 28% in 2013. Germany dominates by the number of international scientific co-publications and doctoral graduates, as well as the efficiency of innovation spending. Weaknesses concern venture capital investment, licensing and patent revenues from abroad.

Innovation performance of France was increasing until 2010. However, for the past four years, the growth rate was slowing down, and the level of innovation performance declined in 2013 mainly due to the small share of fast-growing companies in the innovation sector. Performance level in relation to the EU has reached a peak of 107% in 2011, though in 2013 decreased down to 103%.

4. Discussion

In 2014, almost all EU countries acknowledged their commitment to innovation policy and intentions, either retaining or, in most cases, increasing the national budget in the field of science, technology and innovation.

Thus, *France* is implementing the second phase of its program "Investing in the Future" with funding of 14 bln US dollars (12 bln Euros). In 2012, the spending for R&D amounted to 1.48% of GDP. This indicator is lower than that for Germany and the Nordic countries. To increase R&D and innovation, the French government retains a tax credit, which is one of the highest in the world, with a total demand of about 6 bln US dollars per year (5 bln Euros). Also, a number of measures were adopted to strengthen the direct support of 34 key industry sectors (OECD, 2014).

De-industrialization of the country affected the competitiveness of industrial enterprises. In this regard, the mobilization of mechanisms of public-private partnerships to promote innovation-based growth is a major focus of the state.

Priority #1: Promoting restructuring and a new approach to growth. France puts innovation at the center of its growth strategy, which focuses on the new industrial policy, in particular, on the "management" of energy, and on information technology. Policies to promote R&D business and development of new companies are formalized in legislation, and clear plans are shaped for its implementation.

Priority #2. The solution of social problems. French policy is aimed at increasing the contribution of publicly supported R&D in solving critical social problems (environment, nation's aging). This will be a major component of the national strategy of France (SNR), which is developed in the first half of 2014 through extensive consultations with concerned parties. Implementation of the plan will allow identifying the necessary resources. It will be associated with investments into the future (PIA), based on a budget amounting to 23.8 bln US dollars (20 bln Euros) for research and innovation for a period of 2010-2020.

Priority #3. Reforming the public research system. French public research system continues developing. France is going to take measures to strengthen the links between parties having social and economic interests, to enhance the integration of universities, as well as engineering and business schools (grandes écoles).

The United Kingdom plans to unlock additional funding and prioritize long-term infrastructure costs. Since 2011, the UK's growth strategy envisages a key role of the government as a leading customer of innovative products and services. In 2012, the British government adopted an industrial strategy, which focuses on innovation policy in areas, where the government can have a quick and real effect.

Priority 1: Focus on preferred areas/sectors and new industrial policies. State industrial strategy is aimed at developing of strategic partnerships with industry in 11 sectors, which are capable of initiating the growth of the entire world economy. Among them, the most important are co-funded Institute for Aerospace Technology (2.8 bln US dollars or 2 bln pounds sterling), Automotive Power Center (1.5 bln US dollars or 1 bln pounds sterling), and the centers for agricultural innovation and agricultural technology (231 mln US dollars or 160 mln pounds sterling).

Industrial strategy involves public investment in eight new cross-platform technologies, for which the United Kingdom in 2012 allocated from the budget 879 mln US dollars (600 mln pounds sterling). In addition, the government is developing a network of Catapult centers, which give businesses access to specialized equipment and the cutting-edge technologies.

Priority #2: Extension of international cooperation. In the UK, researchers are well integrated into the international network. Federal initiatives contribute to closer ties with developing countries.

For example, Technology Strategy Board (TSB) has launched two R&D cooperation programs funded jointly by China (on sustainable production technology) and India (on affordable medical care and "clean" technologies, especially for energy systems) totaling 15 mln US dollars (10 mln pounds sterling). The government is also investing 115 mln US dollars (80 mln pounds sterling) in the framework of joint global program on cooperation with emerging nations in the field of space resources and technology development.

Another 108 mln US dollars (75 mln pounds sterling) will be invested annually to improve the research and innovation capacity of emerging countries and to create a research partnership with the UK.

Priority 3: Promoting innovation in companies and supporting entrepreneurship and SMEs. The UK government has taken some measures to increase innovation in companies and support SMEs, especially through the TSB programs. The government has announced the extension of the Small Business Research Initiative (SBRI) program, which aims at encouragement of innovation through public procurement. This extension will include specific key targets with a view to increase the value of procurement contracts through SBRI in 2014-2015 by more than 290 mln US dollars (200 mln pounds sterling).

The innovation vouchers program was officially launched in 2012. Now in the UK, small and medium-sized enterprises can get for start-ups up to 7,000 US dollars (5,000 pounds sterling).

In order to increase the supply and diversity of available funding for small and medium-sized enterprises, the United Kingdom is currently creating British Business Bank as a new national development bank.

Germany also has selected the priority of public expenditure on R&D and innovation. Thus, budget of the Federal Ministry for Education and Research in 2014 provided an additional 402 mln US dollars (313 mln Euros) for education and research.

Germany is one of the leading players in the global innovation and science. The High-Tech (HTS) Strategy of the German Federal Government sets the medium-term strategic guidelines for the innovation, namely strengthening the scientific and technological base, enhancing innovation activity and creating jobs, as well as helping to solve global problems in order to improve standard of living. Integrated innovative interagency strategy covers technological and social innovation, and is focused on the transformation of research results into practice.

Priority #1: Innovative contribution to the solution of social problems (which includes also their transparency). Unlike the previous R&D policy, HTS will contribute not only to the development of individual technologies, but will also meet public need for sustainable development in the field of clean energy, effective healthcare service, sustainable mobility, communications security, and the future competitiveness of German industry.

The HTS also aims at creating and bringing to market promising projects (Zukunftsfeldprojekte), which will have an impact on society. Implementation of HTS is supported by many initiatives, related to the financing private and public R&D, reforming the education system and improving links between science and production. A budget of 960 mln US dollars (770 mln Euros) is currently provided on healthcare service innovation for 2011-2015.

Priority #2: Focus on promising trends. The implementation of promising projects is inseparably associated with the achievement of specific R&D goals during the course of the next 10-15 years. As part of the research program in the field of sustainable development (FONA) (2010-2014), a studies on climate change mitigation and adaptation have been conducted, as well as on sustainable resource management and innovative environmental and energy technologies, with a budget of 2.5 bln US dollars (2 bln Euros). The program aims at maintaining and strengthening Germany's leading status in these technological areas.

National research strategy in bio-based economy up to 2030 with a budget of 2.6 bln US dollars (2 bln Euros) for 2011-2016 is aimed at strengthening the future competitiveness of German industry and biotechnology.

Other sectorial programs include Nano-2015 initiative with a budget of 526 mln US dollars (410 mln Euros) for 2012-2015, and the German space program with an annual budget of 1.5 bln US dollars (1.2 bln Euros).

Priority 3: Enhancing conditions for the innovation activities and improving competitiveness of SMEs. Germany stands for direct public support of innovation business and tax incentives. Financing of technologies for SMEs by the Federal Government has increased from 943 mln US dollars (783 mln Euros) in 2007 to 1.8 bln US dollars (1.4 bln Euros) in 2013. Central innovation program for SMEs provides the allocation of grants for small and medium-sized businesses, which are engaged in applied research and implement innovative projects worth 705 mln US dollars per year (550 mln Euros).

5. Conclusion

The economic crisis and the moderate pace of economic redevelopment have a significant impact on innovation policy in the EU. Gross expenditure on R&D in the EU fell by almost half compared to that of 2001-2008.

The challenges facing the governments of developed European countries consist in increasing the rates of economic growth and providing the solution to urgent social and environmental problems. However, the decrease in the volume of public resources may have a negative impact on R&D budgets (HM Treasury, 2012).

Since 2011, the growth rates of business expenditure on R&D have redeveloped to pre-crisis levels and amount currently to 3% per year. Here growth prospects are better than those for investments into physical assets, because companies, expecting weak demand, improve products and processes, but do not extend their production capacities.

State support for innovation business has helped to mitigate the ramifications of the crisis. Over eight years state financing has increased mainly due to the extension of tax incentives. Along with direct state funding, tax incentives amount to 10-20% of the R&D business costs. Indirect support is equal to or greater than direct support in thirteen of the twenty eight EU countries.

Direct government funding of R&D business is increasingly done through competitive grants and contracts, while debt finance (loans and loan guarantees) as well as participatory finance (venture capital, funds of foundations) are becoming more popular. Many countries have made to finance a particular industry or certain company category (especially SMEs) as part of their new industrial policy.

Solution to social and economic problems will require a technological breakthrough, the rapid deployment of existing or new technological solutions and systemic changes (in policy, regulation, behavior, etc.). Innovations of the aging society, for example, can lead to a new growth in industry, though suffer from a lack of funding and policy coherence.

Therefore, the governments of many European countries are initiating a "new course" for innovations that will enhance the status of innovation policy when adapting to new conditions. Current prospects for slow GDP growth and tight government budgets indicate the continuing strategy of using innovation to achieve social goals for the coming years.

References

- Butova, T., Ragulina, J., & Krivtsova, M. (2013). *Proceedings of the 2nd International Conference on the political, technological, economic and social processes*. SCIEURO, London.
- Chernomorova, T. (2013). The Great Britain: Innovation policy and methods of its implementation. *Topical Problems of Europe, 1*, 89-116.
- European Commission. (2010). *EUROPE 2020: A European strategy for smart, sustainable and inclusive growth*. Brussels.
- European Commission. (2013a). *Public-private partnerships in horizon 2020: a powerful tool to deliver on innovation and growth in Europe*. Brussels.
- European Commission. (2013b). *State of the innovation union. Taking stock 2010–2014*. European Commission. <http://dx.doi.org/10.2777/74073>
- European Commission. (2013c). *Efficiency of R&D spending at national and regional level*.
- Eurostat. (2014). *Eurostat regional yearbook 2014*. <http://dx.doi.org/10.2785/54659>
- Farquharson, de Mästle, T., & Yescombe. (2011). *How to engage with the private sector in public-private partnerships in emerging markets*. PPIAF, World Bank. <http://dx.doi.org/10.1596/978-0-8213-7863-2>
- HM Treasury. (2012). *A new approach to public private partnerships*.
- Kerashev, A., & Mokrushin, A. (2011). Strategic management of the interaction of vertically integrated corporations and regional economic systems of South Russia. *Bulletin of Adyghe State University, 5*(3).
- Kondratiev, V. (2013). Innovation race. *Direct Investments, 6*, 32-36.
- Kroll, H., & Stahlecker, T. (2013). *Smart specialization approaches: a new policy paradigm on its way from concept to practice*. ERSA Conference, Palermo.
- Kutlaca, D., & Radosevic, S. (2011). *Innovation capacity in the South East Europe region*. Handbook of Doing Business in South East Europe, Palgrave Macmillan.
- Mokrushin, A. (2011). Strategic aspects of the interaction of vertically integrated corporations with regional economic system. *Bulletin of Adyghe State University, 5*(2).
- OECD. (2015). *Gross domestic spending on R&D (indicator)*. <http://dx.doi.org/10.1787/d8b068b4-en>
- Organization for Economic Co-operation and Development (OECD). (2014). *Science, technology and industry outlook: 2014*. http://dx.doi.org/10.1787/sti_outlook-2014-en
- Porras, B., Nicklas, M., & Jerzyniak, T. (2014). *Innovation union scoreboard 2014*. European Union.
- Posner, P., Ryu, S. K., & Tkachenko, A. (2009). Public-private partnerships: the relevance of budgeting. *OECD Journal on Budgeting, 1*.
- Seleznev, P. (2012). European way of innovation policy. *Columnist: Scientific and Analytical Magazine, 6*(269), 107-121.
- Sudas, L., & Koryakina, O. (2014). The dynamics of interaction between the state and the private sector in the field of scientific and technological innovation. Public administration. *The Newsletter Issue, 47*.
- World Bank Institute. (2012). *The World Bank and public-private infrastructure advisory facility (PPIAF). Public-Private Partnerships*. Version 1.0. Reference Guide. Retrieved January 20, 2015, from <http://wbi.worldbank.org/wbi/Data/wbi/wbicms/files/drupal-acquia/wbi/WBIPPIAFPPReferenceGuideV11.0.pdf>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Islamic Transcendental Wellbeing Model for Malaysian Muslim Women: Implication on Counseling

Siti Aishah Hassan¹

¹Department of Counsellor Education and Counselling Psychology, Faculty of Educational Studies, Universiti Putra Malaysia, Malaysia

Correspondence: Siti Aishah Hassan. Department of Counsellor Education and Counselling Psychology, Faculty of Educational Studies, Universiti Putra Malaysia, 43000 Serdang UPM, Malaysia. Tel: 60-38-94-6816. E-mail: siti_aishahh@upm.edu.my; siti8_aishah@yahoo.com

Received: June 30, 2014 Accepted: March 3, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p331

URL: <http://dx.doi.org/10.5539/ass.v11n21p331>

Abstract

A great majority of the middle-aged women experience some degenerative physical symptoms, specifically pelvic prolapse which affected their quality of life. Accordingly, they may experience marital distress, divorces and depression. For younger women, among college students, cybersex addiction may likely affect their academic performances. Female are double as compared to male in the sexual addiction. Recent findings indicate that, spiritual wellbeing is the most satisfied domain among women in Malaysia. Yet, it does not correlate well with other domains, especially in economic. For single mothers, socio-economic status is indeed in crisis. Hence, there is a need to capitalize women's spirituality as inner resources for Muslim women's wellbeing. Therefore, we conceptualize a holistic model for Muslim Malaysian women wellbeing that integrates physical-sexual, socio-economical, and psycho-spiritual domains. Theoretically, this model helps to delineate Islamic transcendental theory that explains spiritual wellbeing permeates overall wellbeing. Finally, implications on counseling process are suggested

Keywords: wellbeing, spirituality, Islamic transcendental, psycho-spiritual, cybersex

1. Introduction

Women not only are the nucleus of families, but also the pillars of nations. In Malaysia, the contributions of women in multiple roles may not be overemphasis. Hence, the overall wellbeing of women is considered as the golden asset of nation has been reflected in National Women Policy (Dasar Wanita Negara, 1986). Women's wellbeing has also received substantial scholarly attention (Momtaz, Hamid, Masud, Haron, & Ibrahim, 2013; Wan-Ibrahim, Majid, & Zainab, 2014; Noor, Gandhi, Ishak, & Wok, 2014). Due to overload of multiple roles responsibilities, multi-tasking seems to be the strength and strategy utilized by many women. Generally, from dawn to dusk, endless duties and expectations need to be met. This phenomenon has been documented in numerous empirical studies on work-family conflict among women (Noor et al., 2014; Ahmad, Baba, & Hassan, 2009). Work overload has given a toll to women wellbeing. When the stress level reaches the threshold, women may not function well anymore. They are double as compare to man in depression (Khoosbooi, Hassan & Baba, 2011) and older women tend to experience higher levels of chronic stress, lower levels of self-esteem and were less satisfied with life (Ong, Phillips, & Chai, 2013).

Malaysia is aiming towards a developed nation by the year 2020, the social illness such as divorce rate, cyber-sex addiction and mental health problems are not aspired to be similar to that of the developed nations (Noor et al., 2014). Nevertheless, Malaysia is witnessing the steady increasing trend of the divorce rate. JAKIM (2010) reported in the last decade over 33,000 couples were divorced. It indicated that 0.22% of marriages among Malaysians aged from 18-50 ended in divorce, almost double to 0.13% as recorded in the year 2000. Thus, based on the doubling rate, it is forecasted that by the year 2020, the divorce rate will increase to at least 0.44 %.

As a result, more social illness of the divorce related cases will be witnessed. Younger generations may not have faith in marriage institutions and wellbeing single mothers and their children are at higher risks (Hassan, & AlHorany, 2011). For younger women, 10 % among college students addicted to cybersex (Cooper, 2013).

Women are double (67%) as compared to man (33%) sexually addicted (Swisher, 1995). Studies indicate that sexual satisfaction is indeed important in marital wellbeing (Henderson-King & Veroff, 1994).

Sexual satisfaction is a prime bio-psychosocial factor that helps stabilize the commitment in long term couple relationship Sprecher (2002) and buffer the life stress and marital conflicts (Litzinger & Gordon, 2005).

Malaysia has witnessed an increasing interest in sexual related issues among researcher and mental health practitioner. Sexual dissatisfaction issues, especially among female, was a taboo to be discussed outside the bedroom has now taken places in conferences and clinics. Bio-psychosocial factors such as lack of sexual fitness (Brubaker, Shott, Tomezsko, & Goldberg 2008), depression (Khoshbooi, Hassan, Hamzah, & Baba, 2011) and cybersex addictions (Zakaria & Baharudin, 2011, 2012) are among factors that lead to marital discord.

Barriers to diagnosis and treatment for sexual fitness (SF) may include the social stigma of the condition, the perception that treatment may require surgery (Culligan, 2012), and misconceptions that lack of SF may be normal for older women or after childbirth. It is believed that a "silent majority" of women lack of SF never seeks help and fails to implement self-help strategies that might have lessened the symptoms (Brubaker, et al., 2008). Primary care physicians routinely see younger women with milder symptoms, but often lack of time, interest, or training to adequately screen, evaluate and treat for SF. For these and other reasons, previous studies have shown that women who bring up the symptom with a health care professional may not receive appropriate information, and often are not provided effective treatment (Culligan et al., 2010).

Substantial evidences suggest the decline in libido is strongly related to the depth of depression in women (Kalmbach, Pillai, Kingsberg, & Ciesla, 2014). Nevertheless, the assumption that depression among women lead to less sexual satisfactions and activities, as well as more sexual problems remain as an interpretive result (Bodenmann & Ledermann, 2008). A depressed person experiences loss of interest in normally and previously enjoyed activities, hence, less likely to engage in sexual activities and achieve sexual satisfaction. Frohlich & Meston (2002) investigated the relationship between depression and sexual problem on a large sample of undergraduate students aged 19-25 years old, found that the depressed students reported more difficulties in vaginal lubrication, experience more pain and have difficulties in reaching orgasm. Hence, depression as psychological factor may affect sexual satisfaction due to its symptoms regardless of age groups.

With the advent of smartphone, applications like WhatsApp allow mobile users to send real-time text messages, images, video, audio to individuals or groups of friends at no cost has both positive and negative effects to society like any other technology advancements. At present WhatsApp handles over 10 billion messages per day and is one of the most popular paid for apps across all mobile platforms (Church & de Oliveira, 2013). One of the critical challenges of online technology is cybersex addictions among the youth. In the USA, it has been suggested that the increase in viewing of cybersex materials is due to easy access of those materials online. As of the year 2000, it has been estimated that nearly 20 million users visited sexual-related websites on monthly basis and this trend looks to continue as the search for sexual-related materials in the internet search engine has been ranked as the top searched items (Freeman-Longo, 2000). Although this trend sets to continue, it is unfortunate to note that research works on how to manage and prevent this addiction are not widely available. Cybersex addicts who compulsively used the internet pornography, adult chat rooms, or adult fantasy role-play sites most probably jeopardizing their mental health and real-life intimate partners (Zakaria & Baharudin, 2011; 2012)

2. Problem Statement

Despite women play many significant roles in family and society, their well-being are at stakes. More than 80% of the middle-aged women experience some degenerative physical symptoms, 50 % pelvic prolapse (Culligan, 2012), 65 % marital distress and 22 % divorces (Poomalar & Arounassalame, 2013). Prolong marital conflicts lead to depression (Yahya & Hassan, 2011; Symoens, Van de Velde, Colman, & Bracke, 2013). Women are double as compare to man in depression (Khoosbooi et al., 2011) and older women tend to experience higher levels of chronic stress, lower levels of self-esteem and were less satisfied with life (Ong et al., 2013). For younger women, 10 % among college students addicted to cybersex (Cooper et al., 2013). Women are double (67%) as compared to man (33%) sexually addicted (Swisher, 1995).

