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Welcoming Remarks

I am pleased to extend a welcome to all whose interest in gambling-related inquiry has led them to this first edition of *The Electronic Journal of Gambling Issues* (*EJGI*), a forum for researchers, clinicians, the gambling industry, gamblers and the interested public. *EJGI* is intended to be a vehicle for ongoing dialogue about issues ranging from gambling as a social phenomenon to what constitutes responsible gambling and the most effective treatment interventions for problem gamblers. For example, the Features section contains research statements from significant thinkers in the area of gambling studies. If you work with clients with gambling-related problems, the Clinic section offers up-to-date treatment information. And our First Person Accounts section provides a unique opportunity to learn from the narratives of individuals whose lives have been affected by gambling.

The Centre for Addiction and Mental Health is itself actively involved in treating individuals who experience problems with gambling, and takes a leading role in training people who plan to work with problem gamblers or are in a position to encourage responsible gambling. In addition, the Centre is committed to gambling-related research and policy initiatives. This journal reflects the breadth of that commitment to the treatment of problem gamblers and the emerging field of gambling studies.

This initiative is especially important as gambling assumes a greater presence in more and more communities through lotteries, casinos, bingo halls and sports betting. Fully understanding the impact of this phenomenon is essential for people who choose to gamble, community leaders, the gambling industry and those involved in the treatment of problem gamblers and their families. The Centre is

particularly excited about providing leadership in understanding, prevention and treatment of problem gambling provincially, nationally, and indeed, internationally. The fact that this journal is available through the Internet to whomever has access to a computer underlines our commitment to disseminating knowledge to as wide a public as possible.

Dr. Paul Garfinkel, President and CEO of the Centre for Addiction and Mental Health

Statement of Purpose

The Electronic Journal of Gambling Issues (EJGI) offers an Internet-based forum for developments in gambling-related research, policy and treatment as well as personal accounts about gambling and gambling behaviour. Through publishing peer-reviewed articles about gambling as a social phenomenon and the prevention and treatment of gambling problems, it is our aim is to help make sense of how gambling affects us all.

The *EJGI* is published by the <u>Centre for Addiction and Mental Health</u> and is fully funded by the Ontario Substance Abuse Bureau of the Ministry of Health and Long-Term Care. We welcome manuscripts submitted by researchers and clinicians, people involved in gambling as players, and family and friends of gamblers.

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Pathways to Pathological Gambling: Identifying Typologies

By Alex Blaszczynski PhD, MAPSs; Director, Impulse Control Research Clinic, School of Psychiatry, University of New South Wales, Sydney, NSW

Abstract

The majority of explanatory models of pathological gambling fail to differentiate specific typologies of gamblers despite recognition of the multi-factorial causal pathways to its development. All models inherently assume that gamblers are a homogenous population; therefore theoretically derived treatments can be effectively applied to all pathological gamblers. This article describes a comprehensive and alternative conceptual-pathway model that identifies three main subgroups: "normal," emotionally vulnerable and biologically based impulsive pathological gamblers. All three groups are exposed to common influences related to ecological factors, cognitive processes and contingencies of reinforcement. However, predisposing emotional stresses and affective disturbances for one group, and biological impulsivity for another, are additional risk factors of aetiological significance in identifying separate subtypes. The implications for treatment are discussed with particular reference to the need to match client subtype with specific treatment interventions.

Introduction

Historically, societal attitudes toward gambling were influenced by the effects of gambling on public order, the erosion of prevailing moral values and social mores, and the cheating and exploitation of the masses (Peterson, 1950; Ploscowe, 1950; Blakely, 1977). The move to medicalize pathological gambling originated from the case studies of early psychoanalytic writers (Von Hattinger, 1914; Bergler, 1957), and by the inclusion of pathological gambling in DSM-III (American Psychiatric Association, 1980), as a psychiatric disorder of impulse control. The formalization of pathological gambling as a psychiatric disorder led to recent attempts to develop theoretical models, which explain the aetiology of problem gambling (Ferris, Wynne & Single, 1998).

Contemporary psychological models include gambling as:

- an addictive disorder (Jacobs, 1986; Blume, 1987)
- an unresolved intrapsychic conflict (Bergler, 1957; Rosenthal, 1992; Wildman, 1997)
- having its causation through a biological/psychophysiological dysregulation (Blaszczynski, Winter & McConaghy, 1986; Carlton & Goldstein, 1987; Lesieur & Rosenthal, 1991; Rugle, 1993; Comings, Rosenthal, Lesieur & Rugle, 1996)
- a learned behaviour (McConaghy, Armstrong, Blaszczynski & Allcock, 1983; Anderson & Brown, 1984)
- a result of distorted/irrational cognitions (Sharpe & Tarrier, 1993; Ladouceur & Walker, 1996).

This diversity of models has led to the search for qualitative similarities and differences between social and pathological gamblers in personality traits (Blaszczynski, Buhrich & McConaghy, 1985; McCormick, Taber, Kruedelbach & Russo, 1987; Castellani & Rugle, 1995), co-morbidity (Kruedelbach & Rugle, 1994) and biological correlates (Rugle, Semple, Goyer & Castellani, 1995; Comings et al., 1996).

The fundamental assumption contained within each model is that pathological gamblers constitute a homogenous population, and that theoretically derived treatments can be effectively applied to all pathological gamblers. There is minimal evidence to support this implicit assumption. On closer inspection, learning theories (Dickerson, 1979) refer to fixed and variable schedules of reinforcement. But these learning theories fail to explain why not all gamblers suffer impaired control. Cognitive theories (Sharpe & Tarrier, 1993; Ladouceur & Walker, 1996) emphasize irrational cognitive schemas but have not demonstrated that these are of

causal significance. Heated debate continues on the validity of the addiction model of gambling, particularly by those adhering to the socio-cognitive approach.

Divergent frameworks, however, can be reconciled if gamblers are accepted as a heterogeneous group (Blaszczynski, 1996) with multi-factorial causes. It cannot be denied that the majority of gamblers seek monetary gain. But some continue to participate and persist because they are inexorably motivated to find relief from boredom, to dissociate and to escape from negative life circumstances, or to modulate negative mood states. The task confronting clinicians is to refine the categorization of problem gamblers into increasingly homogenous subgroups or typologies of gamblers.

In a series of long-term controlled outcome studies (Blaszczynski, 1988; McConaghy, Blaszczynski & Frankova, 1991), three types of responses to treatment were observed: controlled gambling, abstinence and uncontrolled gambling. Controlled gamblers were characterized by an absence of psychopathology, abstinent gamblers continued to exhibit moderate levels of affective disturbances and elevated neuroticism; while uncontrolled gamblers persisted in showing high levels of psychopathology across a number of domains. These findings matched my clinical experience. I found that some gamblers displayed integrated personalities; others showed evidence of depressive affect and situational stresses which precipitated increased gambling. Others manifested traits of impulsivity and severe disruptive behaviours in gambling and in other parts of their lives.

These findings made me question if the response to treatment was predicated on personality or demographic differences, which were present between groups prior to treatment. However, no such differences emerged when statistical comparisons were applied to group variables. An alternative possibility was therefore considered: that is, that the end results of gambling had affected their psychological profile so that it masked group differences. I argued that with gambling the common manifestation of affective disturbances (anxiety, substance use and criminality) were a complex mixture and/or interaction of both primary and secondary processes involved in gambling. In some cases, depression was instrumental in causing impaired control over gambling; while in others, gambling produced depression resulting from financial and marital difficulties. During a psychometric assessment, both groups obtained similar scores on depression. But this depression had significantly different implications in respect to etiological significance and relevance to treatment strategies. This led to the postulate that specific subgroups of gamblers existed and shared features in common, yet differed significantly in many respects.

I have proposed a prototypical model that attempts to integrate biological,

personality, developmental, cognitive, learning theory and environmental factors into one model. This model is based on clinical experience and attempts to integrate relevant research findings. It suggests the existence of three major types of gamblers: the gambler who is not pathologically disturbed, the gambler who is emotionally vulnerable, and the gambler whose impulsivity is biologically based.

There are three elements relevant to all gamblers irrespective of subgroup membership. The first relates to ecological determinants. These determinants revolve around public policy issues that promote availability and access to gambling facilities. Substantive data clearly demonstrates that the incidence of pathological gambling is inextricably tied to the number of available gambling outlets (Abbott & Volberg, 1996; Volberg, 1996; Productivity Commission, 1999).

The second element resides in the role of classical and operant conditioning. Studies have demonstrated that gambling produces a state of subjective excitement (Dickerson, Hinchy & Fabre, 1987), dissociation (Jacobs, 1986) and increased heart rate (Anderson & Brown, 1984; Leary & Dickerson, 1985; Brown, 1988; Griffiths, 1995). Wins, delivered at variable ratios that are resistant to the effects of extinctions, produce states of excitement described as equivalent to a "druginduced high." Repeated pairings classically condition this arousal to stimuli associated with the gambling environment (Dickerson, 1979; Sharpe & Tarrier, 1993). Through second order conditioning, gambling cues elicit an urge to gamble, which results in a habitual pattern of gambling. As Rosenthal and Lesieur (1992) observe, excitement can be experienced in anticipation, during, or in response to exposure to gambling situations or cues. This process of conditioning can be used to explain gambling as an addiction produced by the effects of positive and negative conditioning, tolerance and withdrawal.

An alternative non-addiction explanation has also been offered, and is based on a neo-Pavlovian "neuronal model" of habitual behaviour, which relies on the concept of cortical excitation (McConaghy, 1980).

Superimposed on the conditioning framework and irrespective of whether or not an addiction type model is adopted, is the development of cognitive schemas. Early and repeated wins result in irrational belief structures that promote gambling as an effective source of income. These schemas shape illusions of control, biased evaluations, erroneous perceptions, superstitious thinking and faulty understandings of probability (Langer, 1975; Gilovich, 1983; Ladouceur & Walker, 1996; Walker, 1992; Griffiths, 1995).

The reinforcing properties of gambling and the irrational cognitive schemas combine to consolidate and strengthen habitual gambling practices. At this point, the downward spiral of gambling, perceptively described by Lesieur (1984), takes

its toll. When gamblers lose they attempt to recoup losses through further chasing, which results in accumulating financial debts. Despite acknowledging the reality that gambling led them into financial problems, they irrationally believe that gambling will solve their problems.

It is emphasized that the above processes are applicable to all gamblers. At this point additional factors can be invoked to differentiate between three broad subgroups of gamblers.

Subgroup one: "Normal" problem gamblers

The first subgroup can be labelled, perhaps somewhat oxymoronically, as the "normal" pathological gambling subgroup. Members of this subgroup may meet formal criteria for pathological gambling at the height of their gambling disorder. What distinguishes this subgroup is the absence of any specific premorbid psychopathology. Conceptually, these gamblers can be seen as occupying the diffuse domain between regular-heavy and excessive gambling. Excessive gambling behaviour occurs as a result of bad judgments or poor decision-making strategies, which are independent of any intrapsychic disturbance. Features of a preoccupation with gambling, chasing losses, substance dependence and depression and anxiety are all seen as the end response to the presence of financial pressures caused by continual losses. These symptoms are the consequence not the cause of excessive gambling.

Clinically, the severity of difficulties in the "normal" gambling subgroup is the lowest of all pathological gamblers. They do not manifest gross signs of major premorbid psychopathology, substance abuse or impulsivity behaviours. Placed at the low end of the problem-gambling scale, these gamblers move between heavy and problem gambling. They are more motivated to seek treatment, to comply with instructions and post treatment are able to achieve controlled levels of gambling. Counselling and minimal intervention programs are of benefit.

Subgroup two: Emotionally disturbed gamblers

The next subgroup is characterized by the presence of predisposing psychological vulnerability factors where participation in gambling is motivated by a desire to modulate affective states and/or meet specific psychological needs. This subgroup manifests a history of problem gambling in the family, negative developmental

experiences, neurotic personality traits and adverse life events. These problems may contribute in a cumulative fashion to produce an emotionally vulnerable gambler.'

Evidence in support of this contention comes from a number of sources. Jacobs (1988), Lesieur and Rothschild (1989), Gambino, Fitzgerald, Shaffer, Renner, and Courtage (1993) observed that a family history of pathological gambling was an important predisposing risk factor for children. Jacobs (1986), in his General Theory of Addiction, postulated that certain personality characteristics and life events, which interacted with physiological states of arousal, influenced the development of gambling problems. He stated that excessive gambling was produced by the interaction between abnormal physiological resting states of hyper or hypo-arousal, and a history of negative childhood experiences. Personal vulnerability was linked to negative childhood experiences of inadequacy, inferiority, low self-esteem and rejection (McCormick, et al., 1987; McCormick, Taber & Kruedelbach, 1989).

This subgroup of gamblers displays higher levels of premorbid psychopathology. In particular, they display depression, anxiety, substance dependence, and deficits in their ability to cope with and manage external stress. Gamblers within this subgroup cannot express their emotions directly and effectively, and they show a tendency to engage in avoidance or passive aggressive behaviours. Emotionally vulnerable gamblers see gambling as a means of achieving a state of emotional escape through the effect of dissociation on mood alteration and narrowed attention (Anderson & Brown, 1984; Jacobs, 1986).

The abstinent gamblers in Blaszczynski's (1988) and Blaszczynski, McConaghy and Frankova's, (1991) two-to-five year treatment outcome study appear to fall within this subgroup. In respect to psychopathology, the abstinent gamblers were placed on an intermediate position between the more adjusted controlled and severely disturbed uncontrolled gamblers. Because of their negative developmental history and poor coping skills, these gamblers were regarded as too fragile to maintain sufficient control over behaviour to permit controlled gambling.

Subgroup three: Biological correlates of gambling

The third subgroup of pathological gamblers is defined by the presence of neurological or neurochemical dysfunction reflecting impulsivity (Steel & Blaszczynski, 1996) and attention-deficit features (Rugle & Melamed, 1993). Briefly, evidence supporting neurological deficits in gamblers is found in

electrophysiological, neuropsychological and biochemical studies.