Although Islam considers divorce as the necessary evil, the divorce rate may increase to at least 0.44 % by the year 2020. In the year 2011, there is one divorce for every 15 minutes reported by JAKIM (2012). Divorce is permissible, yet it is very much discouraged. Unless it has become a threat to the married couple, marriage is a better choice than divorce and remains single. Johnston (2007) explained Islamic legal theory, known as maqasid as-shariah, one has the right to divorce when marriage has become a threat to; i) the *deen* (religion), *nafs* (soul), *aql* (cognition), *nasl* (descendent), and *mal* (wealth). Empty marriage, where married couples living together but do not consume conjugal relationships or sexually dissatisfied may pose danger not only to their psychological

wellbeing (mental health) but also to their religion (Yahya & Hassan, 2011). Concisely, Islam encourage neither divorce, nor empty marriage according to maqasid as-shariah (Khan, 2008).

Most probably due to embarrassment, Muslim women reserved sexual dissatisfaction within themselves. Even among the Euro-American, research indicates that very few clients try to seek face-to-face professional helps for increasing sexual satisfaction (Hucker & McCabe, 2014). Unless, an attractive, comprehensive and trustworthy professional help is offered, Muslim women well-being may not be uplifted. They may receive an “ill-advice” and “help” from the internet in the form of sexual chat room and interactive porn games or movies and become addicted to cybersex. Worst of all, there are women who turned to be lesbian due to marital and sexual dissatisfaction (Ghoroghi & Hassan, 2015).

Almost all clients who experience sexual infidelity in their marital life experience Post Traumatic Stress Disorder (PTSD) similar to that of psychological symptoms due to tsunami and world war (Harun & Yusof, 2011; Leone 2013). Indeed, divorced women are often confronted with stressful socio-economic status decline due to splitting household income and receiving sole custody of children without or very little alimony support (Symoens et al., 2013; Yahya & Hassan, 2011). Accordingly, the lack of a soul mate, a move to another neighborhood, and reductions in social networks with family and friends after divorce decrease the amount of potential social support, just when high-quality support is needed most (Symoens et al., 2013). However, firm social networks, a stable job, a new partner, a high educational degree, and sufficient income can protect divorcees from getting too distressed by maximizing support and lowering financial worries. In particular, results show that women who have been divorced benefit more from higher education in terms of their sense of autonomy and their feelings of depression. Regarding feelings of competence, employment is also more strongly associated with better mental health among women than men after divorced.

To date, treatment on sexual relationships mostly limited to sexual dysfunction using medical and physical exercises (Litzinger & Gordon, 2005). Few studies, if any, have conducted on Islamic psycho-spiritual treatment for sexual dissatisfaction. Results of our previous studies indicated that psychological treatment, Cognitive Behaviour Therapy, that embodied the Quranic Therapy to Muslim clients successfully decrease depression and increase sexual satisfaction (Khosbooi et al., 2011). In tandem to that, Group Cognitive Behavior Therapy that infused Quranic Therapy reduced parenting stress and increase marital adjustment (AlHorany, et al., 2011). We also found that another psychological treatment, Existential issues Training that integrates Quranic Therapy reduces existential anxiety of multiple roles responsibilities in women and improve marital communication and satisfaction (Kalantarkousheh et al., 2012). Effectiveness of our Marital Islamic Psycho-spiritual Intervention has also been documented (Ahmad & Hassan, 2013) to increase spiritual and marital wellbeing. Consistently, previous findings provide support for the effectiveness of Islamic psycho-spiritual treatment (Hamjah, & Akhir, 2014). Therefore, it is timely to propose a model of wellbeing based on Islamic transcendental theory (Al-Ghazali, 2010b; Hassan, Abdullah, Ishak, & Langgulong, 2008).

3. Objective of the Study

Accordingly, we propose a holistic model of wellbeing for Malaysian Muslim women that integrates physical-sexual, socio-economical, and psycho-spiritual domains based on Islamic perspective of human nature. The model covers all dimension of human nature as described in the following sub-section. Moreover, the proposed model is also built upon the limitation of the existing wellbeing model.

3.1 Human Nature

In his inaugural lecture, Langgulong (2001) explained that human being is dual nature. The physical (*jasd*) is from the realm of creation (*‘alam al-khalq*) and the spirit (*ruh*) is from the realm of order (*‘alam al-amr*). The soul connect the physical and the spirit. The soul comes in three different forms as illustrated in Figure 1.

Langgulong, (2001), summarized the meaning of the four concepts that constitute human consciousness based on the works of the past Muslims scholars.

“Nafs is the place of the bad conduct, whereas ruh is the source of life and the place of good conduct. It is soft, pure and free from the influence of the nafs. It came from Allah and its existence is unobservable, it is also the place of love and mercy, whereas the Qalb is the place of Knowledge and the channels of perceptions. The Qalb cannot perceive unless it is free from the influence of the five senses. With performing zikir the laduni knowledge shed light to it. It is the place of knowledge. Aql they said is used for knowledge coming through the five senses using the thinking process. It is lower in rank than the Qalb. It is because both nafs and ruh tried to drag the qalb to its side that the qalb sometimes is influenced by the Ruh and other times by the Nafs.”

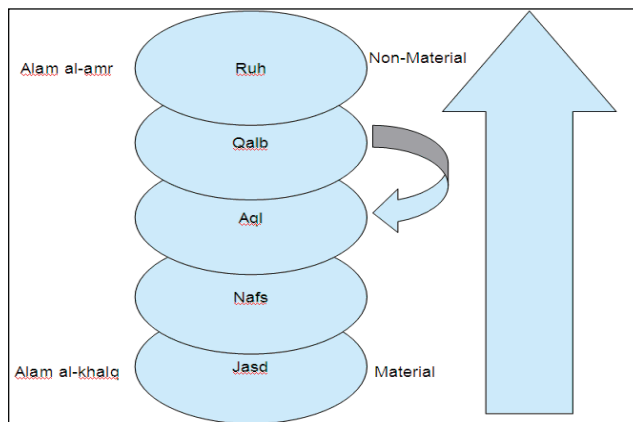


Figure 1. Human Consciousness (Source: Langgulong, 2001)

Then, Langgulong concluded that *nafs*, *aql*, *qalb* and *ruh* can be ranked in the ascending status as shown in Figure 1. Accordingly, based on Langgulong (2001) work, we derived a step further (Hassan, 2001; Hassan, Abdullah, Ishak, & Langgulong, 2005). The dimension of human nature can be philosophically viewed as a six-layer sphere. The spirit is the center core of the sphere. This is the spiritual dimension of human being which always remains pure. Then, it is followed by the *qalb*, which is considered as emotional dimension. Then, the *aql*, the intellectual dimension followed by the *nafs*, the physiological dimension. This is then followed by *jasad*, the physical and the last layer is “*insan*” the social dimension of human being. Thus, a cross section of this sphere is illustrated as in Figure 2.

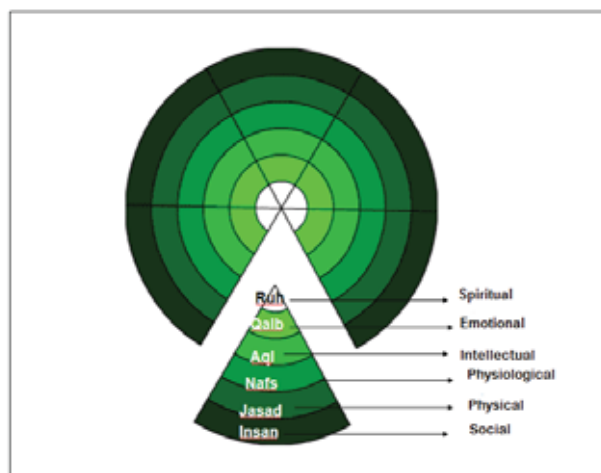


Figure 2. Dimensions of Human Nature (Source: Hassan, 2001, 2008)

Before discussing in detail the proposed six dimensions of human nature, it is noteworthy to understand the word human. In the Arabic Language, human means *insan* which is derived from the Arabic verb *anisa* to be sociable. From that word, then are the words of *Insaniyyah*, giving the meaning humanity and *Insaniy* means humanitarian (Raba, 2001).

3.1.1 Social Dimension (The First Outer Layer)

As noted earlier the word, “*insan*” means to be sociable thus, this dimension is pertinent in understanding human nature and behaviors. It is proposed as the first outer layer of human being. The first man, Adam (P.B.U.H) was created initially without any companionship. Then, Allah the Merciful created Hawa (Eve). From them, generations after generations are born until today. Thus, the very nature of human being is sociable. Accordingly, it is very important for the persons to consider whom their social contacts are.

The sociological dimension is very much influencing to human being. Most of the time it defines the needs of human if it is left unobserved by other dimensions. As an elaboration, the needs of certain kind of dressing, housing and so forth are culturally and socially determined.

Muslim scholars are convinced that the secret of mental health lies in observing certain rights and obligations (Langgulung, 1989). To illustrate, the right of a husband is the duty of his wife and vice versa (Qudrawi, 1997). They further explained that a healthy person is the one who fulfills his or her personal as well as social duties to the best of his or her ability. The following verse is the code of conduct:

“Allah commands justice, and the doing good (i.e. kindness) to kith and kin, and He forbids shameful deeds and injustice and rebellion...” (Quran, 16: 90)

God does not burden any human being with more than he is well able to bear (2:2860)

Once the above teaching has been internalized, the person will remain free from worries and anxieties (AbdulRaheem, 1998).

3.1.2 Physical Dimension (The Second Outer Layer)

This dimension focuses on the *jasd* (body). It is proposed to be the second outer layer of the sphere. Contrary to Western view about the existent of the first human being as hypothesized by the Darwin, Haron Din (1991) summarized from The Holy Quran, that the first human (Adam) was created in bodily shape out of various combination of six types of earth and water. The six types of earth are stated in The Holy Quran as the following:

- i. *Al-Turab (al-Anbbiya:30)*
- ii. *Al-Tin (al- Anbbiya:30)*
- iii. *Al-Tin Al-Lazib (As-Sffat:11)*
- iv. *Hamaein Masnun (Al-Hijr:28)*
- v. *Salsaalin kal-fakhar (Ar-Rahman:14)*
- vi. *Al-Ard (An-Najm:32)*

Accordingly, the process of the Adam genesis is described in the following verses.

"...We created you out of dust, then out of sperm, then out of a leech-like clot, then out of a morsel flesh, partly formed and partly unformed, in order that we may manifest (Our power) to you... "

(Quran, 22: 5)

3.1.3 Physiological Dimension (The Third Outer Layer)

Then the reactivity of the *jasd* and *nafs*, in specific the sexual intercourse which then brings lives to physical genesis is one of the most significant in physiological dimension.

The third dimension of human nature is the *nafs* (physiological dimension) which is interrelated between physical and emotional (Langgulung, 1989).

"Was he not a drop of sperm emitted in lowly form?"(Quran, 75:30)

The physiological needs are in fact very much important to be fulfilled. This is clearly stated in various verses in the Holy Quran. Among them is

"O children of Adam! Wear your beautiful apparel at every time and place of prayer: eat and drink: but waste not by excess, for God loved not the wasters."

(Quran, 7:31)

Prophet Muhamamd (P.B.U.H) is the “living Quran” also emphasizes the importance of this dimension. Thus, he opposed the plan of *sahabah* (companion) to fast every day and not to marry.

3.1.4 Intellectual Dimension

The faculty of intellect of human nature is one of the biggest *ni'mah* (blessing) bestowed by Allah to humankind. It is proposed as this is the fourth outer and the third inner layer of human nature. This intellectual dimension is what differentiates us from an animal as a basic principle in order to understand human beings. As unique as the human fingerprint, so does human thought. Thus, with this special gift given to us we are obligated to actualize the potential. Seeking and disseminating knowledge is thus obligatory upon each individual.

Aql in the Arabic literature means determination, logic and judgment. The Holy Quran mentions at least 49 times about thinking, memorizing and imagining (Raba, 2001). It motivates a human being to use this faculty inductively and deductively.

The Quran (Yunus: 24) reminds us.

“Worldly life may be compared to water We send down from the sky. It mingles with the plants of the earth on which mankind and life stock feed until, when the earth takes on its trimmings and looks attractive, and its people think that they will be able to use them as they like. Our command comes along to it by night or daytime, and We mow it down ahead of time just as though it had not been so lush the day before. Thus We spell out signs for folk who will think things over”.

In another verse,

“In the creation of the heavens and the earth, and in the alteration of night and day, there are signs for men of sense.” (Al-Quran: 3: 190)

3.1.5 Emotional Dimension

Qalb (heart) is the place where real faith, true feelings or emotions are stored and shown in human behavior. The Holy Quran uses the word *qalb* and *fuad* because the word *fuad* means the heart of the heart or the cover of the heart. For example, remembering Allah (swt) is the work of the heart, performing worships and all good actions are derived from the sincerity, which is derived from the heart (Raba, 2001).

The following verses describe the important of taking care this dimension

“We will turn away their hearts and eyes (from truth) since they refused to believe it at the first. We will learn them to blunder about it in their wrong doing.”

(Al-Quran, 17:37)

According to Al- Ghazali (2010b), the heart is like the mirror receiving knowledge through light of faith. The heart of the child is immature to receive and understand the reality. The heart of the sinner that has become dark cannot show knowledge on it.

As proposed earlier, this is the layer that comes right before the spiritual dimension. Thus, to safeguard this dimension is to take care the inner core of human dimension. To take care of the heart is actually to take care of one self.

3.1.6 Spiritual Dimension

Muslim psychologists considered this dimension the distinguishing factor between Islamic and the Western psychology. This dimension has purposely being ruled out by materialistic and positivistic scholars as explained earlier. The spirit is considered as the core of the human nature sphere. This dimension is always pure and seeks the purity. Thus, one can only be in the eternal bliss and felicity if this dimension is taken care of. Human has the potential of being the true believer from the very beginning. This can be evident from the covenant of the children of Adam have committed in the following verse.

“When your Lord took their offspring from the children of Adam’s loins, and made them bear witness about the selves. Am I not your Lord? They Said: Of course, we testify to it. Lest you all might say on resurrection day: we were unaware of it.” (Al-Quran, 7:172)

Since that time, every human being has been testifying that Allah is Their Lord, the Only One. In fact, the whole Quran as well as the previous books of Allah has been dedicated for this teaching. This fact is clearly stated in another verse (Ar-Rum: 30) as below:

“Therefore set your face in devotion to the true faith, the upright nature with which Allah has endowed man. Allah’s creation cannot be changed. This is the true religion, although most men do not know”

However, if the other dimension of self is not taken care of, this dimension is affected. As mentioned before if the heart is full of sin then the light of truth can never penetrate. Similarly, if the social dimension is corrupted then, this dimension is affected as well. The hadith mentions the importance of the environmental factor. Prophet Muhammad (P.B.U.H) described the parents being the determiner of the children’s faith whether to be Muslim, Jew, Christian or the idol worshiper.

When human beings go against their very own nature they become ill. This is the humble finding that is proposed to be integrated in counseling the clients. Being faithful to Allah is man’s nature and this cannot be changed. Therefore, when foreign element discolors his true nature he becomes chaotic in all his dimensions and eventually faces stress, guilt, emotional disturbance and poor health.

3.2 Wellbeing Model

Currently, most of the available wellbeing models position spiritual wellbeing of the same level with other dimension as shown in Figure 3.



Figure 3. The six dimensions of wellness model (Bill Hettler, 1976)

Hettler (1976) explain the Six Dimensions of Wellness Model as a holistic model. It shows how a person contributes to his or her environment, community, and how to build better living spaces and social networks. In occupational dimension, is explained the enrichment of life through work, and its interconnectedness to living and playing in social dimension. The development of belief systems, values, and creating a world-view is in the spiritual dimension. While the physical dimension stress on the benefits of regular physical activity, healthy eating habits, strength and vitality, as well as personal responsibility, self-care and when to seek medical attention. Emotional dimension is to enhance self-esteem, self-control, and determination as a sense of direction. Intellectual is being creative and stimulating mental activities, and sharing them with others.

4. Holistic Model for Malaysian Muslim Women Wellbeing

According to Islamic transcendental theory Al-Ghazali (2010 b), spiritual dimension is the central and permeates to other dimension as we discussed earlier (Hassan, 2001; 2011). It is an inner out approach. Spiritual dimension (*ruh*) is always pure and it is the source of light (*nur*) and life. Where the emotional dimension (*qalb*) is like the glass that contain the light. If the glass is clean, the light penetrates clearly to other dimension. We suggest that the intellectual dimension (*aql*) is like mirror that reflect the light from *ruh* and captures or shows the images of other dimensions.

Therefore, we proposed another holistic model of wellbeing for Muslim women in Malaysia. Figure 3 illustrates that spiritual domain is the central of Muslim women’s wellbeing model. From the spiritual wellbeing, transcends other domains of wellbeing. According to anti-clock wise, the model shows that psychological wellbeing of women is affected by and overlap with their sexual wellbeing. Then, sexual wellbeing is affected by and overlap with their physical wellbeing. Next, physical wellbeing is affected by and overlap with their social wellbeing. Accordingly, social wellbeing is affected by and overlap with their economic wellbeing. Finally, economic wellbeing is affected by and overlap with their psychological wellbeing. Hence, a complete cycle of women’s wellbeing shows interrelation from one domain to another.

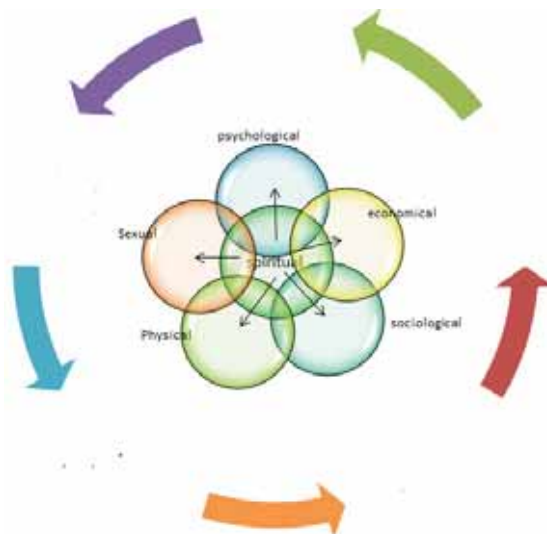


Figure 3. The proposed Islamic transcendental wellbeing model (ITWM) for women

5. Counseling Implication

Lent (2004) suggests that clients often seek counseling for a wide array of problems, that may probably be categorized into two types. Type A “The unhappy client” who seeks help for symptom relief and restoration of life satisfaction and Type B “The self-actualizing client” who seeks for growth, learning, change, or understanding.

Type A clients are typically experiencing heightened negative affect and diminished positive affect and their sense of wellbeing most likely diminished and destabilized their sense of coping efficacy.

Type B clients are often desire to learn or develop. They want to be “better than well,” as it were. Typically, they may express existential concerns such as a wish to find purpose or meaning in their lives.

Nevertheless, it is also common to see Type A clients eventually become Type B clients. They seek to extend the focus of counseling and prolong the counseling process. Understanding the type of clients may help reduce tensions and misunderstandings between counselor and client.

In the beginning phase of the counseling process, for setting the counseling objectives and approach, Type A client may only wish to achieve symptom relief and then be off they go but the, but the counselor who is convinced that longer term, growth-oriented counseling may privately disparage such client motivations, referring to symptom-focused counseling as merely “band-aiding” the client’s problems. On the other hand, it is also common to see that counselor especially among the novice, moving too quickly toward prescribing actions to help the client feel better. Yet, we do not imply an irreconcilable dichotomy between the two. Rather it is interrelated of negative affect reduction and positive affect increment.