Goldstein and his colleagues (Goldstein, Manowitz, Nora, Swartzburg & Carlton, 1985; Carlton, Manowitz, McBride, Nora, Swartzburg & Goldstein, 1987) reported differential patterns of EEG activity and self-reported symptoms among gamblers found in childhood attention deficit disorder. Supporting this finding, Rugle and Melamed (1993) on the basis of neuropsychological measures of executive functions concluded that childhood differences in behaviours related to overactivity, destructibility and difficulty inhibiting conflicting behaviours were of primary importance in differentiating gamblers from controls. These authors noted that attention- deficit related symptoms reflecting traits of impulsivity were present in childhood. These traits predated the onset of pathological gambling behaviour and gave rise to the hypothesis that impulsivity precedes gambling; and that impulsivity is independent of it and is a good predictor factor for severity of involvement in at least a subgroup of gamblers.

From preliminary evidence in the field of genetics and from neurotransmitter activity comes the tentative hypothesis which links receptor genes and neurotransmitter dysregulation in reward deficiency, arousal, impulsivity and pathological gambling (Roy, De Jong & Linnoila, 1989; Lopez-Ibor, 1988; Moreno, Saiz-Ruiz & Lopez-Ibor, 1991; Carrasco, Saiz-Ruiz, Hollander, Cesar & Lopez-Ibor, 1994; Comings et al, 1996; Bergh, Eklund, Sodersten & Nordin, 1997; DeCaria, Hollander, Grossman, Wong, Mosovich & Cherkasky, 1996).

Genetic studies have recently reported that pathological gamblers, similar to substance abusers, are much more likely to have the D2A1 allele for the dopamine D2 receptor gene than controls leading Comings et al., (1996) to suggest that the D2A1 allele may be a major risk factor in pathological gambling. When gamblers were evaluated on severity, 63.8 per cent of them in the upper range carried the D2A1 allele compared to 40.9 per cent in the lower range. Of note: 76.2 per cent of pathological gamblers who were co-morbid alcohol abusers carried the gene compared to 49.1 per cent of males without co-morbid alcohol abuse or dependency.

It is argued that gamblers manifest differential responses to reward and punishment because of their biologically based impulsivity. These gamblers manifest a marked propensity for seeking out rewarding activities. They are unable to delay gratification, and have a diminished response to punishment. When the consequences of their actions are painful, they fail to modify their behaviour.

Clinically, impulsive gamblers display a broad spectrum of behavioural problems which are independent of gambling. These problems include substance abuse, suicidality, irritability, low tolerance for boredom, sensation seeking and criminal

behaviours. Poor interpersonal relationships, excessive alcohol and poly-drug experimentation, non-gambling related criminality, and a family history of antisocial behaviour and alcoholism are characteristic of this group. Gambling commences at an early age, rapidly escalates in intensity and severity, occurs in binge episodes and is associated with early gambling-related criminality. These gamblers are less motivated to seek treatment in the first instance, have poor compliance rates, and respond poorly to any form of intervention.

Discussion

The starting premise of the proposed pathway typology model is that problem gamblers form a heterogeneous population; the end result of a complex interaction of genetic, biological, psychological and environmental factors. From this population, subgroups of gamblers sharing commonalties can be extracted. The strength of this approach is that it integrates disparate findings reported in the literature. It takes into account the notion that there are groups of non-disturbed gamblers. These gamblers lose transient control over their behaviour because of irrational cognitions, which lead to a series of poor judgments and they become temporarily over-involved in gambling. Fluctuations between heavy and excessive gambling are observed; their disordered gambling may remit spontaneously or with minimal interventions. At the same time, the pathway typology recognizes subgroups of gamblers who participate for emotional reasons: to dissociate as a means of escaping painful life stresses, to reduce boredom, or to deal with unresolved intrapsychic conflicts or childhood traumas. The model also acknowledges that there are some gamblers who exhibit biological correlates of disturbed behaviours. These traits qualify them as sufferers of a medical and/or psychiatric condition characterized by impulsivity and features of attention deficit disorder.

All three subgroups are affected by environmental variables, conditioning and cognitive processes. From a clinical perspective, each pathway contains different implications for managing ement strategies and treatment interventions. "Normal" pathological gamblers require minimal interventions, counselling and support strategies and may resume controlled gambling post intervention. Self-help groups such as Gamblers Anonymous are effective, as are self-control self-help educational materials.

The needs of emotionally vulnerable gamblers who seek solace through dissociation produced by gambling (Anderson & Brown, 1984) to deal with emotional distress, life circumstances or trauma and loss (Taber, McCormick &

Ramirez, 1987) require more extensive psychotherapeutic interventions. Relevant here are stress management and problem-solving skills, as are therapeutic endeavours directed toward resolving intrapsychic conflicts and procedures designed to enhance self-esteem and self-image.

For those gamblers with biological correlates, clinicians must attend to problems related to attention and organizational deficits, emotional liability, stress intolerance, and poor problem solving and coping skills. These gamblers may require intensive cognitive behavioural interventions aimed at impulse control, which is administered over longer terms. Medication aimed at reducing impulsivity through its calming effects may be considered (for example, Prozac); although more random-controlled outcome trials are needed before the benefits of the medication can be established with confidence.

The proposed pathway model is a conceptual framework that attempts to integrate research data and clinical observation to assist clinicians in the identification of distinct subgroups of gamblers requiring different treatment strategies. It is hoped that the model will provide a practical clinical guide that will improve the effectiveness of treatment by refining diagnostic processes and matching gamblers to intervention techniques. The model is open to empirical testing.

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Gambling on the Edge in Alberta

By Harold J. Wynne, PhD, Wynne Resources, Edmonton, Alberta

Abstract

Alberta is Canada's gambling hotbed. In this article, the author explores the preoccupation of Albertans with this form of entertainment and discusses recent events related to gambling in this province. These include the divisive community video lottery terminal (VLT) debate, hotel operators lobbying for gambling expansion, the government's role in Internet gambling and the increasing reliance of charities on gambling revenues.

The author concludes by forecasting four "gambling megatrends" based on experiences from this bellwether province:

- 1. gambling in Canada will continue to expand in the foreseeable future;
- 2. a high-tech gambling future will include Internet gambling in the home;
- 3. special "gaming rooms" and "mini-casinos" will appear in hotels and convention centres; and
- 4. charitable organizations will increasingly depend on gambling revenues for their good works.

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Alberta's Gambling Boom

Alberta is Canada's gambling hotbed. Nine out of ten adult Albertans gamble on some form of legally-sanctioned "game" and this province has the distinction of having the widest array of gaming entertainment options available to its citizenry of any jurisdiction in North America. Even the kids are getting into the act as seven out of ten adolescents age 12 to 17 have gambled for money, either on a legal game or informally with family or friends (Wynne, Smith, & Jacobs, 1996).

Further evidence of Albertans' preoccupation with gambling is apparent when one examines the staggering amount that is wagered in this province each year. In the research report *Gambling and the Public Interest* (Smith & Azmier, 1997), the Canada West Foundation reported that the gross amount wagered on all forms of gambling in Alberta rose from \$1.6 billion in 1993 to \$2.7 billion in 1996-a shocking increase of \$1.1 billion, or 70%, in only three years! This translates into every Albertan over 18 spending \$1,344 each year on gambling in 1996. This was the highest per capita wagering total in the country (Saskatchewan was second highest at \$1,183 and British Columbia was the lowest at \$589). No other industry in Alberta or in the rest of the country - not even the banking fraternity, long chided for its revenue generating propensity - has experienced this phenomenal financial growth in the past few years.

This gambling boom has translated into a windfall of revenue flowing to provincial government coffers. In crafting the 1999-2000 budget, the Alberta government projects that lottery revenue will total \$770 million. This lottery revenue comes from video lottery terminals (VLTs), slot machines, and ticket lotteries only and it does not include other gambling revenues, such as licensing fees or income to non-profit organizations derived from horse racing, bingos, raffles, or charitable casino gambling. To place this in perspective, the estimated \$770 million in lottery revenue compares with \$1.1 billion collected annually from school property taxes, \$690 million from health care insurance premiums, \$570 million from fuel taxes, \$452 million from liquor taxes, \$350 million from tobacco taxes, and \$346 million from crude oil royalties. Fully 4.5% of Alberta's estimated budget of \$17 billion is expected to come from lottery revenues and this compares with 37% from combined personal and corporate income taxes and 14% from all natural resource revenues.

Clearly, as well as providing entertainment for the citizenry, gambling has become a major component in Alberta's fiscal policy. In fact in the 1999 spring cabinet shuffle, the Alberta government created the new Ministry of Gaming (www.gaming.gov.ab.ca) to oversee gambling operations throughout the province. "Gaming" now has a permanent, high profile place at the cabinet table alongside

Learning, Health and Wellness, Environment, Community Development, Children's Services and other significant portfolios.

Recent Gambling Happenings in Alberta

It is much easier to describe what is happening on the Alberta gambling scene than why gambling has been so enthusiastically embraced in this province. The latter necessitates an examination of the settlement history, socio-political climate, and economic forces at play in a diverse and bountiful environment - all considerations far beyond the scope of this article. It is, however, instructive to track recent gambling happenings in a province that is so preoccupied with this form of entertainment for two main reasons: first, as a precursor to understanding why gambling is paramount in Alberta and second, as a harbinger of gambling trends that may spread to other Canadian provinces.

The Great VLT War

There are about 6,000 VLTs in over 1,200 sites across Alberta. On October 19, 1998, Albertans in 36 communities voted on whether to keep VLTs in their villages, towns and cities or to ask the province to remove these gambling machines from bars and lounges. In the end, most communities, including the major cities of Edmonton and Calgary, voted to retain VLTs, although in Edmonton the vote margin was very narrow.

This is a watershed event in Alberta and Canada's gambling history as it represents the first time the people have exercised a direct vote on any form of gambling expansion. The proponents of the "yes" (VLT removal) side engaged in a media war with the "no" (VLT retention) advocates and the rhetoric raged for months. Those who are interested in the details of the Great VLT War can find details in the Canada West Foundation (www.cwf.ca) report entitled *Rolling the Dice: Alberta's Experience With Direct Democracy and Video Lottery Terminals* (Azmier, 1998).

In the final analysis, the people of Alberta have spoken. Petitions signed in Edmonton and Calgary that forced the VLT plebiscites garnered nearly a quarter of a million signatures, which is an extremely strong indication that many Albertans insist on having a say in gambling decisions that affect their communities. Based on this highly visible and successful experience with direct democracy, it is very

likely that the people will continue to lobby the Alberta government to be more involved in the gambling policy decision-making process.

Alberta Hotel Operators Lobby for More Gambling - Again

Several weeks ago, the Alberta Hotel Association approached the Alberta government with an idea for a "pilot study" that involves swapping VLTs for coin slot machines in 40 bars and lounges. The hoteliers are proposing giving up the VLTs in 40 establishments in return for 50 coin slots to be placed in new "gaming rooms" to be developed in these selected hotels. Interestingly, although the government has capped VLTs at 6,000 province-wide, there is no similar limit on the number of coin slots permitted (these presently number about 3,000). The hotel association proposes creating a foundation to funnel 15 per cent of the slot machine revenues into medical research with hotel operators getting another 15 per cent and the province getting the final 70 percent.

The specter of hotel operators lobbying government for more gambling business is nothing new in Alberta. In the early 1990s, the hotel lobby was a major factor in the government's decision to conduct the VLT "pilot projects" in Edmonton and Calgary that ultimately resulted in the wide distribution of VLTs in bars and lounges throughout the province.

Once again, the hotel lobby is attempting to influence the Alberta government to expand gambling to the industry's benefit. If approved, the coin slot "pilot project" suggested by the hotel industry will see some 2,000 coin slots rolled out in 40 new gaming rooms, replacing about 300 VLTs in the process. So far, government MLAs who have been quoted in the media do not favour the hotel association proposal. Ironically, both the pro- and anti-VLT spokesmen in Calgary are also quoted as being opposed. Nevertheless, history shows that the hotel lobby in Alberta is powerful, so I wouldn't bet the farm against lobbyists ultimately succeeding in getting their gaming rooms- starting with coin slots at first and, perhaps, expanding to table games in the future.

Is Internet Gambling Coming to Alberta?

Internet gambling is already available in Alberta, as it is in other provinces. On-line gambling is presently illegal and is typically operated from offshore locations, such as the Caribbean islands, which are outside the jurisdiction of Canadian governments. In our recent study *Gambling and Crime in Western Canada* (Smith & Wynne 1999) Garry Smith and I conclude that, because the present laws against Internet gambling are inadequate and unenforceable, consumers are vulnerable to crimes such as fraud, credit card theft, and cheating. Moreover, there is no way for provinces to stop under-age gamblers from playing. Consequently, we speculate that legalization of Internet gambling seems likely because prohibition is futile in the face of advanced technology and there is tremendous potential for governments to raise large revenues.

Coincidentally, the day after our study was released, provincial newspapers ran a story "Internet Gambling Could Be in the Cards" referring to the Alberta government's plans. In the Edmonton Sun, Gaming Minister Murray Smith was quoted as saying, "You never rule anything out categorically. But we're not considering it at this point. We don't see it as viable at this point" (Beazley, 1999). The story was sparked when it was learned that the Alberta Gaming and Liquor Commission (AGLC) executive was to get a briefing on Internet gambling operations in Canada and abroad. The purpose of the briefing was ostensibly to bring AGLC up to speed on which Internet gambling operators offer their product in Alberta.

This is not the first time that the prospect of Internet gambling in Alberta has surfaced. The Sun also reported that, in 1995, a Caribbean-based Internet gaming company, Internet Casinos Inc., offered to make a personal pitch to Premier Ralph Klein to set up an Internet gambling service in Alberta. The outcome of this overture was not reported. The Liberal opposition has made a Freedom of Information request for any studies and documents relating to Internet gambling and the government has promised these will be delivered in early October.

Clearly, The prospect of Internet gambling in Alberta promises to be a political hot potato in the near future. The government is in the unenviable position of having to either enforce and attempt to eradicate illegal Internet operations or sanction and regulate this form of on-line gambling. Of course, doing nothing is also a government option as is legalizing, promoting and regulating a made-in-Alberta Internet gambling operation. It will be very interesting to watch how the Alberta government deals with this difficult issue in the months ahead.

Charities Are Hooked on Gambling

Revenues

A recent Canada West Foundation study of 400 non-profit charities across Canada (Berdahl, 1999), concluded that "gambling revenues are an increasingly important source of funding for the non-profit sector, despite the facts that such revenues are often unstable and present ethical conflicts for a number of organizations." Of the 400 non-profits participating in the study, 28% rated gambling grants as their top funding source and 50% said gaming grants were in the top three sources of their funding. Furthermore, about 20% said they received over half of their annual revenues from gaming grants.