In the working phase, growth is eventually taken place when Type A clients need to change some aspect of their life in order to avoid recurring pain and maintain lasting happiness. They then become Type B client. With the Islamic holistic approach, where spiritual is the core, we consider focusing on spiritual dimension are beneficial for both Type A and Type B client. Nevertheless, the novice counselor or at least novice in Islamic transcendental and psycho-spiritual may likely tends to prescribe treatment for quick fix solution (Hamjah & Akhir, 2014). Until and unless, the client Type A is moving toward Type B, who is already enlighten and moving toward holistic wellbeing, then counselor has to be more of modeling on Islamic manner rather than a preacher. Even that, applying Islamic Transcendental Wellbeing Model in the counseling process is not only about talking but also doing and feeling (Al-Ghazali, 2010 a). In other words, as discussed by Langgulong (1986) Hamjah (2008) and Hassan (2011) first is to purify (*takhalli*) from the vices, then to beautify (*tahalli*) with virtues. The processes then continue until the clients experience the sweetness of faith (*tajalli*). Thus, it marks the end of the counseling process.

In a nutshell, Islamic Transcendental Wellbeing Model (ITWM) for women highlights the important spiritual domain as inner resources for them to be healthy, feel happy and achieve prosperity. This model propagates of holistic approach that was propagated by Langgulong (1989) and Hassan (2011), hence it begins with spiritual dimension in counseling process. Yet, the counselors are not to prescribe religious quick fix solution by providing cheap advice especially for type B clients. They are to model themselves of experiencing the sweetness of faith from the spiritual dimension, then it permeates into all domain of wellbeing.

Acknowledgements

The author would like to acknowledge The Ministry of Education for providing the grant ERGS /1/2013/SS02/UPM/02/1

References

- Ahmad, H., Baba, M., & Hassan, S. A. (2009). Work-family conflict and its antecedents among single mother employees. *The International Journal of Interdisciplinary Social Sciences*, 4.
- Al-Ghazali, A. H. M. (2010a). *Deliverance from Error and the Beginning of Guidance* (W. M. Watt Trans.). Kuala Lumpur: Islamic Book Trust. (Original work published 1924).
- Al-Ghazali, A. H. M. (2010b). *The Message From On High* (M. Smith Trans.). Kuala Lumpur: Islamic Book Trust. (Original work published 1924).
- Alhorany, A., Hassan, S. A., Baba, M., & Juhari, R. (2011). Efficacy of group cognitive behavioral therapy on depression among Muslim parents of autistic children in Jordan. *Australian Journal of Basic and Applied Sciences*, 5(12), 827-832.
- AlHorany, A. K., Younis, N. A., Batainah, M. Z., & Hassan S. A. (2013). Do mothers of children with autism are

- at higher risk of depression? A review of literature. *Life Science Journal*, 10(1), 3303-3308.
- Ali, A. Y. (2000). *The Holy Qur'an: Original Arabic Text with English Translation and selected commentary*. Kuala Lumpur: Saba Islamic Media.
- Askari, M., Noah, S. B. M., Hassan, S. A. B., & Baba, M. B. (2012). Comparison the effects of communication and conflict resolution skills training on marital satisfaction. *International Journal of Psychological Studies*, 4(1), 182. <http://dx.doi.org/10.5539/ijps.v5n1p182>
- Azahari, R. (2010). The Development of Family Mediation in Malaysian Muslim Society. *European Journal of Social Sciences*, 18(2), 220-230.
- Bill Hettler, M. D. (1976). *The Six Dimensions of Wellness Model*. Retrieved June 10, 2014, from <http://www.nationalwellness.org>
- Bodenmann, G., & Ledermann, T. (2008). *International Journal of Sexual Health*, 19, 63-73. [http://dx.doi.org/10.1300/J514v19n04-07\(CD\)\(SX\)](http://dx.doi.org/10.1300/J514v19n04-07(CD)(SX))
- Brubaker, L., Shott, S., Tomezsko, J., & Goldberg, R. P. (2008). Pelvic floor fitness using lay instructors. *Obstetrics & Gynecology*, 111(6), 1298-1304.
- Chlen, S., & Mustaffa, M. S. (2008). Divorce in Malaysia. In *Proceedings of the Seminar Kaunseling Keluarga*, Aug (Vol. 30, pp. 23-28). <http://dx.doi.org/10.3923/jas.2009.3758.3763>
- Church, K., & de Oliveira, R. (2013, August). What's up with WhatsApp?: comparing mobile instant messaging behaviors with traditional SMS. In *Proceedings of the 15th international conference on Human-computer interaction with mobile devices and services* (pp. 352-361). ACM.
- Cooper, A. (Ed.). (2013). *Cybersex: The Dark Side of the Force: A Special Issue of the Journal Sexual Addiction and Compulsion*. Routledge.
- Culligan, P. J. (2012). Nonsurgical management of pelvic organ prolapse. *Obstetrics & Gynecology*, 119(4), 852-860. <http://dx.doi.org/10.1097/AOG.0b013e31824c0806>
- Culligan, P. J., Scherer, J., Dyer, K., Priestley, J. L., Guignon-White, G., Delvecchio, D., & Vangeli, M. (2010). A randomized clinical trial comparing pelvic floor muscle training to a Pilates exercise program for improving pelvic muscle strength. *International urogynecology Journal*, 21(4), 401-408. <http://dx.doi.org/10.1007/s00192-009-1046-z>
- Da Silva Borin, L. C. M., Nunes, F. R., & de Oliveira Guirro, E. C. (2013). Assessment of Pelvic Floor Muscle Pressure in Female Athletes. *PM&R*, 5(3), 189-193. <http://dx.doi.org/10.1016/j.pmrj.2012.09.001>
- Dasar Wanita Negara. (1986). Retrieved June 1, 2014, from <http://pmr.penerangan.gov.my/index.php/maklumat-kenegaraan/249-dasar-wanita-negara.html>
- Din, H. (1991). *Manusia dan Islam*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Freeman-Longo, R. E. (2000). Children, teens, and sex on the Internet. *Sexual Addiction & Compulsivity: The Journal of Treatment and Prevention*, 7(1-2), 75-90.
- Frohlich, P., & Meston, C. (2002). Self-reported depressive symptoms among college women. *The Journal of Sex Research*, 39, 321-325.
- Ghoroghi, S., Hassan, S. A., & Baba, M. (2012). Function of Family-of-Origin experiences and marital adjustment among married Iranian students. *International Journal of Psychological Studies*, 4(3), 94-103. <http://dx.doi.org/10.5539/ijps.v4n3p94>
- Ghoroghi, S., & Hassan, S. A. (2015). *Students' cybersex casual activities In Malaysia*. In press.
- Hamjah, S. H. (2008). *Pendekatan Da'wah Al-Irsyad Al-Nafsiyy Menurut Al-Ghazali: Satu Kajian Di Pusat Kaunseling Majlis Agama Islam Negeri Sembilan [Al-Irsyad Al-Nafsiyy Missionary Approach According to Al-Ghazali: A case study at Counseling Centre of Department Religious Affair Negeri Sembilan]* (Doctoral dissertation, Universiti Sains Malaysia).
- Hamjah, S. H., & Akhir, N. S. M. (2014). Islamic Approach in Counseling. *Journal of religion and health*, 53(1), 279-289. <http://dx.doi.org/10.1007/s10943-013-9703-4>
- Harun, L. M., & Yusof, S. N. M. (2011). Kecurangan didalam rumahtangga [Infidelity in marital relationship]. Dalam Siti Aishah Hassan. *Menangani Masalah Komuniti: Pendekatan Psikospiritual, Kaedah E-Kaunseling, dan Pelaksanaan Modul* (pp. 8-25). Serdang: Penerbit UPM. ISBN: 978-967-344-256-0

- Hassan, S. A. (2011). Teori Kaunseling Psikospiritual Islam. Dalam Siti Aishah Hassan. *Menangani Masalah Komuniti: Pendekatan Psikospiritual, Kaedah E-Kaunseling, dan Pelaksanaan Modul* (pp. 8-25). Serdang: Penerbit UPM. ISBN: 978-967-344-256-0
- Hassan, S. A., & Al Horany, A. (2011). Marital adjustment among postgraduate students at universities in Malaysia. *Elixir Psychology*, 37, 3773-3776.
- Hassan, S. A., Abdullah A. S., Ishak, N., & Langgulong, H. (2008). Measuring the unmeasurable: Maternal piety scales. *Pertanika Journal of Social Sciences*, 16(1), 95-105.
- Hassan, S. A., Abdullah, A. S., Langgulong, H., & Ishak, N. (2005). Fostering Mother-Child Relationship via Creator-Creature Relationship: A Structural Equation Modelling Analysis. *Journal of Malaysian Psychology*, 19, 69-82.
- Hassan, S. A. (2001). *Stress counseling for employed mothers: An Islamic approach of dimensional self*. Paper presented at Seminar Kaunseling Kebangsaan Ke III, Universiti Utara Malaysia. Oct. 27.
- Henderson-King, D. H., & Veroff, J. (1994). Sexual satisfaction and marital well-being in the first years of marriage. *Journal of Social and Personal Relationships*, 11(4), 509-534.
- Hucker, A., & McCabe, M. P. (2014). Incorporating mindfulness and chat groups into an online cognitive behavioral therapy for mixed female sexual problems. *The Journal of Sex Research*, (ahead-of-print), 1-13.
- Isherwood, P. J., & Rane, A. (2000). Comparative assessment of pelvic floor strength using a perineometer and digital examination. *BJOG: An International Journal of Obstetrics & Gynaecology*, 107(8), 1007-1011. <http://dx.doi.org/10.1111/j.1471-0528.2000.tb10404.x>
- JAKIM. (2010). Statistik penceraian 2000-2009. Jabatan Kemajuan Islam Malaysia
- JAKIM. (2012). Statistik penceraian 2010-2011. Jabatan Kemajuan Islam Malaysia
- Jalovaara, M. (2001). Socio-economic status and divorce in first marriages in Finland 1991-93. *Population Studies*, 55(2), 119-133. <http://dx.doi.org/10.1080/00324720127685>
- Johnston, D. L. (2007). Maqasid Al-Shariah: Epistemology and hermeneutics of Muslim theologies of human rights. *Die welt des Islams*, 47, 2.
- Kalantarkousheh, S. M., Hassan, S. A., Kadir, R. A., & Talib, M. A. (2012). Effects of existential issues training on marital satisfaction among Iranian women. *The New Educational Review*, 28(2), 29-38.
- Kalmbach, D. A., Pillai, V., Kingsberg, S. A., & Ciesla, J. A. (2014). The transaction between depression and anxiety symptoms and sexual functioning: A prospective study of premenopausal, healthy women. *Archives of sexual behavior*, 1-15.
- Khan, F. (2008). *Traditionalist Approaches to Shariah Reform: Mawlana AshrafAli Thanawi's Fatwa on Women's Right to Divorce*. ProQuest.
- Khoshbooi R., Hassan, S. A., Hamzah, M. S. G., & Baba, M. (2011). Effectiveness of group cognitive behavioral therapy on depression among Iranian women around menopause. *Australian Journal of Basic and Applied Sciences*, 5(11), 991-995.
- Kwan, L. L. Y., Mellor, D., Rizzuto, L., Kolar, C., & Bt. Mamat, N. H. (2013). The Relationship Between Perceived Interparental Conflict and Malaysian Young Adults' Attitudes Toward Divorce. *Journal of Divorce & Remarriage*, 54(7), 596-607. <http://dx.doi.org/10.1080/10502556.2013.828989>
- Langgulong, H. (1986). Manusia dan pendidikan. *Suatu Analisa Psikologi dan Pendidikan, Jakarta: Alhusna*.
- Langgulong, H. (1989). Research in psychology: Toward an ummatic paradigm. *IIIT: Toward Islamization of disciplines. Herndon: IIIT*, 115-130.
- Langgulong, H. (2001). *A Psycho-pedagogical Approach to Islamization of Knowledge: Inaugural Lecture Delivered on 16th May 2001, Ground Floor, Research Centre, IIUM*. Research Centre, International Islamic University Malaysia.
- Lent, R. W. (2004). Toward a Unifying Theoretical and Practical Perspective on Well-Being and Psychosocial Adjustment. *Journal of Counseling Psychology*, 51(4), 482.
- Leone, C. (2013). Helping Couples Heal From Infidelity: A Self Psychological, Intersubjective Approach. *International Journal of Psychoanalytic Self Psychology*, 8(3), 282-308.
- Litzinger, S., & Gordon, K. C. (2005). Exploring relationships among communication, sexual satisfaction, and

- marital satisfaction. *Journal of sex & marital therapy*, 31(5), 409-424.
- Momtaz, Y. A., Hamid, T. A., Masud, J., Haron, S. A., & Ibrahim, R. (2013). Dyadic effects of attitude toward aging on psychological well-being of older Malaysian couples: an actor-partner interdependence model. *Clinical interventions in aging*, 8, 1413.
- Noor, N. M., Gandhi, A. D., Ishak, I., & Wok, S. (2014). Development of Indicators for Family Well-Being in Malaysia. *Social Indicators Research*, 115(1), 279-318.
- Nor, A. M., Karim, D. N. F. M., Jaladin, R. A. M., & Ahmad, N. (2013). From nasty to healthy divorce: A marriage and family therapy model for working effectively with divorcing Malay-Muslim Couples. *Malaysian Online Journal of Counseling*, 1(1).
- Ong, F. S., Phillips, D. R., & Chai, S. T. (2013). Life events and stress: do older men and women in Malaysia cope differently as consumers? *Journal of Cross-cultural Gerontology*, 28(2), 195-210. <http://dx.doi.org/10.1007/s10823-013-9190-9>
- Poomalar, G. K., & Arounassalame, B. (2013). The quality of life during and after menopause among rural women. *Journal of clinical and diagnostic research: JCDR*, 7(1), 135.
- Raba, A. M. (2001). *Major personalities in the Quran*. Kuala Lumpur: AS Noordeen.
- Sadiqi, F. (2008). The Central role of the family law in the Moroccan Feminist Movement. *British Journal of Middle Eastern Studies*, 35(3), 325-337. <http://dx.doi.org/10.1080/13530190802525098>
- Sprecher, S. (2002). Sexual satisfaction in premarital relationships: Associations with satisfaction, love, commitment, and stability. *Journal of Sex Research*, 39(3), 190-196. <http://dx.doi.org/10.1080/00224490209552141>
- Swisher, S. H. (1995). Therapeutic interventions recommended for treatment of sexual addiction/compulsivity. *Sexual Addiction & Compulsivity: The Journal of Treatment and Prevention*, 2(1), 31-39.
- Symoens, S., Van de Velde, S., Colman, E., & Bracke, P. (2013). Divorce and the Multidimensionality of Men and Women's Mental Health: The Role of Social-Relational and Socio-Economic Conditions. *Applied Research in Quality of Life*, 1-18.
- Wan-Ibrahim, W. A., Majid, M. A., & Zainab, I. (2014). Subjective Well-Being of Older Persons at Elderly Day-Care Center. *Middle-East Journal of Scientific Research*, 20(11), 1461-1464. <http://dx.doi.org/10.5829/idosi.mejsr.2014.20.11.21081>
- Weissman, M. M., & Klerman, G. L. (1977). Sex differences and the epidemiology of depression. *Archives of general psychiatry*, 34(1), 98.
- Yahya, Z., & Hassan, S. A. (2011). Model Kaunseling Penceraian Maqasid Syariah [Maqasid Syariah Divorce Counseling Model]. Dalam Siti Aishah Hassan. *Menangani Masalah Komuniti: Pendekatan Psikospiritual, Kaedah E-Kaunseling, dan Pelaksanaan Modul* (pp. 26-58). Serdang: Penerbit UPM.
- Zainab, I., Wan-Ibrahim, W. A., & Asyraf, H. A. R. (2014). Marital Breakdown in Muslim Community in Malaysia. *Middle-East Journal of Scientific Research*, 20(11), 1440-1444. <http://dx.doi.org/10.5829/idosi.mejsr.2014.20.11.21072>
- Zakaria, M. Z., & Baharuddin, D. F. (2011a). *Cybersex Addiction Treatment a Malaysian Perspective on The Needs for Counselors Training*. PERKAMA International Conference Bandung, Indonesia, 7-9 December.
- Zakaria, M. Z., & Baharudin, D. F. (2011b). *Ketagihan Seks Siber: Pengalaman Kaunselor di Malaysia*. PERKAMA International Convention. Kuala Lumpur: 22-23 June.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Influence of Local Leadership in Poverty Eradication among the Orang Asli Communities in the State of Terengganu, Malaysia

Mohamad Hafis Amat Simin¹, Ramle Abdullah² & Asmawi Ibrahim³

¹ Faculty of Applied Social Sciences, University Sultan Zainal Abidin, Terengganu, Malaysia

² Knowledge Enhancement Centre, University Sultan Zainal Abidin, Terengganu, Malaysia

³ University – Community Transformation Centre, University Sultan Zainal Abidin, Terengganu, Malaysia

Correspondence: Hafis Amat Simin, Faculty of Applied Social Sciences, University Sultan Zainal Abidin, 21300 Kuala Terengganu, Malaysia. Tel: 60-96-68-8146. E-mail: mohamadhafis@unisza.edu.my

Received: August 24, 2014 Accepted: March 3, 2015 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p342

URL: <http://dx.doi.org/10.5539/ass.v11n21p342>

Abstract

Statistics show until now more than 30% of Orang Asli in Malaysia is still living in poverty. The government plans to eradicate the poverty facing many challenges. One of the challenges is related to the local synchronic factors, which include aspects of culture, belief, attitude, values and leadership. A survey was conducted on Kampung Orang Asli Sungai Pergam, Terengganu to identify the importance of the role of local leaders in ensuring the successful implementation of a development project that aims to poverty eradication among the local population. The village is chosen based on its performance in a number of development projects, and has successfully enhance socio-economic status of the population. Objective of the survey is to identify: (i) What are the characteristics that are capable of leadership impacts on local poverty alleviation project success. (ii) What role should be played by local leaders to make sure every development project undertaken to achieve objective. Survey data were collected by using interviews and observation techniques. Survey findings show personality traits of a leader is an important factor affecting the success of a leader of its own related to the implementation of development projects. In addition to the leadership structure also has a significance practiced in community development. From the point role of leadership, the element of awareness of the responsibility and commitment of the leaders in developing the village is important. Orang Asli leaders in the Kampung Sungai Pergam have initiative and commitment in ensuring their future progress of development for their village.

Keywords: Orang Asli, poverty, leadership, development, poverty eradicated

1. Introduction

Development of a country or society is not only measured in terms of economy, but also about the social aspects such as education, health, family, political, intellectual and spiritual. Development involves a continuous process undertaken by individuals, communities, government and anyone in authority do. The process is thus a difference in the pattern or patterns of life, both qualitatively (there has been a good change and bring well-being) and quantitative (size or number of aspects and items) (Nor Ashikin Mohd Saad, 2008).

Determination of the need for the implementation of the development is to be accomplished so that the results benefit the next target for a healthy life. The fact of development is actually something that can bring happiness to the people involved. Each planned development has the target. Therefore, the goal of development to bring prosperity to the target. The meaning behind his development agenda is development that can bring quality of life which encompasses all aspects of social, physical, economic and human. Its impact on the lives of very large universal whether development brings positive results or otherwise. Smoothness development occurs in stages in the context of a country that is on a national, regional and local levels.

For Malaysia, the existence of a society of different cultures together require different initiatives in development planning. Our development efforts are directed to everyone regardless of race, religion, ethnicity, gender or social class. Similarly, ethnic minority groups in Malaysia. Ethnic minorities such as Orang Asli, aborigines of Sabah and Sarawak did not escape the attention of government to plan of development them.