Alberta charitable organizations are especially dependent on gambling revenues. Twenty per cent of Alberta non-profits receive more than half of their revenues from charitable gambling as opposed to 10 per cent in Ontario and 5 per cent in Saskatchewan. More than 8,000 charitable organizations in Alberta currently either have a gaming licence or have conducted a gaming activity in the past two years. The list includes agricultural societies, service clubs, community associations, community leagues, and various types of groups (e.g., youth, music, multicultural, sports, religious, seniors, social action). In the current fiscal year, it is estimated that these non-profit organizations will share in \$146 million in net revenue realized from four charitable gambling sources - bingo, \$58 million; casinos, \$60 million; pull tickets, \$9 million; and raffles, \$19 million (Berdahl, 1999).

Depending on gambling revenues for charitable "good works" causes an ethical dilemma for some board members and volunteers. The Canada West study found, however, that the prevailing sentiment among non-profits was that the "commitment to their cause overrides their ethical concerns about gambling" (Berdahl, 1999). In other words, most take the money and hold their nose. The study concludes by offering 10 recommendations, with the main focus being on reducing charitable organizations' reliance on gambling revenues by replacing these with government grants to organizations to meet community needs.

Gambling Megatrends

In his pop-futurist best seller *Megatrends* (1982), John Naisbitt identified "ten new directions transforming our lives." Ironically, Naisbitt ignited a trend of his own as his seminal work spawned a parade of similar futurist publications - Faith Popcorn's *The Popcorn Report* (1992) and *Clicking* (1996), Naisbitt and Aburdene's *Megatrends* 2000 (1990), David Foot's *Boom, Bust and Echo* (1996)

and Angus Reid's *Shakedown* (1996) to name a few. Each of these authors uses different methods to read the tea leaves in an attempt to enlighten us as to where Western society is heading. In the original *Megatrends*, Naisbitt describes "bellwether states" as those wherein "social invention" in response to social issues and local conditions, seems to occur time and time again. He identified five bellwether states as the leaders and trendsetters in the United States - California, Florida, Washington, Colorado and Connecticut - and through monitoring local media accounts of social invention in these states, he extrapolated the first 10 "megatrends."

While other futurists use different approaches - Foot examines demographic shifts, Popcorn depends on interviews, and Reid relies on polling data and research - there is merit in Naisbitt's observation that there are bellwether states wherein socioeconomic trends are most likely to be conceived, incubated or, at least, quickly adopted.

I believe that Alberta is such a bellwether state when it comes to gambling expansion, regulation and experiencing the inevitable socioeconomic fallout. Therefore, I suggest that it is instructive to monitor the gambling happenings in Alberta for clues about emerging "gambling trends" that may ultimately be experienced in other provinces. At the risk of being labeled a gambling futurist, I offer for consideration four gambling trends inferred from these Alberta happenings:

- 1. Gambling in Canada will continue to expand in the foreseeable future and machine-based gambling including VLTs, coin slots, electronic Keno and bingo, and video poker will grow significantly and become the most pervasive gaming format.
- 2. This high-tech gambling future will include legalized Internet gambling where citizens will wager on the outcome of table games, horse races, sporting events, elections, and a myriad of yet-to-be determined gambling opportunities, all on their personal computer and in the privacy of their home.
- 3. The Canadian hospitality and tourism industry will be successful in lobbying governments to allow special "gaming rooms" or "mini-casinos" in larger hotels, convention centres, and tourist destination facilities as part of providing a better entertainment package to attract guests.
- 4. Canadian charitable organizations will rely heavily on gambling initiatives lotteries, raffles, casino nights, bingos, and grants from government-sponsored gambling to fund their programs and administration.

The Alberta people have also clearly voiced that they want a say in the government's future gambling expansion plans and other provincial governments would be prudent to involve the public in gambling decision-making lest they, too, suffer the wrath of the citizenry.

In Alberta, gambling is on the edge. But the edge of what? Proponents would argue that the province is on the leading, trendsetting edge of crafting responsible gambling expansion plans while mitigating the harmful effects of gambling - in other words, creating a healthy balance. In contrast, detractors argue that Alberta is on the edge of a precipice. They see unfettered gambling expansion as a black hole that impoverishes the vulnerable, enriches governments and a few fat-cat operators, and generally seduces people into valuing "luck" above sacrifice and hard work. Which is the true Alberta gambling edge - precipice or trend-setting? It will be interesting to watch the gambling happenings in this bellwether province as the answer to this question emerges.

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Relationship between gender and substance use among treatment-seeking gamblers

By Tony Toneatto, Senior Scientist, Centre for Addiction and Mental Health, Toronto, Ontario and Wayne Skinner, Clinical Director, Concurrent Disorders Program, Centre for Addiction and Mental Health, Toronto, Ontario

Abstract

Very little is known about gender differences in psychoactive substance use among gamblers. In this study, 200 individuals seeking treatment for problem gambling were assessed with respect to lifetime and current use and abuse of licit and illicit substances. As a group, they were found to have experience with psychoactive substances exceeding that reported for the general population. There were no gender differences in patterns of illicit drugs; however, the women gamblers reported greater experience with psychiatric medications over the lifetime and during the treatment and follow-up periods.

Introduction

A considerable body of research, recently reviewed by Spunt, Dupont, Lesieur, Liberty and Hunt (1998), has shown a strong relationship between substance abuse and dependence, and pathological gambling. In general, the research reports higher rates (ranging from two to three times) of alcoholism and other substance use

among gamblers than among the general population (e.g., Abbott & Volberg, 1991; Ladouceur, Dube, & Bujold, 1994; Rupcich, Frisch, & Govoni, 1997). Similarly, rates of pathological gambling seem to be higher among substance-abusing populations than the general population (e.g., Feigelman, Wallisch, & Lesieur, 1998; Roehrich, Sorensen, & Good, 1994; Steinberg, Kosten, & Rounsaville, 1992).

However, Spunt et al. (1998) note the lack of data regarding the effect of gender on substance use among pathological gamblers. Mark and Lesieur's 1992 survey of the gambling research literature found that very few studies included female gamblers; those that did rarely analyzed results according to gender. They observed that the failure to include female gamblers seriously limited the generalizability of the findings.

The purpose of the current study was to describe the relationship between gender and patterns of legal, illicit and prescribed psychoactive substance use in a sample of treatment-seeking pathological gamblers.

Method

Individuals seeking treatment for problem gambling were recruited from addiction and mental health agencies, community mental health professionals, assessment and referral agencies, credit counselling agencies, employee assistance programs as well as directly soliciting participants through advertisements in major and local daily newspapers in Toronto, Canada. Individuals who were referred to the study or responded to newspaper advertisements were invited to participate in the baseline assessment procedure.

The severity of the individual's gambling problem was measured using the Diagnostic and Statistical Manual (DSM-IV) criteria for pathological gambling (American Psychiatric Association, 1994) and the South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987), a widely used screen for gambling problems. The Gambling Behavior Questionnaire (Toneatto, unpublished) was used to assess the types and duration of gambling problems, previous gambling treatment, family history of gambling, positive and negative perceptions of gambling and negative consequences of pathological gambling.