In the context of the Orang Asli community, Malaysian government never marginalize this community to develop of their socio-economic order in line with other communities. Various efforts have been taken by the

government (JAKOA, 2011). The evidence, since the First Malaysia Plan (1966-1970) again Orang Asli development agenda of the country has become known for sure as you indulge them weak and marginalized groups. Allotment for Orang Asli community continues to increase from time to time to draft begins during the first Malaysia Plan to be introduced so that the 10th Malaysia Plan.

The success of a planned development program depends on the target group of the main players on every program implemented. The government is aware of their involvement is needed to work together and achieve the objective of developing countries (Hood Salleh, 1986). The active involvement of the local community, especially organizations at the village level is very important in determining the success of this exercise.

1.1 Orang Asli Leadership Issues in Development

In the context of the public, the leader of the village known surely rank as an important mechanism in helping convey government passion in the grass roots level. They play a important role create involvement of villagers in the local development plan and so voiced desires, purposes, and problems that can not be resolved host itself to rank the top in order to put forward and take action (Nicholas, 1998).

However, the failure often associated with the Orang Asli community development program designed by the government in eradicating poverty among other factors caused by local synchronic namely the failure of leaders in grass root function properly. There are several obstacles that qualify the role of leader of the Orang Asli to fulfilling the task of bringing into the mainstream of local community members (Odin Abdullah, 1995). Due to these constraints can be formulated as a problem of knowledge, culture, and social psychology. Odin Abdullah(1995) describes the stages bahawa low education is a major factor as most traditional leaders and the head of the village bomoh lack of knowledge and can not arrange things with better village management. It can be proved as busy as 80 percent Orang Asli leaders should not be read.

In the same period, Ma'arof Redzuan & Zahid Emby (2008) explains, the some Orang Asli leaders (penghulu / batin) have low self-esteem that outrageous attitude in addition to embarrassment, fear and belief. Such attitudes lead to the penghulu / batin is not capable of being a good middleman between the government with the villagers. What are the desires of the villagers can not be clearly caused feelings of fear and shame to deal with related parties. In addition, they also do not believe in implementing development programs designed something by government. This led development efforts undertaken stunted and did not reach the objective due to a cold welcome by the villagers.

However, the situation during the Orang Asli community in the Terengganu, especially in the village of Sungai Pergam seen to be in the opposite situation. In this 10 years back, the poverty level has come down a little high off the entire period of 10 years. This changes is the result of the triumph of development program that was conducted by the government, especially economic development. The success is influenced by the organization's leadership role in the local community. This paper will explain good features that exist in the organization leadership of Orang Asli Terengganu community in helping to tackle the problem of poverty in the country among their group. Objective of this paper are: (i) Describe the leadership character that gives the impression to the glory that is capable of development projects to eradicate poverty in the local community. (ii) Explaining the role of successful leader each host in the development project.

2. Method

Research is conducted using qualitative methods that seek to answer this research issue. The use of qualitative methods can help researchers obtain comprehensive data, more accurate, clear, and allows researchers to connect descriptive aspects of the study. More specifically, the study was conducted within the scope of the design of an ethnographic study that was conducted on Orang Asli tribe in the Orang Asli village Semaq Beri in Sungai Pergam, Kemaman. The data collected is in the form of descriptive. Researchers have used three techniques of data collection, observation and follow, in-depth interviews and content analysis. The use of three different techniques is a triangulation technique that will strengthen the reliability of the results.

Participation observations is the main techniques used to collect data from informants study. This technique is used to understand the characteristics and role performed by local leadership as a key player in the process of acceptance of all development programs planned by the government. In applying this technique, the researchers participated in all the daily activities performed by local leaders, especially on the process of managing the affairs of the village, JKKK meetings, as well as the relations with external parties. Use this technique especially beneficial in the following areas:

- i. Give researchers the opportunity to directly observe the number of issues or events related to the research problem.

- ii. Obtain a clear and accurate picture of an issue may be.
- iii. Avoid the possibility of falsification of information by informants during the interview process implemented.

Regarding depth interview technique as well, it is an important source of data intended for a complete description and explanation on the matter observed, participated and things that are not understood by researchers. The interview also aims to add as much information or data. Several informants interviewed range from 20 local leaders and members of the *batin* covering Village Development and Security Committee (JKKK).

In addition, the researchers also used the content analysis technique, which analyzes the document associated with this study. Researchers have examined the documents relating to the results of previous studies considered relevant and can be relied on to clarify further the study of phenomena related issues.

Once data is collected, analyzed and coordinated data using computer software QSR NVivo. Software to help researchers transcribe, store, coordinating, organizing, coding and making a systematic study of the theme.

3. Literature Review

By tradition, the Orang Asli community, led by the leader of their traditions such as *Batin penghulu*, witches (*hala*) and also the parents. Historically, the village chief of formal institutions is a new institution in the Orang Asli community organizations (Benjamin, 1968; Williams-Hant, A.1993; Ma'arof Redzuan & Zahid Emby, 2008). They explained that this institution was introduced by British colonists in the colonial era and they are responsible induct heads in the Orang Asli village. Between the village chief purpose inauguration is intended to help the royal British give intimation and keep the Orang Asli community rather than engaging in subversive activities, terrorist communist. This inauguration reflects the Orang Asli community does not have the head of the village (formal leaders) in the past (Ma'arof Redzuan & Zahid Emby, 2008). In the past many aborigines people rely on traditional leadership (not formal) as well as parents and witches to make certain decisions and as a source of reference group members.

In Temiar Orang Asli society, Benjamin (1968) described in the past Temiar community does not have an aging system and formal leadership. The existence of this leadership system only occurs when there is close contact with the Malay community. Establishment of contacts with the Malay community needs Temiar people choose 'leaders' representing their communities.

Itam Wali Nawan (1993) explains, the traditional leaders in the Orang Asli community known by various terms. For traditional Malay tribes, known by the title of their leader Tok Batin. For Negrito and Senoi tribe, their leader known as *penghulu*. However, in general the indigenous communities, particularly indigenous peoples, there are a number of leadership positions such as chiefs, headmen, Tok Batin, healer, shaman, healer, Traditional Authority and Council Old Folks (Ma'arof Redzuan & Zahid Emby, 2008), depending on the related tribes. For tribes findings usually there are at least four leadership positions. While for most of the Negrito tribes only have one position only (Ramle Abdullah, 2001). However, that is certainly now almost the entire indigenous villages have a leader who is known as the *penghulu* or *Batin* appointed formal or informal.

Itam Wali Nawan (1993) also explained that there are two methods of appointment of the Orang Asli community, through inheritance and appointment system. Appointment through inheritance is the position of Village Heads / ruler will be automatically handed to her if one heart dies. Members of the group will try to replace it immediately. Position will normally be replaced by the oldest son in the family Tok Batin. There is also the possibility of another person as his brother would take place if the Tok Batin had no son. Successor Tok Batin always been trained to carry out informally by the Batin self during his lifetime (Ibrahim, 2013). If there is no suitable candidate, the non- relative in the old chief would be appointed (Williams-Hant, 1993).

However, there are Orang Asli communities who elect their leaders through the appointment system. Because there are people who are appointed by the head of the inheritance system of functioning properly, then the community members elect a leader who is more credible. General appointed based appointment system is dependent on whether he has the leadership ability or have a lot of support and well-liked by members of the group (Redzuan & Emby, 2008).

However, in recent years the government through the Department of Orang Asli Development (JAKOA) directly involved in the selection of the village chief. In the Orang Asli Act (Act 134) Chapter 16 (1) and 19 (1) (c), the minister has the power to appoint and terminate the services of an Orang Asli leader whether they are appointed by legacy systems or appointment. Selection / appointment is required by JAKOA as per Bil.5/91 and categorized as 'A, B and C' (Abdullah, 1995). There is a tendency to JAKOA appoint someone who has the education and understanding of all tasks to be performed when directed. Usually they are made up of young people who lack the knowledge and experience of the traditions and customs of their group. JAKOA intervene in

the appointment of the head of the village has been an issue, where the indigenous people assume JAKOA downplayed arcane institution and does not respect the will of the local community. there are also cases of sexual appointed by the community has been denied appointment by JAKOA (Redzuan & Emby, 2008).

From the point of leadership influence, the Odin Abdullah (1995) explains, the psychological factor is the dominant factor that hindered the effectiveness of leadership in the Orang Asli community. As a result of poor knowledge and had never been exposed to modern education cause they are not motivated to develop their village. Local leaders also had no idea that a proactive and innovative in directing development effort that could change the lives of local communities. This results in a large number of Orang Asli communities have no direction in participatory process of development. They depend solely on the government through various agencies to develop them.

Studies done by Ma'arof Redzuan & Zahid Emby (2008) on leadership Orang Asli leaders found that the relationship with the community is very important to preserve. Chieftain has two main duties as a government agent and a spokesman for the village. In terms of traditional functions, the chief of a village custom to act as the principal cultural system that allows him to be a judge, the handler, and the determinant to the traditional culture of a ritual which must be observed by the locals. But lately, many chief function is focused on driving or JAKOA and government agencies to establish a program for the social, economic and infrastructure.

Asmawi Ibrahim (2013) explains, among an Batin Batek tribe have vital roles. Among other things, (i) as to all members of the group complained the placement. Any problems that arise will be referred to the arcane knowledge to find solutions. (ii) To protect the welfare of members of the group such as mortality, health, medicine, marriage and divorce. If it matters, must be notified to the heart prior to any action being taken. (iii) Administer the village, but it was not placed on the Batin sole, JAKOA also play a role or set in most cases, especially the activities required by JAKOA. Inward act as a liaison between the villagers with JAKOA.

4. Discussion

4.1 Development Program and Economic Status Changing

In every Malaysia Plan for Orang Asli communities, various programs have been developed to address different aspects of life, especially the problems of poverty. Among the programs that have been designed from the First Malaysia Plan to the Tenth Malaysia Plan is; Poverty Eradication Programme, Programme Regroupment Traditional Village (RPS), Village Rehabilitation Programme, Land Development Programme, Economic Enhancement Program, Infrastructure Development Program, Program, Human Development, Training and Careers, Entrepreneurship Program, Structured Settlements Program, Program of Economic Development and Social Development Programme (Ali, 2008).

In the 9th Malaysia Plan, Economic Stimulus Package 2, the provision of RM40.1 million was spent on the construction of infrastructure and public facilities , agricultural inputs, farm infrastructure and agriculture, as well as the upgrading of infrastructure and economic resources in some selected villages RPS People Natural. Almost all of the programs implemented are associated with policies to increase income and create jobs among the indigenous people (EPU, 2012).

In addition, the core development of the agriculture of Orang Asli peoples in the 9MP is more geared towards commercialization more widely and smallholders producing high income. Land development, in-situ developed for indigenous peoples are in line with this policy which is to make agriculture as areas that can generate high economic impact, as a viable business, developing new agricultural entrepreneurs, and increased productivity for the agricultural sector.

On the whole, it can be noted that in each five -year Malaysia Plan was formed, the various strategies and programs designed to improve the income and quality of life of Orang Asli peoples. In addition to economic development programs through commercial Replanting Project (CSR), some form of resettlement programs and the development of human capital has also been implemented. This is all done with the intent to benefit the economy and tackle the problems of poverty and high poverty among Orang Asli peoples. As a result, based on data from E - Damak (2013) continued reduction in poverty percent of Orang Asli households across the country to 35.1 % in 2011; reported the percentage of poor decreased to 11.5 % and extreme poverty to 23.6 %.

A similar situation is also reflected in the Orang Asli community in the Terengganu. At the end of 1990 the average monthly income not exceeding RM300.00 per month KIR. However, in 2009 almost 60 % KIR earned more than RM2000.00 per month. In 2010 only 32.45 % KIR still fall below the poverty line (JAKOA, 2010). Increased income and poverty reduction among Orang Asli peoples in Terengganu is the result of success of development projects, particularly through commercial cultivation of rubber and oil palm. In order to develop

this commercial cropping, local communities not only as recipients of development projects but are also involved in the planning of each project. This is because they have a leader who has high credibility in the development of their communities.

4.2 Leadership Transformations

As described by Nicholas (2001), local community, especially the Orang Asli many groups led by parents; leaders are much guided by their life experiences, but have little or no direct use in leading intellectuality community. With that, when faced with the new paradigm and new influences such as capitalism, technology and globalization they are not able to advance to the front of the well. Without the principle of science older leaders did not attempt to bring their local community along with other communities.

Consciousness above the issue, since the year 2000 with the cooperation of the state government and JAKOA have taken the approach embodied Jawatankuasa Kemajuan dan Keselamatan Kampung (JKKK) Orang Asli in every village across the country. JKKK composed than a Chief, Deputy Chief, secretary, treasurer and assisted by several other committee. Each member of the JKKK paid allowance by country based on each department. They also paid to attend in case meeting allowance held once a month.

This institution is an alternative embodiment to help institutions batin / penghulu (traditional leadership) are seen not attempt to lead alone the village. JKKK embodiment seen very helpful especially the government in an attempt to wake the Orang Asli community. It's his deep many committee members of JKKK is comprised of experts rather than the young group inducted based their skill and personality versus tradition inaugurated leadership through inheritance system. So also in the Orang Asli community Sungai Pergam, Terengganu. JKKK institution to assist the institution embodied views do not mind carrying the villagers attempt to change society in line with the others. Chief and expert consist committee members than those aged between 25 to 45 years. Although they have not seen the customs and heritage -related skills, but they are very impressive leadership towards bringing members of the group out of the shackles of poverty. Effectiveness of development programs are implemented is to have regard to the character of JKKK Chief chair meeting as knowledgeable, open-minded, have a high commitment, communication skills and proficiency to take care of.

4.2.1 Knowledge

The effectiveness of an organization is dependent on the leadership and the knowledge. With the knowledge they possess a leader capable of leading the community towards their well-being. In the context of Orang Asli leadership JKKK Sungai Pergam, they also consist of individuals who have received formal education. Although the level of education that belongs not reached the level of pride, but they are a new generation of leaders who have a basic knowledge such as reading, writing and arithmetic. Therefore, each program of economic development that is planned and undertaken by the government can be effectively managed as they not only act as receivers but they also act as a playmaker. Brilliant ideas related to development projects are often presented as they have the knowledge than his predecessors. At the same time they also pass on all relevant information effectively to the development of group members.

4.2.2 High Commitment

JKKK leader of Orang Asli in Sungai Pergam also showed a very high commitment to any attempt by the government to help local people out rather than poverty. They are so earnestly successful any programs that run for a local community. They argued, is very important to work with serious to warrant the comforts of life. They also have a high desire Want affect members of the group to support business goals and goal set by government. The informant explained, when want get the pleasure to work with more persistent.

4.2.3 Open Mind / Liberal / Moderate

The basic success of an organization depends on the openness of thinking individuals who act as leaders of the organization. Orang Asli Semaq Beri communities seen to be a better situation than other Orang Asli communities as leaders JKKK they have very positive thoughts. They not only open minded but very shortsighted. They are able to create new ideas that are useful to the interests of community members. The informant explained, to achieve progress they can not expect help and support from the government on an ongoing basis alone. They explained that a long time ago of course they only expect help from JAKOA completely, but if they still like it even reaches the point when they will not grow and prosper. The informant said the community needs to be independent and work hard to change your life without depending on others.

4.2.4 Communication Skills

Skills in communication is a vital part of the character of an effective leader. This feature is also owned by Orang Asli leader of JKKK in Sungai Pergam. These skills are seen much of development efforts undertaken by the government in order to eradicate poverty. This is because the ability to explain, deliver information and give directions influenced members of the community to accept development projects. As a result of information and guidance on an ongoing basis allows a very high incidence of awareness among members of the community to change. The informant also said he was not ashamed and afraid to get in touch with the relevant parties, especially in matters of economic, social and infrastructures villagers.

4.2.5 Management Skills

The most important feature of which is owned by the chairman and members of Orang Asli of JKKK leader in Sungai Pergam is the ability of serving as a leader and manager. He is not only able to help manage development programs undertaken by the government even be able to plan and administer the affairs and all the villagers. The informant explained, to be a good leader, there must be careful planning of each thing you want to do. Also, a point to be made must have the support and response from members of the group. Without the support of community members who run things are useless. The informant also explained that the key to the success of a leader is able to solve and overcome problems among villagers accordingly.

4.3 JKKK Role in Development

4.3.1 Project Planner

Among the leading role in the development JKKK is to identify and plan a project or program deemed suitable to be implemented in the local population. They act as the determination of strategy planning and implementation of development programs and projects in the village. A development project to be accomplished will be decided after a meeting among committee members JKKK implemented. Sometimes meetings are also attended by officials from relevant agencies such as JAKOA, FELCRA, KETENGAH and others. They explained, a project to be implemented should be discussed in detail in the first JKKK committee members. It is to ensure that a project is to be implemented in accordance with the needs of community members. In addition, informants also explained the success of development projects in their villages as the government is particularly JAKOA will take into account the views and suggestions of local people are represented by JKKK. In other words JKKK act determines the priority list of development projects in the village.

4.3.2 Connection Agents

JKKK Orang Asli Sungai Pergam also acts as an intermediate / two-way communication between the villagers and elected representatives or officials of related agencies in managing the development of Orang Asli as JAKOA, FELCRA, Central Terengganu Development Authority (KETENGAH), Department of Health and other agencies. They act as agents of change and act as an important link with the government. Anything problems associated with resident the need JKKK village officials will contact the relevant agencies. Similarly, if the relevant agencies to plan a program for the residents, the agency will contact the JKKK chairman advance for approval of a matter to be accomplished.

During the survey, informants (chairman JKKK) often call the Legislative Assembly constituency Air Puteh, Kemaman MP (Minister of Information and Communication Technology) and Chief Minister to resolve several issues related to the villagers. Courage informants in building relationships with the highest state and federal administrative seen key to the success of development projects to eradicate poverty among Orang Asli Semaq Beri at Sungai River. The relationship was so close to the highest administration also catalyze the development projects implemented unflinching in their village.

The JKKK also responsible as a agent of relationship between the villagers and rural communities like the Malays and Chinese. Normally built relationships is related to economic affairs. The Malay and Chinese residents usually require energy to find small sticks for agricultural activities. They also hired villagers to set up a temporary home (secret) for logging. Therefore, JKKK responsible for residents who want to find work as well as agents that determine the amount of the wages of the work to be accomplished by the related parties.

4.3.3 Action Bodies

JKKK Orang Asli Sungai Pergam also acts as a action body and capable of harnessing energy, resource development, and the changing attitudes of society at the village level to further improve productivity. If there is a new program or project implementation, JKKK members is the main driver and initiator of the project so that it

can be emulated by the locals. They are also responsible for mobilizing the villagers to be more independent so that energy can be exploited in an integrated population towards development to be achieved.

4.3.4 Coordinator and Project Monitoring

The JKKK is coordinating the implementation of development programs and projects in the village. With the ability JKKK members, they maximize their efforts and lead to the success of the projects that have been agreed upon, especially in terms of the following; cooperate with the encouraging participation by all segments of society; monitor and ensure the smooth running of all the projects that are being implemented; provide or assist and so provides for the implementation and development project. The informant explained, the mobilization of energy between JKKK, residents and agencies need to continue to create community-building communities / areas with a high quality of life in terms of spiritual, intellectual, beautiful and clean environment and the need for economic development.

The success of the development program in Kampung Sungai Pergam is also due to ongoing monitoring by the members of the JKKK on the progress of a development project in the village. They also serve to evaluate the projects that constraints or problems that arise in this project should be addressed. Measures to monitor all activities and projects undertaken significant impact on the economic changes of the villagers to maximize the objectives of a project. As a result, the villagers would increase household income thus can move out of poverty.