Lifetime use, problematic use and treatment history for up to11 psychoactive substances were also measured. Recent use (during the month pre-treatment) and use during the year following treatment were assessed. Substances were classified into two broad categories: drugs (cannabis, cocaine, hallucinogens, inhalants, opiates, stimulants) and psychiatric medications (anti-depressants, anxiolytics,

sedatives, anti-psychotics). Prescription opiates and alcohol were considered separately.

Gambling treatment consisted of one of four modalities: cognitive-behavioural therapy, brief motivational intervention, 12-step therapy and solution-focused therapy. As the treatments were administered in separate geographic locations, random assignment was not possible. All treatments were administered on an outpatient basis and averaged six sessions except for the motivational intervention, which was one session.

Frequency of gambling, money wagered and relapse (i.e. any gambling if the treatment goal was abstinence; excessive gambling if participants did not choose abstinence as the treatment goal) were assessed for the periods: a) 30 days prior to the baseline, b) six months post-treatment and c) 12 months post-treatment. Relapse was assessed as any gambling if the treatment goal was abstinence and as excessive gambling if participants did not choose abstinence as the treatment goal. At the 12-month follow-up assessment, use of psychoactive substances during the preceding year was assessed again. Additional details describing the treatments and the study can be found in Toneatto, Dragonetti and Brennan (unpublished).

Results

Sample characteristics

Table 1 describes the overall demographic and gambling-related characteristics for the sample as a whole. The sample was primarily male, middle-aged, earning a middle income, largely non-partnered, with some college education and generally employed. Almost everyone met clinical criteria for pathological gambling according to DSM-IV or SOGS. All subjects were included in the analysis, however, as these measures were not employed as inclusion criteria, but rather as indicators of the severity of the gambling problem.

At the time of seeking treatment, the individual's gambling problem was typically of several years duration, associated with multiple negative consequences (including substantial total estimated financial losses). Almost half of the sample had sought treatment for gambling previously at Gamblers Anonymous (GA). Participation in other addiction programs was not assessed.

Table 1

Description of sample

| Variable | Total (n=200) | | | | |
|---|----------------------|--|--|--|--|
| Demographic | | | | | |
| Mean (SD) age in years | 41.3 (11.1) | | | | |
| % male | 74.9 | | | | |
| % married/common-law | 48.2 | | | | |
| % some college education | 30.3 | | | | |
| % full-/part-time employment | 61.9 | | | | |
| Mean (SD) income in thousands | 33.0 (23.0) | | | | |
| Gambling-Related | | | | | |
| Mean (SD) SOGS score | 12.1 (4.0) | | | | |
| % pathological gamblers, SOGS score > 4 | 96.0 | | | | |
| Mean (SD) DSM-IV symptoms | 6.9 (2.2) | | | | |
| % pathological gamblers, DSM-IV 5 symptoms | 84.9 | | | | |
| Mean (SD) years pathological gambling | 7.2 (7.6) | | | | |
| Mean (SD) lifetime financial loss in thousands | 90.0 (140.0) | | | | |
| % ever attended GA | 47.5 | | | | |
| Mean (SD) number of consequences ¹ | 6.2 (2.2) | | | | |
| Mean (SD) problem gambling behaviors ² | 2.4 (1.6) | | | | |

¹ maximum 10 2 maximum 12

Gender and substance use patterns

Lifetime use of psychoactive substances was extensive in this sample (see Tables 2 and 3). The highest use rates were reported for certain psychiatric medications (i.e., anti-depressants and anxiolytics), cannabis, cocaine and prescription opiates (see Table 2). Several gender differences in psychoactive substance use were observed. Females were more likely to report lifetime use of psychotropic medications, primarily anti-depressants (62% vs. 22% for males; $\chi^2[1] = 27.3$, p < .0001), anxiolytics (50% vs. 22% for males; $\chi^2[1] = 14.9$, p < .0001) and sedatives (28% vs. 13% for males; $\chi^2[1] = 5.7$, p < .02).

The women were also more likely to report drug use during the 12-month post-gambling treatment follow-up period as well; anxiolytics (19% vs. 2% for males; χ 2 [1] = 7.0, p < .01) and anti-depressants (37% vs. 14% for males; χ 2 [1] = 5.4, p < .05). There were no gender differences in the proportion of individuals reporting lifetime use of any specific drugs, history of drug problems or drug treatment, or drug use either pre-treatment or during the 12-month follow-up.

Gender and alcohol use patterns

Males were more likely than females to drink alcohol in the month prior to seeking treatment for gambling (64.3% vs. 26.0%, respectively; $\chi^2[1] = 22.7$, p < .0001) as well as during the 12-month follow-up period (59.7% vs. 24.2%, respectively; $\chi^2[1] = 8.3$, p < .005) (See Table 2.) Males also consumed significantly more alcohol drinks (M[SD] = 4.4 [6.0]) on any one day in the month prior to treatment than did females (M[SD] = 1.5 [4.3]; F[1:197] = 9.6, p < .005). This margin of difference decreased in the month prior to the 12-month follow-up assessment (M[SD] = 3.6 [6.3] vs. M[SD] = 1.3 [3.1], for males and females, respectively; F[1:91] = 4.0, p < .05). There were no significant differences in the proportion of males (12.9%) and females (9.1%) who reported a current alcohol problem.

Females also reported more days of abstinence in the month pre-treatment (M = 28.4, SD = 4.3) than did males (M = 23.9, SD = 8.1; t [197] = -3.72, p < .0001). The same was true in the month prior to the 12-month follow-up assessment (M = 28.4, SD = 4.8 vs. M = 23.7, SD = 8.7 for females; t [91] = -2.82, p < .01). There were no gender differences, however, in the lifetime rates of alcohol problems or treatment-seeking for problem gambling.

In addition, there was no significant gender effect of either alcohol use on gambling behaviour (21.0% of males vs. 10.0% of females reported increased gambling when drinking alcohol) or gambling on alcohol consumption (14.4% of males and 12.0% of females reported increased alcohol use when gambling).

Table 2Patterns of use for individual psychoactive substances, by gender

| Substance | | Ever used | | Ever a problem | | Ever treated | | Used in 30 days pre- treatment | | Used during follow-up period ¹ | |
|---------------|---|-----------------|----------------|----------------|----|-----------------|----|---|----|---|------|
| | | M^2 | F ³ | M | F | M | F | M | F | M | F |
| Alcohol | % | na ⁴ | na | 26 | 24 | 12 | 22 | 664.3 | 26 | 59.7 | 24.2 |
| | n | na | na | 22 | 8 | 10 | 7 | 97 | 13 | 37 | 8 |
| Cannabis | % | 67 | 54 | 15.3 | 12 | 6 | 6 | 8.7 | 8 | 1.3 | 4 |
| | n | 100 | 27 | 23 | 6 | 9 | 3 | 13 | 4 | 2 | 1 |
| Cocaine | % | 30 | 22 | 8 | 10 | 4 | 18 | 0.7 | 4 | 0.7 | 0 |
| | n | 45 | 11 | 12 | 5 | 6 | 2 | 1 | 2 | 1 | 0 |
| Opiates | % | 7 | 10 | 2.7 | 4 | 1.3 | 2 | 1.3 | 0 | 2 | 0 |
| | n | 11 | 5 | 4 | 2 | 2 | 1 | 2 | 0 | 1 | 0 |
| Hallucinogens | % | 31 | 24 | 6.7 | 6 | 3.3 | 4 | 0 | 0 | 0 | 0 |
| | n | 46 | 12 | 10 | 3 | 5 | 2 | 0 | 0 | 0 | 0 |
| Inhalants | % | 5 | 6 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | n | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stimulants | % | 21 | 22 | 6 | 10 | 1.3 | 8 | 1.3 | 2 | 0 | 0 |
| | n | 31 | 11 | 9 | 5 | 2 | 4 | 2 | 1 | 0 | 0 |