5. Conclusion

Orang Asli community leadership Sungai Pergam has undergone changes in line with the passage of time, changes in the community and the needs of the community. Although there has been a change, leadership tradition is still maintained because it is considered as a fundamental symbol of heritage and identity customs of indigenous peoples. The emergence of a new generation of leaders among Orang Asli Sungai Pergam is attributed to an increasing number of educated community members. They emerged as a leader whose role is alerting members of their communities about the need to shift to a better life.

Members of JKKK Orang Asli Sungai Pergam plays a very significant role in the success of development programs in their villages. They are able to function and respond to the new paradigm shift in tandem with other communities. The role played had a big impact so as to remove the villagers out of poverty. In addition, JKKK leadership has complete character to influence the villagers towards achieving the aims and objectives of development. In other words, characters belonging to influence that led them to change their attitudes and behavior.

JKKK leadership in this village are very helpful in expanding the opportunities provided by the government - resources for the benefit of local residents. The process of effective leadership practices JKKK village leadership to allow it to act as an agent of change at the grassroots level. They serve as intermediaries in information sharing between the government and villagers. Therefore, this study proves that JKKK capable and able to fulfill the wishes of work to bring change at the village level in line with its position as a development team.

References

- Abdullah, O. (1995, January). *Development Challenges of the Orang Asli from leadership aspects*. Paper presented at the Workshop on Orang Asli Development in 21st Century.
- Abdullah, R. (2001). *Economic Transition of the Orang Asli: from environmental economic aspects* (Unpublished doctoral thesis). Universiti Sains Malaysia.
- Benjamin, G. (1968). Headmanship And Leadership In Temiar Society. *Federal Museum Journal, Volume XIII New Series*.
- Economic Planning Unit. (2012). Interim Report on Socioeconomic of Orang Asli in Malaysia Peninsular: Moving to National Plan of Orang Asli Development. Putrajaya: Prime Minister Office.
- Ibrahim, A. (2013). *Traditional knowledge related nutritions among Orang Asli Bateq in Kuala Koh Gua Musang Kelantan* (Unpublished master's thesis). University Sultan Zainal Abidin, Kuala Terengganu, Malaysia.
- JAKOA. (2011). *Strategic Plans Orang Asli Development 2011-2015*. Kuala Lumpur: Department of Orang Asli Development Malaysia.
- JAKOA. (2013). *E-Damak System*. Retrieved March 20, 2013, from <http://damak.jakoa.gov.my/>
- Nawan, I. W. (1993, September). *Rancangan Pengumpulan Semula (RPS) Air Banun: Case Study in Social Change*. Paper presented at the Colloquium on Indigenous People Facing Development Challenge.

- Nicholas, C. (1998). *The Orang Asli in the Malaysian nation state: the politics and development of marginal indigenous communities* (Unpublished doctoral thesis). University of Malaya, Malaysia.
- Nicholas, C. (2001). Compromising Indigenous Leadership: Losing Root in Tribal Communities. In R. G. Abad, (Ed.), *The Asian face of globalisation reconstructing identities, institutions and resources* (p. 152). The Asian Public Intellectual (API) Fellows.
- Redzuan, M., & Emby, Z. (2008). Leadership and Development of Orang Asli. In M. Redzuan & S. G. Sarjit (Eds.), *Orang Asli: Issues, Transformation and Challenge*. Serdang: Universiti Putra Malaysia.
- Saad, N. A. M. (2008). Development of Orang Asli : Study on Orang Asli Temiar in Rancangan Pengumpulan Semula (RPS) Dala, Gerik, Perak. *Proceedings of the Conference for Malaysia Indigenous*.
- Salleh, H. (1986, September). *Bases of Traditional Authority Among Orang Asli*. Paper presented at the 2nd Symposium Life and Development of Orang Asli in Malaysia Peninsular.
- Williams-Hant, A. (1993, September). Orang Asli communities facing development challenges. Paper presented at the *Colloquium for Indigenous Community Facing Development Challenges*.
- Zainal Abidin, A. (2008). The role of the Department of Orang Asli (JHEOA) in Orang Asli community development. In M. Redzuan, & S. G. Sarjit (Eds.). *Orang Asli: Issues, Transformation and Challenges*. Serdang: Universiti Putra Malaysia.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Consequences of Ataturk's Secularization on Turkey

Asyraf Hj Ab Rahman¹, Wan Ibrahim Wan Ahmad², Fadzli Adam³, Nooraihan Ali³ & Daud Ismail³

¹ Centre for Fundamental and Liberal Education, Universiti Malaysia Terengganu, Malaysia

² School of Social Development, Universiti Utara Malaysia, Malaysia

³ Faculty of Islamic Contemporary Studies, Universiti Sultan Zainal Abidin (UniSZA), Terengganu, Malaysia

Correspondence: Asyraf Hj Ab Rahman, Centre for Fundamental and Liberal Education, Universiti Malaysia Terengganu, Malaysia. Tel: 60-9-668-3507. E-mail: asyraf@umt.edu.my

Received: October 3, 2014 Accepted: November 17, 2014 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p350

URL: <http://dx.doi.org/10.5539/ass.v11n21p350>

Abstract

Mustafa Kamal Ataturk was known as one of the important figures responsible in making new modern Turkey. Resulting from his modernization and secularization process, there were several consequences upon Turkish nations in particular that related to social and religious as well as political aspects. This paper discusses some of those consequences in the contexts of modern Turkey. Using a secondary data analysis, published materials written by scholars and writers in the field, the study found that Kemal's reforms had totally brought a new system of life based on the western style whilst rejecting Islamic tradition and its culture. This includes his policy to terminate the political role of Islam or taking Islam out of politics. Kemal's modernization could be regarded as one of the main factors for the social and religious changes in modern Turkey.

Keywords: Islam, Modern Turkey, Secularization

1. Introduction

After the collapse of the Ottoman Empire, Turkey began to emerge as a newly established republic under the leadership of Mustafa Kemal Ataturk (1881-1938) whose administration adopted Western norms and culture to create a new society and nation-state. After World War I, the country progressed in the spirit of Kemalist ideology thus becoming a modern, Westernized republic with a parliamentary government. Kemal's ideology, has one important goal: to raise Turkish nation, society, politics, education, and institutions to the level of Western civilization. As Hakan (2005) argues, Turkey pursues its overall goal, modernization, and its more specific goal, membership in the European Union. Despite the many promises and systematic process of modernization, Kemal's revolution for the modernization of Turkey to some other extents, brought many consequences to the Turkish people socially, religiously and politically including the rejection of the Islamic traditions. This paper discusses those consequences and to see how Ataturk's secularization finally eliminated the Turkish own Islamic heritage and traditions arguing that the progress of a nation need not to eliminate its own heritage and traditions as happen to some other countries.

2. Methods

This paper aims to analyze the consequences of Ataturk's secularization in Turkey. Data for this study is based on secondary data and materials written on Modern Turkey and Kemal's Reforms in particular. Using content analysis technique and a descriptive approach, Kemal's life and his modernization and secularization process are reviewed and analyzed. Content analysis refers to any technique for making inferences by objectively and systematically identifying specified characteristics of messages (Stemler, 2001). A descriptive analysis is also employed by examining those works which manifest Kemal's thought and reforms besides identifying some major themes relevant to the study objectives.

3. Result and Discussions

3.1 Mustafa Kemal's Life and Reforms

Mustafa Kemal later known as 'Kemal Ataturk' was born in Salonica in 1881. He was the son of Ali Riza and Zubaida. During his father's death, he was about seven years old. He then was brought up by his mother with religious knowledge as she wanted him to become a good Muslim. In 1893, he entered the Military cadet. In the same year, he went on to the Military Academy in Monastir and entered the War Collage in Istanbul. In 1902, he

got a promotion from the college to a teaching position on the staff. In January 1905, he graduated from the college with the rank of staff-captain (Lewis 1968, p. 244). The discussion in this paper will firstly concentrate on Kemal's ideology and his political structure since both gives important contributions towards the establishment of modern secular Turkey. It seems to be clear that his years at the War College in 1899 was the starting point of his nationalist ideology when he began to keep in touch with the works of Namik Kemal, an Ottoman Turkish writer, intellectual, reformer, journalist and political activist who was influential in the formation of the Young Ottomans and their struggles against the administration of the Ottoman authority. Kemal's early life in fact, had already brought him away from religious up-bringing. He got religious knowledge from his mother when he was about seven years old. His religious education lasted for five years when he chose military career while he was twelve years old. In fact, twelve years old was too young for him to get involve in military career and leaving out his early religious education. The environment at the War college, had in many respects, influenced Kemal towards his later reforms for the Modern Turkey.

Need to mention that the hardness and the struggles of Namik Kemal for the liberation of the Turkish nations also attracted Kemal to involve himself in nationalist movement. Thus, terms like *vatan* (fatherland), *hurriyet* (freedom) and *mesrutiyet* (constitutional government) were very influential in increasing Kemal's later nationalist motivation. It should be noted that Kemal's involvement with the nationalist movement was for several reasons. First, he was attracted with the struggle of the movement to assimilate the Turkish nationality with the Western civilization. In this case, the movement tried to convince the Ottoman authority that, the Turks should be free, proud and creative like the Western people. In order to be a great nation, the Ottoman authority must also put limits on the sovereign, adopted and lived by a constitution and swept away what they saw as the superstitions of the past. Kemal seemed to agree with the idea, since it was the only mean Turkish people became modern socially and culturally. Secondly, the movement's attempt to interpret Islam in accordance with the Modern liberal viewpoint without referring to the traditional '*ulama*' was in line with Kemal's early inspirations arguing that the existence of traditional *ulama* was one of the reasons led the Turkish nation in backwardness. Kemal's early involvement in the Young Turks movement has nothing when he failed to prosper the political structure of the movement itself. His relation with the Young Turks leaders was also very cordial. Therefore, the Young Turks revolution in 1908 did not bring him to any positions (Lewis, 1968, p. 244).

Kemal's political involvement began when he got in touch with the secret Committee of Union and Progress, and took part in their works. His ideas were much more influenced by the ideas of one Turkish famous writer Ziya Gokalp. In this regard, as claimed by Maryam Jameelah, most of Ziya Gokalp's ideas about nationalism and the adoption of Western civilization had been later implemented by Mustafa Kemal (Jameelah, 1975, pp. 122-130). Furthermore, Gokalp's ideas from Kemal's view point, were very effective towards the modernization of the Turkish nations since it would expose people of Turkey with new technique, political form and institutional structures of other nations (Western civilizations). Up to this point, Gokalp's ideas gradually look the process of assimilation as the only way to bring the Turkish nation far more advanced in terms of social aspects, politics and economy. Another important aspect of Gokalp's ideas, perhaps the most important one, the reinterpretation of Islam in line with the needs of modern society. This means that Islam must be carried by the Turks into their new civilization as another faith alongside Catholicism or Protestantism in Western Europe. This idea seems to put aside the influence of the old Perso-Arabic tradition as practiced by the traditional *ulama* and scholars. Kemal, who had already expressed his resentment to the traditional '*ulama*', later implemented the idea and modified Islam in line with his modern reforms. This was the beginning of Kemal secular reforms in which religion should be westernized like everything else. In Mustafa Kemal's own words, he describes the importance of Turkish identity and the insignificance of Islam as he sees it:

"Even before accepting the religion of the Arabs [Islam], the Turks were a great nation. After accepting the religion of the Arabs, this religion, didn't effect to combine the Arabs, the Persians and Egyptians with the Turks to constitute a nation. (This religion) rather, loosened the national nexus of Turkish nation, got national excitement numb. This was very natural. Because the purpose of the religion founded by Muhammad, over all nations, was to drag to an including Arab national politics."— Mustafa Kemal, *Medeni Bilgiler* (<http://lostislamichistory.com/article/>).

A conference called at Erzurum in 1919 that involved all resistance movements created another development for Kemal's career in politics when he was elected as a chairman. On 23 April he became president for a new national assembly, meeting at Ankara. These movements had expressed their decision to maintain national independence and integrity through a new government they had elected called the Grand National Assembly. Mustafa Kemal who was the president of this organization began to point out the idea of national sovereignty and independence of the Turkish nations. His policy was to make Turkey as a prosperous modern state respected

by all other nations of the world. In 1921, the Assembly had passed the Constitutional Act that recognized the principle of national sovereignty assembled all powers including the execution of the Sharia' in the National Assembly (Kemal, 1970, p. 532).

This Constitution however had given a critical impact to the role of Sultan in the government. Even there was a considerable body of the Turkish opinion suggesting the retention of the Sultanate monarchy, but Mustafa Kemal, through the Assembly as his tool, proposed the abolition of the Sultanate and banish from Turkey all members of the Ottoman dynasty. At this point, Kemal gradually implemented Gokalp's idea when the national sovereignty was recognized and the authority of Islam was eliminated in the National Assembly. Regarding the elimination of Islamic authority, Kemal made a clear statement as to show how Islam from his view point, became a major obstacle to the progress of Turkey:

“For nearly five hundred years, these rules and theories of an Arab Shaikh and the interpretations of generations of lazy and good-for-nothing priests have decided the civil and criminal law of Turkey....Islam-this theology of an immoral Arab- is a dead thing. Possibly it might have suited tribes in the desert. It is no good for modern, progressive state. God's revelation! There is no God!..” (H. G. Armstrong, 1961, pp. 199-200).

From Kemal's statement, nothing can be said unless to see his another revolutionary reforms that gradually marginalized Islam as the way of life among the Turks. More importantly, his reform for disestablishment of Islam politically and culturally was completed. In 1939 Turkey became a secular state and modern in her constitution, her law and her aspirations (Lewis, 1968, p. 276). Mustafa Kemal was absolute Dictator of this modern Turkey. There were critics and comments from writers and scholars regarding Kemal's revolution that was very controversial and drastic. In describing Kemal's ideas towards Secular Turkey, R. D. Robinson stated that: “Kemal was an authoritarian ruler, but, unlike some, his record was unstained by personal corruption....The ideals toward which he strove were: (1) the creation of a national political state in full possession of its sovereign power. (2) the development of some element of national power and international stature so that Turkey might have a chance to live, (3) a steady advance to a western standard of living by marching the physical and human resources of the country, (4) a slow but continued movement towards more liberal political and economic institutions” (Robinson, 1963, p. 90).

3.2 Consequences of Kemal's Reforms

In fact, Kemal's revolution to the modernization of Turkey brought many consequences to the Turkish people socially, religiously and politically;

3.2.1 Social and Religious Aspects

The rejection of the Islamic tradition and its culture could be regarded as one of the main factors for the social and religious changes in modern Turkey. Kemal's reforms had totally brought a new system of life based on the western style. Turkey was henceforth a purely secular state. In fact, Kemal's policy to terminate the political role of Islam or taking Islam out of politic seemed to be an attempt to take Islam out of much of social life as well (Yapp, 1991, p. 158). Up to the years 1990s, the religious institutions only function at a marginal role or take charge on a smaller religious administration not as it was during the Ottoman day (Bein, 2011). In this context, the urban society seemed to be much more affected by Kemal's reforms rather than those living in rural areas. In Istanbul and Ankara for instance, many people started to pay no attention to Ramadhan. Children were not taught to observe their daily prayer (Fisher, 1959, pp. 394-395). Since the Shariah law was collapse, thus there was no more religious force that could prevent people from doing whatever they like; good or bad things. However there were different phenomena in rural areas when many Muslims refused to accept Kemal's reforms. They quietly ignored and avoid the institutions of the secular state and continued to practice the Islamic traditions and its institutions (Yapp, 1991, p. 158).

With the abolition of all tariqah orders, there was no more Sufis teachings in the mosques and *khanaqahs*. In fact, Sufis teachings that put more emphasis on soul cleansing and the creation of the good and righteous man, had contributed a great deal to the Islamic awareness among the Muslim community in Turkey. After its suppression by the Kemalist regime, there was nothing to be said about this teaching unless to see some Sufis teachers who practiced Sufis order privately in their houses.

The introduction of a civil law based on Europeans law created another social problem in modern Turkey when there was the increase in number of illegitimate births among the teenagers. Rather more, many of the new generations got involve in alcohol since there was a law permitted them to do so.

3.2.2 Political Aspects

Kemal's reforms that based on the ideology of Western secularism brought a new political structure of Modern Turkey. He put the blame for the backwardness of Turkish nation not only on the Ottoman empire but also on Islam. He believed that through the elimination of the social and political power of the Islamic religious authorities, thus Turkey would become thoroughly modernized. Even though the government established by the Kemalist regime seemed to be in form of democracy but in fact, at that time and for twenty years to follow, there was only a one party government controlled by Mustafa Kemal and his close political associates (Fisher, 1959, p. 392). That was why his secular republic survived without any major challenges as long as he maintained a one party dictatorship under which any opposition to his policies or actions was not allowed. Mustafa Kemal's political structure seemed to be opposed by many Muslims scholars because it was totally contradictory to Islam. The Kurdish rebellion in 1925 was a clear evidence when they lasted for several month. The emancipation of women was one of his most essential reform when they were given the right to vote and be candidates in election. By enhancing women in their social and political life, Kemal thought that he had made a great departure from Islamic principles. Actually, in Islam, women can and do enjoy full political rights; for example, the political situation in Pakistan when a woman candidate for presidential election in 1964 was supported by all opposition parties including the so-called fundamentalist party-Jamaat-i-Islami. Thus, Islam as we have elaborated, is not against giving women political roles.

What is clear to us that Kemal's reform on the emancipation of women seem to show his apparent prejudice against Islam. Therefore, the emergence of Secular Turkey was regarded as a starting point of the adoption of Western political elements into Muslims country. The abolition of Sultanate and the caliphate that declared the sovereignty of God was later followed by the replacement of republic by which all sovereignty only belongs to Turkish nations.

4. Conclusion

Turkey was regarded as the first Muslims country that declared as a secular state. Mustafa Kemal Ataturk was responsible for the establishment of modern Turkey. His revolutions and reforms has brought Turkey into a new era of modernization which were not based on any Islamic tradition. Looking at Kemal's reforms it was clear that he has failed to recognize the significance of preserving the historical, cultural and heritage of the Turkish people (Ottoman Empire) when he consciously amended the constitution of his country only for achieving his personal will. The abolition of the Sultanate and the caliphate for instance, gave a great impact for the Islamic political institution since they were the symbol of unity among Muslims all over the world. The emergence of rebellion groups and opposition movements against the Kemalist regime was a clear evidence of his controversial acts.

In fact Mustafa Kemal had forced his will upon the party and nation. The People's Party for instance, seemed to be his tools to dominate in the political scene. Through the reforms imposed, it was clear that he failed to recognize that the progress of a nation need not to eliminate its own heritage and traditions. There are certain countries with ancient civilizations, such as China, Korea and Japan which have become vast progress and development without sacrificing their traditions and heritage. Thus the secularization of Turkey under Kemalist regime would remain as a historical account that could not be forgotten by any Turkish nations since they looked at Kemal's reforms as having positive and negative impacts for Turkey and the new generations in particular.

References

- Armstrong, H. G. (1961). *The Grey Wolf*. New York: Capricorn Books.
- Bein, A. (2011). *Ottoman Ulema, Turkish Republic: Agents of Change and Guardians of Tradition*. California: Stanford University Press. <http://dx.doi.org/10.11126/stanford/9780804773119.001.0001>
- Cleveland, W. L. (1986). *A History of the Modern Middle East*. Colorado: West View Press.
- Fisher, S. N. (1959). *The Middle East: A History*. London: Routledge & Kegan Paul Ltd.
- Jameelah, M. (1975). *Islam and Modernism*. Lahore: Kazi Publication.
- Karakus, H. (2005). *Turkey and the European Union (EU): Kemalism's Effects on the Road to the EU* (M. A. Thesis). Naval Postgraduate School, California, US.
- Karpat, K. H. (1970). Modern Turkey. In P. M. Holt, & A. K. S. Lambton (Eds.), *The Cambridge History of Islam* (Vol. 1). London: Cambridge University Press.
- Kedourie, E. (1992). *Politics in the Middle East*. Oxford University Press.
- Lewis, B. (1968). *The Emergence of Modern Turkey*. Oxford: Oxford University Press.