| Anti- | % | 22 | 62 | 1.3 | 6 | 0 | 0 | 14.7 | 34 | 14 | 37 |
|----------------|---|----|----|-----|----|-----|----|------|----|----|----|
| depressants | n | 33 | 31 | 2 | 3 | 0 | 0 | 22 | 17 | 7 | 10 |
| Anxiolytics | % | 22 | 50 | 4 | 14 | 1.3 | 10 | 4.7 | 22 | 2 | 19 |
| | n | 32 | 25 | 6 | 7 | 2 | 5 | 7 | 11 | 1 | 5 |
| Antipsychotics | % | 4 | 12 | 0 | 0 | 0 | 2 | 2.7 | 8 | 8 | 15 |
| | n | 6 | 6 | 0 | 0 | 0 | 1 | 4 | 4 | 4 | 4 |
| Sedatives | % | 13 | 28 | 3.3 | 16 | 0.7 | 8 | 4 | 10 | 6 | 15 |
| | n | 20 | 14 | 5 | 8 | 1 | 4 | 6 | 5 | 3 | 4 |
| Prescribed | % | 33 | 46 | 4 | 16 | 1.3 | 8 | 9.3 | 10 | 6 | 15 |
| opiates | n | 49 | 23 | 6 | 8 | 2 | 4 | 14 | 5 | 3 | 4 |

 $^{^{1}}n = 93$ 2 Males, n = 149-150 3 Females, n = 50

Gender and aggregated psychoactive substance use patterns

Table 3 describes the relationship of gender and aggregated substance use patterns. More females reported lifetime use of psychiatric medications ($\chi^2[1] = 16.7, p < .0001$), abuse of medications ($\chi^2[1] = 10.2, p < .005$), treatment for abuse of medications ($\chi^2[1] = 17.0, p < .0001$), medication use at the time of seeking treatment for the gambling problem ($\chi^2[1] = 17.8, p < .0001$) and medication use during the 12-month follow-up period post-treatment ($\chi^2[1] = 10.9, p < .001$). Frequencies for the use of psychiatric medications also showed similar, significant gender differences. There were no gender differences in the patterns or frequency of drug use.

Table 3

⁴Lifetime use of alcohol not assessed.

Lifetime, current and follow-up drug and medication use, by gender

| Variable | Males | Females | | | |
|---|------------|-----------|--|--|--|
| Mean (SD) number of: | % n | % n | | | |
| Drugs ¹ ever used | 70.5 (106) | 60.0 (30) | | | |
| Drugs ever a problem | 24.0 (36) | 22.0 (11) | | | |
| Drugs ever treated for | 9.3 (14) | 10.0 (5) | | | |
| Drugs used in 30 days pretreatment | 10.0 (15) | 10.0 (5) | | | |
| Drugs used during follow- up period ² | 6.5 (4) | 3.0 (1) | | | |
| Medications ever used ³ | 38.7 (58) | 72.0 (36) | | | |
| Medications ever a problem ³ | 7.3 (11) | 24.0 (12) | | | |
| Medications ever treated for ³ | 1.3 (2) | 16.0 (8) | | | |
| Medications used in 30 days pre-treatment ³ | 18.0 (27) | 48.0 (24) | | | |
| Medications used during follow-up period ^{2,3} | 14.5 (9) | 46.0 (15) | | | |

¹excluding alcohol $^2n = 93$

Discussion

No study has systematically assessed gender differences in substance use patterns, problematic substance use and substance treatment history among pathological gamblers. The results of the present study suggest that female problem gamblers

³chi-square significant at p < .0001 ⁴chi-square significant at p < .005

reported significantly greater lifetime use of psychiatric medications, in particular anti-depressants, anxiolytics, and sedatives, than male problem gamblers.

This pattern parallels the relationship observed between gender and psychiatric medications in the general Canadian population. In a survey of drug use among Canadians (McKenzie, 1997), more women used tranquilizers (5.3%), sedatives (5.4%) and anti-depressants (4.2%) in the past year than did men (3.4%, 3.7%, 1.7%, respectively).

While the lifetime prevalence of illicit drug use in the Ontario population (e.g., cannabis, 26.8%, cocaine, 4.9%, heroin, 1.1%) is considerably lower than that for legal substances (e.g., nicotine, alcohol) and prescribed medications, the rates are generally twice as high for males as for females (Van Truong, Williams, Timoshenko, 1998; Adlaf, Ivis, Ialomiteanu, Walsh, Bondy, 1997). The present study found the same relationship wherein illicit drug use was higher in males, although not significantly so. While the relationship between gender and substance use appears to be consistent with what is found in the general population, the rates are considerably higher among problem gamblers seeking gambling treatment.

There were no gender differences in the reported rates for problems with, or treatment for, drug, medication or alcohol use. Furthermore, very little drug use was reported at the time that participants were seeking gambling treatment. None of the participants reported that their current substance use was problematic. Nor was there any evidence that gambling behaviour was substituted by increased use of psychoactive substances as a result of treatment, since there was no change in the use of psychoactive substance during the post-treatment period compared to substance use prior to entering gambling treatment.

The relatively high rates of medication usage among treatment-seeking female gamblers suggest higher levels of psychological dysfunction, sufficient to warrant psychopharmacological intervention. It is well-documented that women tend to suffer from mood and anxiety disorders at rates higher (approximately two to three times) than men in the general population and they are also more likely to seek treatment for anxiety and depression (Kessler, et al. 1994; Ross, 1995). Medications would frequently be a component of such treatment.

Problem gamblers have been shown to suffer considerably from concurrent psychiatric symptomatology. Reviews of the literature show that affective disorders and anxiety disorders are particularly common (Lesieur & Blume, 1991; McCormick, Russo, Ramirez & Taber, 1984; Linden, Pope and Jonas, 1986). Specker, Carlson, Edmonson, Johnson and Marcotte (1996) found that almost all of a sample of 40 problem gamblers had had a lifetime mood disorder and most female (but not male) problem gamblers had been diagnosed with an anxiety

disorder during their lifetime. In general, this literature has not examined psychopathology by gender.

The results of this study suggest that substance use among treatment-seeking problem gamblers, while highly prevalent over the course of the lifetime for both genders, does not seem to be a relevant clinical issue. However, the elevated rates of psychotropic drug use, especially among female problem gamblers, suggest that there may be considerable psychiatric comorbidity in this population, which is consistent with other research in this area.

It is not clear from the study whether such psychopathology is functionally associated with the gambling behaviour. The finding that neither gender changed greatly in their use of antidepressants and anti-anxiety medications in the year following treatment for gambling may indicate an independent psychiatric syndrome. Additional research is needed to evaluate the impact of concurrent medication use and/or psychopathology on the outcome and long-term effect of treatments for problem gambling.