- Lost Islamic History*. (2011). Retrieved from <http://lostislamichistory.com/article/>
- Mansfield, P. (1973). *The Ottoman Empire and its Successors*. New York: St. Martin's Press.
- Nayir, Y. N. (1968). Ataturkism Is Secularism. In K. H. Karpat (Ed.), *Politics and Social Thought in the Contemporary Middle East*. London: Pall Mall Publication.
- Robinson, R. D. (1963). *The First Turkish Republic: A Case Study in National Development*. Cambridge, Mass: Harvard University Press. <http://dx.doi.org/10.4159/harvard.9780674420465>
- Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation*, 7(17). Retrieved December 17, 2014, from <http://PAREonline.net/getvn.asp>
- Yapp, M. E. (1991). *The Near East Since The First World War*. London: Longman.
- Yegidis, B. L., & Weinbach, R. W. (2002). *Research Methods for Social Workers*. Boston: Allyn and Bacon.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

The Effectiveness of Zakat in Reducing Poverty Incident: An Analysis in Kelantan, Malaysia

Ahmad Fahme Mohd Ali¹, Zakariah Abd. Rashid², Fuadah Johari¹ & Muhammad Ridhwan Ab. Aziz¹

¹ Faculty of Economics and Muamalat, Universiti Sains Islam Malaysia (USIM), Nilai, Negeri Sembilan, Malaysia

² Malaysia Institute of Economic Research (MIER), Malaysia

Correspondence: Fuadah Johari, Faculty of Economics and Muamalat, Universiti Sains Islam Malaysia (USIM), 71800 Nilai, Negeri Sembilan, Malaysia. E-mail: fuadah@usim.edu.my

Received: October 3, 2014 Accepted: November 17, 2014 Online Published: July 6, 2015

doi:10.5539/ass.v11n21p355

URL: <http://dx.doi.org/10.5539/ass.v11n21p355>

Abstract

This study attempts to examine the effectiveness of monthly zakat distribution as a mechanism to poverty reduction in the state of Kelantan. The target population of this study is the *masakin* (poor) and *fuqara* (hardcore poor) (Note 1) categories of the Kelantan Islamic Religious Department (MAIK) (Note 2) zakat recipients. Simple Random sampling procedure is applied to collect primary data related to zakat recipients from the poor and hardcore poor category of ten districts of Kelantan. The effects of zakat distribution on poverty are analyzed within the context of burden of poverty; specifically in terms of incidence, intensity and severity of poverty. These are examined using four major indices of poverty, which include the Headcount Index, Average Poverty Gap, Income Gap and Sen Index. Results revealed that zakat distribution reduces poverty incidence, reduces the extent of poverty and lessens the severity of poverty. Further, the current zakat distribution in Kelantan only gives a small effect on increasing the income of the poor. Hence, by locating the perfect amount of zakat distribution to eliminate poverty and to offer alternative zakat distribution model is the best way in reducing the income inequality and maximization of social welfare.

Keywords: Zakat distribution, poverty alleviation, poverty measures, Kelantan, Malaysia

JEL Classification: I13, O01

1. Introduction

The degree of poverty can be measured at the national level by observing the percentage of the population living under national poverty lines. The usual measurement is by using US\$1 and US\$2 (at 1993 Purchasing Power Parity terms) at reference poverty lines (Note 3). It is estimated that 20 percent (1.2 billion) of the people in the world live on US\$1 a day and 46.7 percent (2.8 billion) of them live on \$2 a day (World Bank, 2001, p. 3). The corresponding percentages of poverty for International Development Bank (IDB) member countries indicate that a relatively large percentage of the populations of these countries are poor although the world economy has grown intensively.

In addition, Islam had brought a method on solving the problem of poverty. Islam makes it obligatory on every Muslim to pay a certain "tax", called Zakat, on their accumulated wealth. The money collected from this Zakat is distributed among the hardcore poor (*Fuqara*) and poor (*Masakin*). One of the most important principles of Islam is that all things belong to Allah S.W.T, and that wealth is therefore held by human beings in trust. The wealth is purified by setting aside a proportion for those in need, and, like the pruning of plants, this cutting back balances and encourages new growth in our wealth.

2. Zakat and Poverty Alleviation

Zakat is one of the five fundamental obligations of Islam. It is an obligatory form of worship (Ibadah) prescribed by Allah s.w.t. Allah commanded in the Qur'an:

"... so establish Salat and give Zakat, and hold fast to Allah ..."

(*Al-Qur'an 22:78*)

The institutions of zakat are among several instruments instituted by Islam to combat and enhance welfare in the society. Zakat helps generate a flow of funds and at the same time increase the consumption of the poor and needy. The word zakat means growth, cleanness and purity in Arabic (Ibn Faris, 1998). The Qur'an mentions the word zakat 30 times and at three places it appears as being commanded by God (Allah s.w.t). Zakat is often called *sadaqah* in the Qur'an. The importance of zakat as an obligation on Muslims is also emphasized in many sayings of the Prophet Muhammad (pbuh). The importance of zakat may be established from a saying of the Prophet (pbuh) in which he indicates that refusing to pay it signify a rebellion against the Islamic State (Mujahid, 2007). Hence, zakat can be considered as an essential form of worship and spiritual purification.

In Kelantan, the collection of zakat is increasing from time to time. Thus, in this case, the opportunity of zakat as a method in reducing poverty is high. Zakat funds could be used to create a pull of funds which can be used in financing development activities which in future can replace government expenditures. For example from the year 2000 until 2013, zakat collection has increase from MYR 15.65 million to MYR 40.62 millions. This has shown on how much does zakat funds will creates more chances in reducing and eliminating the poverty in Kelantan.

3. Problem Statement

Zakat is one of the most important aspects in Islamic Economic System. One positive economic effect of zakat is it increases the money supply which consequent increases the demand for goods and services (Note 4) (Ishak & Ismail, 2007). However many studies in Malaysia illustrate that zakat management reported a negative perception from the zakat payers on the management on zakat funds especially in term of distribution (Dahan, 1998; Sanep et al., 2006; Syukri, 2006; Abdul Halim et al., 2008). The objective of zakat is to assist and rehabilitate the poor and needy (Shirazi, 1996). Thus, the zakat management agency as the trustee for managing the collection and distribution of zakat has to assist in the process of growth and development of the Muslim community. They must ensure that zakat can fulfill the basic needs of the poor in the community and contributes toward a fair and just distribution and circulation of wealth in a society. Though, the effectiveness of zakat collection and distribution mainly depends on the good governance of zakat institution (Wahid & Kader, 2010). If the zakat institution cannot be addressed properly, it could raise negative impact on the future development of the zakat institution.

4. Literature Review

According to Ahmed (2002) and Kahf (2004), the implementation of zakat can provide a micro financing to the poor. Zakat can be given out to the poor for consumption purposes to avoid diversion of funds from production. The combination of micro financing and zakat funds will make it easier for the poor to break out of the poverty cycle. To him, zakat is a redistribution measure while the roots of poverty in Muslim countries lie in productivity and level of economic development. Thus, any discussion of poverty eradication in the context of the Muslim countries must focus on increasing the diameter of the cake rather than distributing a small one. Monzer Khaf (2004) put it on the limitations of the zakat proceeds, hence suggested for the expansion of the zakat base.

Syed Othman Al-Habsyi (1994) explained that zakat can create demand that is one of the most important components in calculating Gross Domestic Product (GDP). The distribution of zakat will create ability for them to increase their capability to purchase. It is obvious that the *fuqara* (poor) and *masakin* (needy) did not have high demand power due to their low and insufficient income to support their needs. So their preference of using things among them is higher than rich people. Because of that, zakat can assist them by increasing their purchasing power. Any growth in demand obviously will accelerate to higher production for goods.

Saiful Azhar Rosly, (2008) explained that zakat plays an important role in poverty eradication and income redistribution of the Muslim people which is a critical component of public finance in Islam. Zakat administration in essence deals with the collection of zakat from zakat payers and distribution of zakat to the 8 recipients (*Asnaf*s). He explained that the increasing number of shareholdings by Muslims in business corporations as well as companies using the Islamic label such as Islamic banks and takaful companies has provide strong basis for a systematic and efficient zakat system of collection and distribution.

S. M. Ali Akkas, (2006) revealed that the strength of zakat as a poverty alleviation tool depends on how much of the prevailing poverty gaps would be financed by zakat proceeds. The strength can be measured by portion of poverty gap that zakat can finance at rural and urban areas. This rural-urban segregation does not have any legal implication but it provides insights on the effect of interventions pursued on regional basis. The information received may help preparing policies which will encourages resources to be transferred wherever these would be of best use. It is quite evident that from his study on poverty alleviation in Bangladesh, zakat collected from rural area can cover only 14.8 percent of the rural poverty gap in 1997. The coverage rises over time and becomes

24.7 percent in 2005. Per capita urban zakat receipts covers 67% of the urban poverty gap and it increases up to 84.3 percent by the year 2005. The extremely low coverage of poverty gap by rural zakat receipts shows severity of rural poverty compared to urban poverty and the limitation of any poverty alleviation strategy solely based on rural zakat. This warrants for mitigation strategy with the necessary condition that the intervention package must be rural biased. Further it also must ensure that the net transfer of resources primarily comes from the rich to poor and equally from urban to rural

M. Kabir Hassan and Juanyed Masrur Khan (2007) estimate the impact of zakat funds on the annual development plan of Bangladesh. The zakat funds can increase the taxation potential of the government through the improvement of productivity, employment and output. Further, the implementation of zakat in Bangladesh has several potential effects on government budgets such as relieving budget categories targeted for poverty alleviation for other budgetary need, increase the potential of taxation through the improvement of productivity, employment and output. Additional the zakat collection can be used by the government as an important economic policy tools for country's development.

Ataul Huq (1993) in his study on development and distribution in Islam highlighted that out of eight beneficiaries of zakat collection, six are for direct benefit of the poor and needy. Thus, zakat can play a very significant role in the redistribution of income in the society which is performed by the Muslim obligation, who recognized their inborn rights to survival in this world. His study further explained the economic impact of zakat from the macro stand points which are, incentives to produce, to invest, to save, to consume and to work. If zakat can be accepted as an economy-wide type of redistribution mechanism of transferring resources from the rich to the poor, then it will provide the best tool for transfer mechanism in the society.

Dimas Bagus Wiranata Kusuma and Raditya Sukmana (2010) study about the power of zakat in poverty alleviation and found out that zakat can give impact in terms of consumption variable and investment variable. Thus, the more zakat disbursed to the recipient, the more in increasing the amount of aggregate consumption created into economy. In spite of in Islamic economic system, zakat payer will transfer their excess income or wealth to zakat recipient which indirectly will promote the higher propensity to consume of zakat recipient. For the zakat payer side, they will reduce the consumption, and turn into saving/investment activities.

Income support provided by zakat fund would increase the money supply in circulation and improve the economic gap between poor and rich group. Johari, F (2004), Patmawati (2006), Rahisam (2010), Mohd Ali, AF (2011) & Ahmed Fahme et al., (2013) show in their studies that zakat has significant impact in bringing positive effect towards improving the income distribution of the poor and needy. Thus, this study tries to measure the level of the effectiveness of zakat in reducing poverty incident in complimenting and enrich the previous study and literatures in Kelantan, Malaysia.

5. Research Methodology

This study will explore the contribution of *zakat* distribution in reducing the burden of poverty which will cover the poverty incidence, the intensity, and the severity of poverty among the fuqara and masakin. To measure the poverty incidence, this study will use the head-count index (H) that shows the proportion of the poor households among the total households. The extent or depth of poverty is measured by using the mean income gap (P_1) and poverty-gap ratio (I). The severity of poverty, which includes the income distribution among the poor, will be measured by the Sen's index of poverty (P_2). The Sen's index is a comprehensive poverty measure, which incorporates the information on the number of poor (H), the extent of poverty, measured by income gap (I), and the Gini coefficient (G), as an indicator of income distribution among the poor.

The poverty measures will be estimated on both data sets on the basis of national poverty line (PLI) at MYR 740, to see the effect of zakat distribution on poverty to the society. Those who receive income below the PLI is considered poor (*masakin*) while half from PLI will be consider as hardcore poor (fuqara). Further, by measuring the income it is an easy to read and easy to compare method. Income measures provide a clearly understood measure of welfare and its determinants. It provides a well-defined unit of analysis that is comparable across households living in different localities. That is the underlying distribution is in terms of monetary units, which has its own merits for comparing poverty as well as inequality. The monetary approach provides a deeper accurate measure of the current standard of living and exhibits continuity in the welfare indicator.

This study involves testing two sets of data. By using four most popular indexes in measuring the poverty; Household-count ratio, Income Gap, Poverty Gap and Sen Index, and the primary data survey based on Zakat Recipient Survey, we first test the income data, before the amount of zakat distribution is included in the household income $f(y_1)$. Following Kakwani (1986), Shirazi (1994), Jehle (1994), Patmawati (2006) and Mohd Ali, AF (2011) Johari F et al. (2014) & (2015) the amount of the zakat transfer is subtracted from the income of

the household in order to get the first set of income distribution. This result will provide us information about the burden of poverty incidence, extent and severity before zakat distribution.

Second, we tested the income data after the zakat distribution by using the same poverty index measurement $f(y_2)$. This second results will provide us the information of the poverty incidence, extent and severity after zakat was distribution. To see the effect of zakat towards reducing the poverty, the result from both tests will be compared. The difference between these results will provides us with information about the effectiveness of zakat in reducing the burden of poverty incidence, extent and severity in Kelantan. The poverty measures will be estimated on both data sets on the basis of national poverty line at MYR 740, to see the effect of zakat distribution on poverty to the society.

The headcount ratio (H) is used to answer the first question of how many are poor. This ratio is called the *head-count (household-count)*.

$$H = \frac{q}{n} \tag{1}$$

This measure is also known as the poverty incidence that it gives the percentage of the poor households among the total households.

The extent or the depth of poverty is measured by using the poverty gap, and income gap of the society.

$$P_1 = \sum_{i=1}^q g_i \tag{2}$$

$$I = \sum_{i \in S(z)} g_i / qz \tag{3}$$

The mean income gap and poverty gap ratio will be estimated on both $f(y_1)$, and $f(y_2)$ income distribution. The severity of poverty will be measured in this study by using the Sen's Index.

$$P_2 = H[I + (1 - I)G] \tag{4}$$

The severity of poverty will be estimated on both data sets of Y_1 and Y_2 frequency household income distribution. The value of P_2 lies in the closed interval $[0,1]$, with $P_2=0$ if everyone has income greater than z , and $P_2=1$ if everyone has zero income. G will be equal to zero ($G = 0$) when all the poor has the same income.

The diagnosis of poverty will be described in terms of the following characteristics of households;

- i) Gender of the household head,
- ii) Location by districts
- iii) The age of the households head,
- v) Household size

Table 1. Number of respondent based on districts area (2008)

District	Mukim	Respondent	Total Fuqara and Masakin	Percent (%)
Bachok	8	55	836	5.7
Gua Musang	3	36	150	23.3
Jeli	3	35	276	12.6
Kota Bharu	15	90	1939	4.6
Kuala Krai	3	40	142	28.1
Machang	6	40	760	7.8
Pasir Mas	10	60	672	7.1
Pasir Putih	8	48	207	16.9
Tanah Merah	3	35	602	6.9
Tumpat	7	42	126	28.5
TOTAL		481	5710	8.4

Source: Research questionnaire

Respondents for this study are selected from the list of MAIK zakat recipients of the *fuqara* and *masakin* (poor and needy) category, which is the target population. The first criteria for the respondent selection are those who have been receiving the zakat from MAIK more than one year. With the cooperation and assistance of the zakat officer of MAIK, the survey encompassed the entire ten districts of Kelantan. Sample of the study are 481 households (8.4 percent) of the total population of 5710 *fuqara* and *masakin* (poor and needy) households in Kelantan. For each *mukim*, 6 respondents were randomly selected from the list of zakat recipient of MAIK. Initially, a number of 481 questionnaires cum interviews carried out in all ten districts in Kelantan. Table 1 illustrates the number of respondent based on districts area.

In order to collect the primary data, a set of questionnaire is used as a survey module for this study. The fieldwork was carried out from January 2009 to May 2009 and it is done by face to face interviews with the respondents based on the questionnaires. In order to answer those previous questions, the questionnaire is divided into three parts. The first part (Part A) is emphasizing on information regarding the background and basic information of the head of households and their household's members. The second part (Part B) is used to gather information on the size and sources of monthly household's income. The third part (Part C) is used to gather the type and amount of assistance that is received by the households from poverty eradication agencies. Pilot test was carried out in Pasir Putih district prior to the actual fieldwork, with the following objectives:

- i. To ensure that the questions are understood and answerable by the respondent.
- ii. To estimate the time needed to interview one respondent. This is important in order to estimate the time and financial budget of the actual fieldwork so that the right number of field enumerators will be employed.
- iii. To estimate possibilities of 'non-responsive' respondents, in order to decide the right sample size and be prepared to overcome such problem.

6. Result

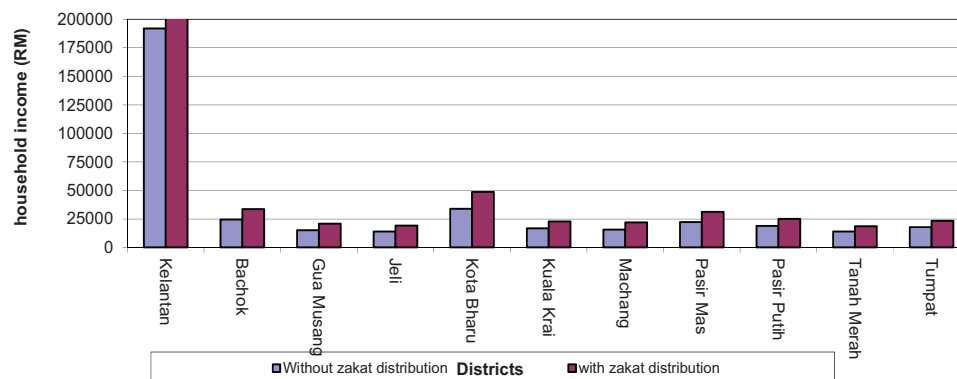
Table 2 presents the impact of zakat on households' monthly income of the *fuqara* and *masakin* categories zakat recipients. Figure 1 shows the graphical presentation of the income impact.

Table 2. Kelantan: changes in monthly household income with and without Zakat distribution by district (MYR)

District	Income without zakat (MYR) (1)	Income with zakat (MYR) (2)	Amount of zakat distribution (MYR) (3) = (2) – (1)	Percentage of zakat to the total income (%) (4) = [(3)/(2)] x 100
KELANTAN	191918	264938	73020 (100%)	27.56
Bachok	24443	33593	9150 (12.6%)	27.23
Gua Musang	15050	20730	5680 (7.8%)	27.39
Jeli	13750	19300	5550 (7.2%)	28.75
Kota Bharu	33930	48680	14750 (18.3%)	30.29
Kuala Krai	16605	22815	6210 (8.6%)	27.21
Machang	15500	21820	6320 (8.2%)	28.96
Pasir Mas	22190	30990	8800 (11.7%)	28.39
Pasir Putih	18810	25060	6250 (9.4%)	24.94
Tanah Merah	14000	18750	4750 (7%)	25.33
Tumpat	17640	23200	5560 (8.7%)	23.96

Source: Research questionnaire

Table 2 shows the difference between the household monthly income before and after zakat distribution. From the table we can see that monthly household income had increased with the zakat distribution. The amount and percentage of zakat distribution varies among the districts. Tanah Merah received the lowest amount of zakat distribution with only 7 percent while Kota Bharu is enjoying the highest with 18.3 percent. This gives us a brief picture of zakat allocation which mostly centered in Kota Bharu because this district has the highest amount of *fuqara* and *masakin*. Overall, zakat distribution contributes 27.56 percent to the total income of the *fuqara* and *masakin* in Kelantan. By districts, the percentage of contribution ranges in between 23 percent to 30 percent. Minimum contribution to the total income is received by Tumpat (23.96 percent), while Kota Bharu is enjoying the highest (30.29 percent).



Source: Research questionnaire

Figure 1. Kelantan: changes in monthly household income (MYR) with and without the Zakat distribution (per family)

The result of zakat distribution to the poor are analyzed by using four major poverty indices of Household-count ratio (H), mean income gap (P_1), poverty gap ratio (I) and Sen index (P_2) to reveal three major problems of: how many are poor, the extent or depth of poverty, and the severity of poverty. Table 3 presents a summary of the poverty measures of this study.

Table 3. Kelantan poverty measures: before and after zakat distribution (by districts) in the households' income

Districts	Before Zakat Distribution				After Zakat Distribution			
	H_1	P_1 (MYR)	I_1	P_2	H_2	P_1 (MYR)	I_2	P_2
KELANTAN	0.90	341	0.46	0.54	0.83	211	0.28	0.36
Bachok	0.94	319	0.43	0.55	0.80	242	0.32	0.36
Gua Musang	0.91	324	0.43	0.54	0.77	194	0.26	0.32
Jeli	0.88	347	0.47	0.53	0.85	217	0.29	0.36
Kota Bharu	0.96	363	0.49	0.60	0.91	233	0.31	0.41
Kuala Krai	0.87	324	0.43	0.50	0.86	195	0.26	0.33
Machang	0.92	352	0.47	0.57	0.82	223	0.30	0.36
Pasir Mas	0.91	370	0.50	0.58	0.83	240	0.32	0.38
Pasir Putih	0.93	348	0.47	0.54	0.85	218	0.29	0.35
Tanah Merah	0.91	340	0.45	0.54	0.86	210	0.28	0.35
Tumpat	0.86	320	0.43	0.49	0.80	190	0.25	0.32

Note: H: Household-count ratio (poverty incidence)

P_1 : Mean Income Gap; I: Poverty Gap Ratio; P_2 : Sen index of poverty

From Table 3, the highest reduction in poverty incidence occurred in Bachok and Gua Musang with 0.14 while Kuala Krai enjoys the lowest reduction in poverty incidence with 0.01 in Kelantan. This proven that zakat distribution in that Bachok and Gua Musang is more effective than other districts in Kelantan mostly in Kuala Krai. As a whole, the highest poverty incidence in Kelantan is in the district of Kota Bharu with 96% rate of poverty before the zakat distribution.

After the zakat distribution, Kota Bharu still has the highest poverty incidence, even though the poverty rate has reduced to 91%. However, the household-count ratio is the very basic measure of poverty, which gives us the percentage of the households below poverty line of RM 740. With identical poverty rates, the two poor subpopulations may have very different average income levels. It is completely insensitive to the extent of the poverty shortfall per person. From the incidence results, it shows that poverty is concentrated more on the urban area (Kota Bharu and Pasir Mas). Most of poverty happens in this area because of the migrating people who comes in this area and hopping to find job and income. But due to lack of skills and knowledge, it is hard for them to get any job and income and further from poor, they had become a hard core poor and become a homeless.

The extent of poverty is highest in Pasir Mas with mean income gap of RM 370 and 0.50 poverty gap ratio before zakat was distributed. Next, Kota Bharu is the second highest district of poverty extent before zakat distribution with average mean income gap of RM 363 and 0.49 poverty gap ratio, followed by Machang, Jeli and Pasir Putih have the average mean income gap of RM 352, RM 348, RM 347 respectively and 0.47 poverty gap ratio before zakat was distributed. Bachok has the lowest mean income gap and poverty gap ratio with RM 319 and 0.43 before the distribution of zakat.

After zakat was distributed, Bachok who has the lowest amount of poverty extent has become the highest amount of poverty extent although it has reduced from RM 319 for mean income gap and 0.43 for income gap to RM 242 and 0.32. Pasir Mas becomes the second highest district of poverty extent with RM 239 and 0.32 and followed by Kota Bharu with RM 232 and 0.31. Tumpat has the lowest of poverty extent with RM 193 and 0.25.

Results on poverty severity (P_2) reveals that the income distribution among the people in Pasir Mas is distinctly unequal and their consumption level is extremely low although the number of people below poverty line in that area is lower than the number of poor people in some other areas but in terms of severity of poverty, it is the second highest compare to other areas. For example, the incident of poverty in Pasir Mas (0.91) is lower than Kota Bharu (0.96), Bachok (0.94), Machang (0.92) and Pasir Putih (0.93), but in term of severity of poverty, their severity is the second highest in Kelantan with 0.58. This also indicates that the severity of poverty can be high in the low poverty incidence area. From Table 6.10, we also noticed that Gua Musang has the highest reduction in poverty severity with 0.22 followed by Machang (0.21) and Pasir Mas (0.20). It means that zakat distribution in that district has improved the income of the worst poor and needy in that area.

7. Poverty Map

A poverty map is a data set that provides information about the spatial distribution of poverty within a country, which allows the visualization of the incidence and magnitude of poverty across space. Based on four selected characteristic of the households which are; gender of the head of the households, location of area by districts, age of the head of households, and size of households, Table 4 presents poverty map of Kelantan, before and after zakat distribution. The poverty map shows that zakat distribution has improved the poverty incidence, the extent of poverty, and the severity of poverty of the affected households. However, the trends of poverty in terms of the most affected area do not change with the existence of zakat distribution. In other words, zakat distribution improved the income of all the households concerned, but the improvement is not enough to overtake their poverty burdens, in all selected characteristics of the households.

The poverty map reveals that poverty is concentrated among the female households head. Based on district, poverty appears to be more apparent in Kota Bharu and Pasir Mas. Poverty is highest among the households' head belonging to the age of 25 to 40. From the poverty map, we can see that zakat distribution did not reduced or give impact to the numbers of household with 1 to 3 members because this group has the highest amount of poverty incidence (1) before and after zakat distribution. But in term of mean income gap (P_1), poverty gap ratio (I) and severity, zakat distribution has given some positive contribution in reducing their burden of poverty. The poverty map also shows that poverty is prevalent among the households with 1 to 3 members, which normally applies to old folks/couple. It is observed from the map that the area with highest poverty incidence, also experiences the most severe form of poverty. From the table, we can see that those whose households with 10 and above enjoying the least poverty gap and exciding the Poverty Line Income (PLI) after zakat were distributed. It should be noted that although this group enjoys the highest zakat distribution, their income is still not enough to cover the whole family members compared to those who has less than 10 members in the family.

Table 4. Poverty map with and without zakat distribution (PLI= MYR 740)

Selected characteristics of households	Poverty Incidence		Mean Income Gap		Poverty Gap Ratio		Sen Index	
	woz	wz	woz	wz	woz	wz	woz	wz
1) Gender of households' head								
Male	0.86	0.80	316	187	0.42	0.25	0.50	0.32
Female	0.93	0.80	373	244	0.50	0.32	0.59	0.39
2) Districts	0.94	0.80	319	242	0.43	0.32	0.55	0.38
Bachok	0.91	0.77	324	194	0.44	0.26	0.54	0.33
Gua Musang	0.88	0.85	347	218	0.47	0.29	0.53	0.36
Jeli	0.96	0.91	363	232	0.49	0.31	0.60	0.42
Kota Bharu	0.87	0.86	324	195	0.43	0.26	0.50	0.35

Kuala Krai	0.92	0.80	352	223	0.47	0.30	0.57	0.37
Machang	0.91	0.83	370	239	0.50	0.32	0.58	0.39
Pasir Mas	0.93	0.85	348	217	0.47	0.29	0.54	0.35
Pasir Putih	0.91	0.85	340	211	0.46	0.28	0.54	0.36
Tanah Merah	0.86	0.80	320	193	0.43	0.25	0.49	0.32
Tumpat								
3) Age households' head								
25-40	0.97	0.93	405	275	0.54	0.37	0.64	0.46
41-56	0.85	0.73	312	182	0.42	0.24	0.49	0.29
57 and above	0.88	0.73	380	252	0.51	0.33	0.57	0.34
4) Household size								
1-3	1	1	481	352	0.65	0.47	0.73	0.55
4-6	1	1	392	260	0.53	0.35	0.61	0.43
7-9	0.90	0.75	277	148	0.37	0.19	0.46	0.25
10 and above	0.43	0.25	37.1	-92	0.05	-0.12	0.08	0.003

Note: woz- without zakat distribution; wz – with zakat distribution

Income per individual for the selected characteristics of household as shown in Table 5 also shows an improvement to the current income after zakat was distributed. For gender household's head, male has the highest income before and after zakat distribution, MYR 72.54 per month and MYR 2.43 per day before zakat distribution and it increase to MYR 104.36 per month and MYR 3.48 per day after zakat distribution. Income per individual for Kelantan is MYR 65.93 per month and MYR 2.20 per day before zakat distribution and it also increase to MYR 93.30 per month and MYR 3.11 per day after zakat was distributed. For districts, Tanah Merah has the highest income before zakat distribution with MYR 79.97 per month and MYR 2.67 per day while Jeli has the lowest income per month (MYR 58.69) and per day (MYR 1.96). After zakat distribution, Tanah Merah still has the highest income with MYR 109.89 per month and MYR 3.66 per day while Pasir Putih has become the lowest income per month (MYR 80.10) and per day (MYR 2.67). For age of the household's head, those who are aged between 25 to 40 has the highest income per month with MYR 74.07 and MYR 2.47 per day before the zakat distribution while those who aged 41 to 56 has the lowest income with MYR 62.46 per month and MYR 2.47 per day. After zakat distribution those who aged 25 to 40 still maintain the highest income with MYR 106.17 per month and MYR 3.54 per day and those who aged 41 to 56 still has the lowest income with MYR 85.17 per month and MYR 2.84 per day. For the household size, before zakat distribution, those who with 1 to 3 household size has the highest income per month with MYR 89.84 and MYR 2.99 per day while family with 7 to 9 household has the lowest income with MYR 52.04 per month and MYR 1.73 per day. After zakat distribution, the family with 1 to 3 household sizes still has the highest income per month with MYR 137.39 and MYR 4.58 per day while family with 7 to 9 household still has the lowest income with MYR 67.04 per month and MYR 2.23 per day.

Table 5. Income per individual before and after zakat distribution

Selected characteristics of households	Before Zakat		After Zakat	
	Per month (MYR)	Per day (MYR)	Per month (MYR)	Per day (MYR)
1) Gender of households' head				
Male	72.54	2.43	104.36	3.48
Female	60.93	2.03	82.45	2.75
2) Districts				
KELANTAN	65.93	2.20	93.30	3.11
Bachok	63.22	2.10	84.29	2.81
Gua Musang	63.22	2.10	86.67	2.89
Jeli	58.69	1.96	81.86	2.73
Kota Bharu	73.86	2.46	105.32	3.51
Kuala Krai	59.28	1.98	82.22	2.74
Machang	69.88	2.33	98.99	3.30
Pasir Mas	63.16	2.11	89.11	2.97
Pasir Putih	58.74	1.96	80.10	2.67
Tanah Merah	79.97	2.67	109.89	3.66

Tumpat	63.88	2.13	87.51	2.92
3) Age				
25-40	74.07	2.47	106.17	3.54
41-56	62.46	2.08	85.17	2.84
57 and above	62.90	2.10	90.44	3.01
4) Household size				
1-3	89.84	2.99	137.39	4.58
4-6	57.95	1.93	79.93	2.66
7-9	52.04	1.73	67.04	2.23
10 and above	62.38	2.08	73.95	2.46

Source: Research Question

8. Discussion

Analysis on poverty in this study is based on poverty line income of MYR 740 has shown a positive result on poverty incidence, extent and severity of income due to zakat distribution. Zakat distribution in Kelantan has only give a small improvement in the mean income and poverty gap of the fuqara and masakin. Results on poverty analysis of this study seem to be encouraging. The results from the household-count ratio, the mean income gap, the poverty gap ratio and Sen's index measures suggest an improvement in income distribution after zakat is distributed. It means that this study has proven the positive contribution of zakat in reducing poverty.

This study has also identified that poverty is more serious on the urban area. Kota Bharu has the highest poverty incidence (H) and poverty severity (P_2) while Pasir Mas has the highest mean income gap (P_1) and poverty gap ratio (I) before zakat was distributed and after zakat distribution. The highest amount of poverty incidence (H) and Income Gap (I) is still in Kota Bharu and it also become the highest districts of poverty incidence while Bachok become the districts with the highest mean income gap (P_1).

A large scale of urbanization that has swelled the ranks of the urban poor in Kota Bharu is the main reason that contributes a large number of poverty in that urban area. The migration of rural low-income groups into the urban areas, the influx of the foreign workers and the results of increase in unemployment have contributed to the rise in poverty rates in that area while at the same time pressures the urban services, infrastructure and the environment. As a result, poverty, which has long been predominantly in a rural area, has become more urbanized. Low levels of education or skills, lack of employment opportunities, low wages, large family size and lack of basic amenities are among the factors that cause urban poverty.

The most important finding in his study is that although Kota Bharu received the highest zakat distribution among ten districts in Kelantan, it still maintains the worst poverty incidence, the extent of poverty, and experienced the worst severe effect of poverty after zakat distribution. This study also proves that high of poverty incidence, extent and severity, can also happen in developed area (i.e Kota Bharu) compared to underdeveloped area, as the case of Tumpat, for example. This situation implies that, even though it is a developed area, the number of poor people in Kota Bharu is high, compared to the number of poor people in Tumpat. Besides that, the results of this study show that the extent of poverty can be high in low poverty incidence area, as the case of Pasir Mas. This means that, even though the number of poor in Pasir Mas is small, but the poverty gap is high. In other words, the poor people in that area are receiving a lower income compared to other districts.

For the poverty gap and income gap that measures the shortfall of the income from the Poverty Line Index, the people in Pasir Mas has the worst shortfall among other districts in Kelantan. Although the incidence (quantity) in that area is not too bad (compared to Kota Bharu) but their gap (quality) is worse than Kota Bharu. It might be the case that people in Kota Bharu has a high poverty incidence but low poverty gap (when numerous members are just below the poverty line), while in Pasir Mas they have a low poverty incidence but a high poverty gap for those who are poor (when relatively few members are below the poverty line but with extremely low levels of income). Compared to herders, people in Kota Bharu has a higher risk of being in poverty, but the poverty is more severe in Pasir Mas. Further, the types of interventions needed to help the two groups are therefore likely to be different.

From the poverty map, it is noted that poverty is prevalent among the households with female households head. Most of the previous study about poverty agreed that female households head women have higher poverty rates than men in almost all societies (Casper et al., 1994). There are two main reasons poverty is more serious among female household head; 1) lower income due to lack of capability to work in a job that is dominantly by male, and 2) single mother who life with children. For a female headed household, finding a job that is suitable with

their capability, skills and qualification will be hard mostly with the competition from male gender. Most company will preferred to pay for male gender for they have more strength and capability in doing various jobs. While this had left the female gender only one more choice, that is to involved in doing hard work such as working in security (i.e; Factory or school) and driver (i.e; bus driver) which is not all female gender is capable to do it. Having children in the household affects the likelihood of poverty in one definitional way. Since the poverty line is adjusted for household size, the presence of children in a household raises the income necessary for the household to escape poverty, and thus, income equal, single adults who live with children are more likely to be poor than those who live alone. Single mother are much more likely to live with children than single men, since women usually have custody of the children in cases of divorce or no marital births. Thus, even if single men and women had equal earnings, more of the women than the men would be in poverty by virtue of supporting children.

Poverty is also common among the households' head at the age of 25 to 40. Normally, this group does not have the opportunity to go to school at their schooling age, consequently did not qualify for a better-paid job. Survey carried out suggests that most of the households with 1 to 3 members of households consist of an old couple, who are no longer economically productive has the highest poverty burden. The poverty map, shows where poverty is concentrated in Kelantan, and consequently which are the most affected group of poverty. Hence, it shows where zakat distribution might have the greatest effect on poverty. This can help the policymakers; like those in the Economic Planning Unit (EPU) and Majlis Agama Islam Kelantan (MAIK) to focus on efficient allocation of scarce zakat resources as well as reducing and eliminate poverty in Kelantan.

Result from monthly and daily income per individual shows that zakat distribution contributes in increasing the income which exceeding the daily poverty line (\$US 1.00) for about 40 percent of the district in Kelantan. While male household head, age of household head 41 to 56 and size of household 4 and above are still below this World Bank poverty line (Note 5). It is clear that zakat distribution based on household size is needed to bring the income of those who are still under this poverty line exceeded \$US 1.00 (Note 6) of income per day. Overall, the results of the previous poverty measures and the poverty map, shows where poverty is concentrated in Kelantan, and consequently which the most affected group of poverty is. Hence, it shows where zakat distribution might have the greatest effect on poverty. This can help the policymakers; like those in the Economic Planning Unit (EPU) and Majlis Agama Islam Kelantan (MAIK) to focus on efficient allocation of scarce zakat resources as well as reducing and eliminate poverty in Kelantan.

9. Conclusion

Zakat distribution has proven its effectiveness in improving per individual monthly and daily income for zakat recipient in Kelantan. This effectiveness is proven with the improvement of monthly and daily income for all selected characteristics after the zakat distribution but still it's way too far from reaching the World standard of MYR 6.20 income per individual per day. Analysis on poverty in this study has shown a positive result on poverty incidence, extent and severity of income due to zakat distribution. Zakat distribution in Kelantan has only give a small improvement in the mean income and poverty gap of the fuqara and masakin. Results on poverty analysis of this study seem to be encouraging. The results from the household-count ratio, the mean income gap, the poverty gap ratio and Sen's index measures suggest an improvement in income distribution after zakat is distributed. It means that this study has proven the positive contribution of zakat in reducing poverty.

Reference

- Ab. Rahman, A. S. (1995). *Eradication of Poverty in the State of Kelantan, West Malaysia from an Islamic Perspectives: An Ethical Dimension* (Ph.D Thesis). University of Wales, Lampeter.
- Abdul Rahman, R., & Ahmad, S. (2010). *Pengukuran Keberkesanan Agihan Zakat: Perspektif Maqasid Al-Syariah*. Paper presented at Seventh International Conference – The Tawhidi Epistemology: Zakat and Waqf Economy.
- Ahmad Fahme A., Ab Aziz, R., Ibrahim, F., Zaleha, N., & Johari, F. (2013). Impact of Zakat Distribution on Poor and Needy Recipients: An Analysis in Kelantan, Malaysia. *Australian Journal of Basic and Applied Sciences*, 7(13), 177-182.
- Ahmad, S., & Wahid, H. (2004). *Kesan Prestasi Agihan Oleh Institusi Formal Ke Atas Kepatuhan Membayar Zakat*. pkukmweb.ukm.my –hairun
- Ahmad, S., Wahid, H., & Mohamad, A. (2006). Penswastaan Institusi Zakat dan Kesannya Terhadap Pembayaran Secara Formal di Malaysia. *International Journal of Management Studies*, 13(2), 175-196.
- Ahmed, H. (2004). *Role of zakat and awqaf in poverty alleviation*. Islamic Development Bank, Islamic Research

- and Training Institute.
- Ahmed, H. (2008). Zakat, Macroeconomic Policies, and Poverty Alleviation: Lessons from Simulations on Bangladesh. *Journal of Islamic Economics, Banking and Finance*, 4(2).
- Akkas, S. A. (2006). *Women in Development, Islamic Perspective: Compilation of Seminar Papers*. Islamic Economics Research Bureau.
- Ali Akkas, S. M. (2006). *An Islamic Alternative to Poverty Alleviation: The "PARSHI" (Neighbourhood) Model*. International Seminar on Islamic Alternative to Poverty Alleviation: Zakat, Awkaf and Microfinance.
- Ali, M., & Fahme, A. (2011). *Role of Zakat in Poverty Reduction in Kelantan, Malaysia* (Masters thesis). Universiti Putra Malaysia.
- Anand, S. (1973). *The Size Distribution of Income in Malaysia* (Part 1). World Bank: Development Research Center.
- Anand, S., & Kanbur, S. M. R. (1993). Inequality And Development: A Critique. *Journal of Development economics*, 41(1), 19-43.
- Atkinson, A. B. (1987). On The Measurement of Poverty. *Econometrica*, 55(4), 749-764.
- Atkinson, A. B. (2003). Income Inequality in OECD Countries: Data and Explanations. *Institute for Economic Research, CESifo Economic Studies*, 49(4), 479-513.
- Aziz, U. A. (1964). Poverty and Rural Development in Malaysia. *Kajian Ekonomi Malaysia*, 1(1), 70-105.
- Chaudhuri, S. (2003). *Assessing vulnerability to poverty: concepts, empirical methods and illustrative examples*. Department of Economics Columbia University.
- Hassan, M. K., & Khan, J. M. (2007). Zakat, External Debt and Poverty Reduction Strategy in Bangladesh. *Journal of Economic Cooperation*, 28(4), 1-38.
- Heshmati, A. (2005). The Relationship between Income Inequality, Poverty, and Globalization. *Research Paper No. 2005/37*.
- Huq, A. (1993). *Development and Distribution in Islam*. Petaling Jaya: Pelanduk Publications (M) Sdn. Bhd.
- Ibrahim, P. (2006). *Economic Role of Zakat in Reducing Income Inequality and Poverty in Selangor*. PhD Thesis. Faculty of Economics and Management, Universiti Putra Malaysia.
- Jehle, G. A. (1994). Zakat and Inequality: Some Evidence from Pakistan. *Review of Income and Wealth*, 40(2).
- Johari, F. (2004). Keberkesanan zakat dalam mengatasi masalah kemiskinan di negeri Melaka. *Unpublished Master Dissertation*. Kuala Lumpur: Akademi pengajian Islam, University Malaya.
- Johari, F., & Ibrahim, P. (2007). Zakat Sebagai Motivasi Pembangunan Ekonomi Umat Islam. In d. Kamarudin et al. (Eds.), *Islam Di Malaysia Pasca Kemerdekaan*. Bangi: Jabatan Usuluddin dan Falsafah, Fakulti Pengajian Islam, Universiti Kebangsaan Malaysia, 77-95.
- Johari, F., Ab Aziz, M. R., & Ali, A. F. M. (2014). The role of zakat in reducing poverty and income inequality among new convert (muallaf) in Selangor, Malaysia. *Online Journal of Research in Islamic Studies*, 1(3), 43-56.
- Johari, F., Ali, A. F. M., & Ab Aziz, M. R. (2015). The Role of Zakat Distribution Among Muallaf (New Convert) In Reducing Poverty In Selangor, Malaysia. *İktisat Politikası Araştırmaları Dergisi*, 2(1), 39-56.
- Kahf, M. (2004). *Shariah and Historical Aspects of Zakah and Awqaf*. Background, paper prepared for Islamic Research and Training Institute, Islamic Development Bank.
- Kakwani, N. (1980). On A Class of Poverty Measures. *Econometrica*, 48(2), 437-446.
- Kelantan, M. A. I. (1994). *Fatwa Sistem Agihan Zakat Negeri Kelantan*. Jawatankuasa Perunding Hukum Syarak (FATWA) Negeri Kelantan Darul Naim,
- Kusuma, D. B. W., & Sukmana, R. (2010). *The Power of Zakat in Poverty Alleviation*. Seventh International Conference – The Tawhidi Epistemology: Zakat and Waqf Economy.
- Latif, M. D. A. (2001). *Pendekatan Kepada Cara Pengagihan Dana zakat yang Dinamik Sesuai dengan Suasana Semasa*. Dalam Nik Mustapha Nik Hassan (penyt). Kaedah Pengagihan Dana Zakat Satu Perspektif Islam. Kuala Lumpur: IKIM.
- Lubis, M., Yaacob, N. I., Omar, Y., Dahlan, A., & Rahman, A. (2011, April). Enhancement of zakat distribution

- management system: case study in Malaysia. In *International Management Conference 2011 Proceedings* (pp. 1-10). University Sultan Zainal Abidin.
- Malaysia. (1965). *First Malaysia Plan 1966-1970*. Kuala Lumpur: Government Printers.
- Malaysia. (1971). *Second Malaysia Plan 1971-1975*. Kuala Lumpur: government Printers.
- Malaysia. (1976) *Third Malaysia Plan 1976-1980*. Kuala Lumpur: Government Printers.
- Malaysia. (1981) *Fourth Malaysia Plan 1981-1985*. Kuala Lumpur: Government Printers.
- Malaysia. (1986). *Fifth Malaysia Plan 1986-1990*. Kuala Lumpur: Government Printers.
- Malaysia. (1991). *Sixth Malaysia Plan 1991-1995*. Kuala Lumpur: Government Printers.
- Malaysia. (1991). *The Second Outline Perspective Plan*. Kuala Lumpur: Government Printers.
- Malaysia. (1996). *Seventh Malaysia Plan 1996-2000*. Kuala Lumpur: Government Printers.
- Malaysia. (2001). *Eighth Malaysia Plan 2001-2005*. Kuala Lumpur: Government Printers.
- Malaysia. (2001). *The Third Outline Perspective Plan 2001-2010*: Kuala Lumpur: Government Printers.
- Malaysia. (2007). *Laporan Ekonomi Negeri Kelantan 2007*. Economic Planning Unit of Malaysia.
- Mannan, M. A. (1986). *Islamic economics: Theory and practice*. Cambridge: Hodder and Stroughton.
- Metwally, M. M. (1983). Fiscal Policy in Islamic Economy. In Z. Ahmed, M. Iqbal, & M. F. Khan (Eds.), *Fiscal Policy and Resource Allocation in Islam* (pp. 59-81). Jeddah, Saudi Arabia: International Centre for Research in Economics, King Abdul Aziz University.
- Minujin, A., & Delamonica, E. (2005). Incidence, Depth and Severity of Children in Poverty. *Division of Policy and Planning of UNICEF*.
- Mohd Nor, M. A., Wahid, H., & Mohd Nor, N. G. (2003). *Kesedaran Membayar Zakat Pendapatan Kakitangan Profesional: Kajian Kes di UKM*. Dalam Zulkefly Abd Karim et. Al (penyt). Prosiding Seminar Kebangsaan Dasar Awam dalam Era Globalisasi. Kuala Lumpur: Univision Press Sdn Bhd.
- Mujahid, A. M. (2007). *Zakat and Fasting* (p. 2). Retrieved from <http://www.islambasics.com>
- Onagun, I. A., Johari, F., & Muhmmad, H. A. (2014). Managing Immediate Action for Women and Poverty Reduction in Nigeria: An Explanation from the Generic Theory. *Asian Journal of Management Sciences & Education*, 3(1).
- Ramli, R. M., Ahmad, S., Wahid, H., & Harun, F. M. (2011). Understanding asnaf attitude: Malaysia's experience in quest for an effective zakat distribution programme. In *International Zakat Conference: Sustainable Zakat Development in the Poverty Alleviation and Improvement of Welfare of the Ummah*.
- Ramli, R., & Ibrahim, P. (2010). Kesan Agihan Zakat dalam Membasmi Kemiskinan dan Ketidakeimbangan Agihan Pendapatan di Negeri Sembilan. *Persidangan Kebangsaan Ekonomi Malaysia ke-V (PERKEM)*. 15-17 October 2010, organized by Pusat Pengajian Ekonomi Fakulti Ekonomi & Pengurusan, Universiti Kebangsaan Malaysia (UKM).
- Rosly, S. A. (2008). *Malaysia and Islamic Economics*. International Center for Education in Islamic Finance (INCEIF), (Paper presented at the Hadhari Economics Roundtable Conference, Universiti Kebangsaan Malaysia, 25th November 2008, MALAYSIA)
- Salleh, M. S. (2006). *Lokalisasi Pengagihan Zakat: satu Cadangan Teoritis*. dalam Hailani & Abdul Ghafar (penyt). *Zakat: Pensyariatan, Perekonomian & Perundangan*. Bangi: Penerbit Universiti Kebangsaan Malaysia 85 Abdul Halim Mohd Noor, Rozman Hj Md Yusof & Ahmad Che Yaakob (2008). Performance indicators model for zakat institution. *Jurnal Pengurusan JAWHAR* : 70-84
- Shimeles, A., & Thoenen, R. (1992). A Methodological Note On Measuring Poverty. *Economic Research and Training Institute, IDB*, 19.
- Shimeles, A., & Thoenen, R. (2005). Poverty Profiles: A Methodological Note on Measuring Poverty. *Poverty and Social Policy Team Economic and Social Policy Division*.
- Shirazi, N. S. (1994). Targeting, Coverage and Contribution of Zakat to Households' Income: The Case of Pakistan. *Journal of Economic Cooperation Among Islamic Country*, 14, 4-5.
- Shirazi, N. S. (1996). Targeting, Coverage and Contributing of Zakat to Household's Income: The Case of Pakistan. *Journal of Economic Cooperation Among Islamic Countries*, 17.

- Syed Othman, Al-H. (1988). Peranan Zakat Dalam Membantu Pembangunan Ekonomi Negara. *Konvensyen Zakat Kebangsaan 1988*. Pusat Islam, Universiti Sains Malaysia, Bahagian Zakat, Majlis Agama Islam Pulau Pinang, Jabatan Hasil Dalam Negeri Pulau Pinang, 5-6 November 1988.
- Syed Othman, Al-H. (1992). Konsep Pengagihan Saksama (dalam Ahmad Sobri Jaafar dan Abdul Razak Chik (penyelenggara) Prosiding Kursus Ekonomi Islam: Asas, Falsafah dan Aplikasi, Kedah: UUM.
- Syed Othman, Al-H. (2001). Zakat Perniagaan: Potensi Dan Cabaran Di Era Ekonomi Baru. *Seminar Zakat Dan Cukai Pendapatan*. Sekretariat Pusat Zakat Negeri- Negeri (SPZ) and Jabatan Kemajuan Islam Malaysia (JAKIM) dengan kerjasama AFTAAS Consulting Sdn, Renaissance Palm Garden Hotel, Putrajaya, 18 September 2001.
- The Asian Development Bank. (2001). *Initiating Draft of Poverty Assessment: The Philippines*.
- Wahid, H., & Kader, R. A. (2010). Localization of Malaysian Zakat Distribution: Perceptions of Amil and Zakat Recipients. In d. A. Ghafar et al. (Eds.), *Proceedings of Seventh International Conference* (pp. 461-484). The Tawhidi Epistemology: Zakat and Waqf Economy.
- Wahid, H., Ahmad, S., & Mohd Nor, M. A. (2004). Kesan Bantuan Zakat Terhadap Kualiti Hidup Asnaf Fakir dan Miskin. *The Journal of Muamalat and Islamic Finance Research*, 1(1), 151-166.
- Wahid, H., Ahmad, S., & Nor, M. A. M. (2004). Kesan Bantuan Zakat Terhadap Kualiti Hidup: Kajian Kes Asnaf Fakir dan Miskin ("The effect of zakat aid on the quality of life: the case of the poor and needy recipients"). *The Journal of Muamalat & Islamic Finance Research*, 1, 151-66.
- Wess, H. (2002). Reorganizing Social Welfare among Muslims: Islamic Voluntarism and Other Forms of Communal Support in Northern Ghana. *Journal of Religion in Africa*, 32(1).
- World Bank. (2000). *World Development Report 2000-2001: Attacking Poverty*. World Bank Group.
- Zakaria, Ab. R. (2007). Pengurusan Zakat Kontemporari. *Jurnal Jabatan Wakaf, Zakat dan Haji*, 1(1), 11-19.
- Zakaria, M. (2014). The Influence of Human Needs in the Perspective of Maqasid al-Syari'ah on Zakat Distribution Effectiveness. *Asian Social Science*, 10(3), 165-173. <http://dx.doi.org/10.5539/ass.v10n3p165>

Notes

Note 1. *Masakan* (poor) defined as those who receive income below the Poverty Line Income while *fuqara'* (hard core poor) means those who receive income half the from PLI.

Note 2. Majlis Agama Islam Kelantan

Note 3. The World Bank often uses \$1 a day for cross-country comparisons, which has since 1990 come to be regarded as providing the absolute minimum standard of living. See "*Nature and Evolution of Poverty, 1998-2003*" pg. 49.

Note 4. Zakat distribution is a transfer of money or fund from non poor to the poor. Thus it creates a money supply to the poor and increases their demand for goods and services.

Note 5. The World Bank often uses \$1 a day for cross-country comparisons, which has since 1990 come to be regarded as providing the absolute minimum standard of living. See "*Nature and Evolution of Poverty, 1998-2003*" pg. 49.

Note 6. 1 US\$ is RM 3.25 (for Mei, 2014)

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Reviewer Acknowledgements

Asian Social Science wishes to acknowledge the following individuals for their assistance with peer review of manuscripts for this issue. Their help and contributions in maintaining the quality of the journal are greatly appreciated.

Asian Social Science is recruiting reviewers for the journal. If you are interested in becoming a reviewer, we welcome you to join us. Please find the application form and details at <http://www.ccsenet.org/reviewer> and e-mail the completed application form to ass@ccsenet.org.

Reviewers for Volume 11, Number 21

Abas Asyafah, Indonesia University of Education, Indonesia
Abbas Ali Khan, North South University, Bangladesh
Abderrazek Elkhaldi, Faculty of Economics and Management of Sousse, Tunisia
Adil Zia, IBN Rushid College for Management Sciences, Abha Saudi Arabia
Alexander S Takeuchi, University of North Alabama, USA
Anjum Ahsan, Qurtuba University, Peshawar
Arshad javed Rizvi, Sir Syed University of Engineering and Technology, Pakistan
Ashirbek Muminov, The L.N. Gumilev Eurasian National University, Kazakhstan
Aymen Ajina, Hec-Business School Liege University, Belgium
Caterina Mazza, Turin University, Italy
Faiz Omar Mohammad Jamie
Felixberto Mercado, Manuel S. Enverga University Foundation, Philippines
Gulnara Sadykhanova, al-Farabi Kazakh National Univeristy, Kazakhstan
H. Yegorov, Academic Research Institute, Russia
Hyung Seok Lee, Chungbuk National University, Republic of Korea
Jianjun Yin, Jackson State University, USA
Jun She, Nantong University, China
Kasimu Mohammed Alhaji, University of Ilorin Nigeria, Nigeria
Kishore Dere, India
M. Ohidul Islam, University of Dhaka, Bangladesh
Maheran Zakaria, Universiti Teknologi MARA, Malaysia
Mahmudul Kabir, University of Management and technology, Bangladesh
Mariia V Rubtcova, Saint-Petersburg State University, Russia
Maryam Ahmadian, University Putra Malaysia, Malaysia
Nawaraj Chaulagain, Harvard University, USA
Nit Bunga monkol, Education Psychology and Counseling Brance, Thailand
Nurgul Maimakova, al-Farabi Kazakh National University, Almaty, Kazakhstan
Oldrich Vylupek, Czech University of Life Sciences, Czech Republic
Ozgur Demirtas, Turkish Air Force Academy, Turkey
Pablo Zanol, Universidad Nacional de la Matanza, Argentina
Ramraini Ali Hassan, Universiti Malaysia Sabah, Malaysia
Rickey Ray, Northeast State Community College, USA
Roman Svoboda, Czech University of Life Sciences, Czech Republic
Ryan Dio, Sorsogon State University, Philippines

Sandro Serpa, University of the Azores, Portugal
Shobha Ajithan, Bharathiar University, India
Siti Seri Delima, Universiti Utara Malaysia, Malaysia
Tsui-Yii Shih, National Taipei College of Business, Taiwan
U-maporn Kardkarnklai, Srinakharinwirot University, Thailand
Wali Rahman, Surhad University, Peshawar
Wasim Ahmad, Indian Institute of Technology (IIT), India
Won-jun Lee, Cheongju University, Korea
Xiaojiang Yan, Nantong University, China
Yuzainee Md Yusoff, Universiti Tenaga Nasional, Malaysia

Call for Manuscripts

Asian Social Science (ASS) is an international, double-blind peer-reviewed, open-access journal published by the Canadian Center of Science and Education. The journal focuses on the following topics: anthropology, sociology, politics, culture, history, philosophy, economics, education, management, arts, laws, linguistics and psychology. It provides an academic platform for professionals and researchers to contribute innovative work in the field. The journal carries original and full-length articles that reflect the latest research and developments in both theoretical and practical aspects of society and human behaviors.

The journal is published in both print and online versions. The online version is free access and download.

We are seeking submissions for forthcoming issues. All manuscripts should be written in English. Manuscripts from 3000–8000 words in length are preferred. All manuscripts should be prepared in MS-Word format, and submitted online, or sent to: ass@ccsenet.org

Paper Selection and Publishing Process

- a) Upon receipt of a submission, the editor sends an e-mail of confirmation to the submission's author within one to three working days. If you fail to receive this confirmation, your submission e-mail may have been missed.
- b) Peer review. We use a double-blind system for peer review; both reviewers' and authors' identities remain anonymous. The paper will be reviewed by at least two experts: one editorial staff member and at least one external reviewer. The review process may take two to three weeks.
- c) Notification of the result of review by e-mail.
- d) If the submission is accepted, the authors revise paper and pay the publication fee.
- e) After publication, the corresponding author will receive two hard copies of the journal, free of charge. If you want to keep more copies, please contact the editor before making an order.
- f) A PDF version of the journal is available for download on the journal's website, free of charge.

Requirements and Copyrights

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the authorities responsible where the work was carried out, and that, if accepted, the article will not be published elsewhere in the same form, in English or in any other language, without the written consent of the publisher. The editors reserve the right to edit or otherwise alter all contributions, but authors will receive proofs for approval before publication.

Copyrights for articles are retained by the authors, with first publication rights granted to the journal. The journal/publisher is not responsible for subsequent uses of the work. It is the author's responsibility to bring an infringement action if so desired by the author.

More Information

E-mail: ass@ccsenet.org

Website: www.ccsenet.org/ass

Paper Submission Guide: www.ccsenet.org/submission

Recruitment for Reviewers: www.ccsenet.org/reviewer

The journal is peer-reviewed
The journal is open-access to the full text
The journal is included in:

Australian Business Deans Council
DOAJ
EBSCOhost
Google Scholar
Lockss
Open J-Gate

PKP Open Archives Harvester
ProQuest
SHERPA/RoMEO
The Excellence in Research for Australia
Ulrich's
Universe Digital Library

Asian Social Science Semimonthly

Publisher Canadian Center of Science and Education
Address 1120 Finch Avenue West, Suite 701-309, Toronto, ON., M3J 3H7, Canada
Telephone 1-416-642-2606
Fax 1-416-642-2608
E-mail ass@ccsenet.org
Website www.ccsenet.org/ass