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clinic

We invite submissions from clinicians - for example, from therapists, counsellors, social workers, and case managers - who work with problem gamblers and their families. We would like to hear what you have learned in your practice that can help other clinicians to better serve their clientele. If you are thinking about beginning an article for us, please see the 'Invitation to Contributors.' All submissions will be peer-reviewed in confidence by at least two clinicians and mediated by the editor for their soundness and value to practicing clinicians.

If you have questions, please contact the editor:

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first person

We hope that the narratives in First Person Accounts will evoke an understanding of how people experience gambling. These experiences may come from gamblers, from family or friends of gamblers, and may be positive or negative. We invite others to share their experiences as First Person Accounts or to a dialogue in our Letters to the Editor.

At Greenwood Racetrack

By Geri Lockwood

(written in 1996)

During the summer of '93, I occasionally talked my mother into going with me to Greenwood Racetrack in Toronto. It wasn't her favourite place, nor was it the favourite place of most of the people I knew. My daughter refused to go there "amongst the scumbags," as she so aptly put it, but it was my weekend recreation. To escape from dwelling on things of the past, which left me empty and broken, I would rush off on Friday or Saturday or both nights to spend money I didn't have, but which my bank overdraft could accommodate. A quick trip to the Green Machine and I was literally off to the races.

When my daughter moved out the first time, the support from my former husband was cut in half and my finances began to worsen. As I tried to make sense of my state of affairs, I looked back to my first gambling experience and totalled up the years: ten years of chasing a myth and living one. I had a secret life that I exposed to few people, certainly not to the people I worked with. And of course, I gave up my friends - they would not learn of my unhappy penchant for losing money.

A psychic thing I had occasionally experienced resurfaced one summer night in Guelph, where I lived in 1980. A lower downtown street in Guelph had been closed

off and a carnival set up. My husband, my daughter and I went - an affluent family secure with themselves.

As the evening progressed, the fair seemed to come into focus, unreal, and yet somehow, heightened. It was a strange experience, almost like being in a car accident when every detail is slowed down and in horror and helplessness you know you are mortal.

I shrugged off that experience, but it foretold a fascination with what was to come. Sometime after this experience, the three of us moved to Montreal. Within two months of this move, my marriage was over and my daughter and I wound up in Toronto, more aware of each other than we had ever been. In one evening, I celebrated my wedding anniversary and ended my marriage, all while eating dinner at Ruby Foo's.

It was March of '82 when we left Montreal at my husband's invitation. The train route to Toronto ended at Union Station and from there we rode the subway to Kennedy station. With our two suitcases in tow, we walked to my mother's apartment, which she shared with my dear stepfather.

I had originally intended to return to Guelph. But Mom and my stepfather talked me into staying at their Toronto apartment with my daughter, where I slept on the pullout bed in their spare room.

It was tough trying to secure an apartment, and I played the waiting game for a home of our own. I worked temporarily while I waited. I had \$10,000 in the bank and was somewhat financially secure. I held off getting a permanent job until I was settled in my own place and had my furniture and possessions with me in Toronto.

I found an apartment, and my stepfather, who never let me down, saw that my furniture was delivered. I then applied for a job with a bank and after weeks of their deliberating, I was offered a permanent position. My life seemed to be settling down.

My daughter and I went to the Canadian National Exhibition on Labour Day weekend, and I was to start work the following Monday. We walked through the CNE and I don't really remember all the details, but I began to play the games of chance. It was fun. In fact, as closing time came my daughter and I were all smiles, thrilled to have enjoyed ourselves for the first time since we left Montreal.

After that I lived for the CNE, and began buying \$2 instant scratch-and-win tickets. I was consumed. One of the early scratch-and-win tickets also had a number for a future draw with a prize of \$100,000. I eagerly kept all these tickets in anticipation

of the future draw. One day I counted them up, I had over \$200 in useless tickets. I began to realize that something was wrong. I searched for the number of Gamblers Anonymous and hesitatingly called. That night, unlike the other nights I called, someone answered.

I told him that I thought I might have a gambling problem, and that I had been buying lottery tickets. The reformed gambler on the other end of the phone scoffed at me and said buying a few lottery tickets was not gambling. He had gone to the track for years and *that* was real gambling. I told him I had bought more than a few tickets, but he was not impressed. Not being at all forceful, I hung up. I decided that I would try the racetrack and that weekend - fearful, but drawn to it, I made my way to Greenwood Racetrack.

It was overwhelming to a novice: noise, crowds and strange odds, which I would later become a master at, showing displayed on television screens beside the horses' numbers.

Thoroughbred horses were running that day, and asking help from a ticket seller, I made my first bet. The horse won and I lined up to cash my \$5 winning ticket.

I asked a man in line ahead of me, obviously also a winner, how much I had won. He said the horse had been at 4 to 5 odds and I would get back \$9. I was disappointed. The man showed me his winning ticket: a \$100 bet. I wasn't so much impressed as in wonder at someone risking so much money when the payoff was so small. Obviously, he was adept at playing "sure things": the bane of all gamblers.

I made some other bets, but finally I made two or three at once; one of which was a show bet on a horse going off at 20 to 1 odds. I was learning about odds quickly. I went to put my tickets in my wallet and I couldn't find it. Frantically, I dug around in my purse. Of course I couldn't have lost my wallet, I told myself, but my search was fruitless. I was in a panic.

I retraced my steps, but my wallet with \$17 in it and my means of getting home were gone. The track was a long way from where I lived. No one knew that I had actually come to a place like this alone. How would I get home and explain my shame, not only at having gone, but also at being the victim of a pickpocket.

A prickle of fear was all over my body, but I calmed myself and hoped that maybe one of my horses would win. Having nothing better to do, I nervously watched the race. My 20 to 1 long shot came home. I cashed the winning ticket and got back \$6, enough to get home and back to real life.

I left the track sobered by my experience. But I would return to that haven of shame and compulsion many times in the years that followed and walk a tightrope of living a dual identity.

In a way, I would remain true to my nature and not be dishonest or cheat anyone involving a money transaction for the sake of gambling. But to myself, I heaped lies onto lies and my self honesty was diminished. Thus what I was changed forever. Changed too, was how I would look at the people who passed through my life. I regarded the addicted as fellow travellers for whom, at times, I would share an unspoken empathy that did not always produce sympathy. The unaddicted became God's chosen; just normal folks, but sometimes within me I wondered if they too harboured a secret self. I regarded anyone with a forced smile or show of gaiety with suspicion.

The compulsion to gamble took a firmer grip on me. I left reason and reality behind on the nights when I discovered that I had inadvertently brought my banking card. One night when I discovered the card, I made a frantic trip to the automatic teller to withdraw money and then raced to the betting window just in time to make a huge bet. It never mattered if I won or lost; though I usually lost. Winning just kept me in the grip and atmosphere of the racetrack, but I always left with nothing in my pocket. I would trudge out and wait by the bus stop at the Harvey's.

Sometimes, but only sometimes, I had the \$1.60 to purchase one of Harvey's wonderful chocolate milkshakes and I enjoyed the reality and treat of it as I entered the real world and shook off the horror and hopelessness of the madness. The many trips I made to the banking machine drained my account, even with my overdraft, and I would steel myself to survive until my next paycheque.

As the bus moved through the darkness, I would look out the window and dwell on how secure the homeowners were, but I knew that such a luxury as a house of my own could never be mine.

Once, when the bus stopped for a light at Greenwood and Danforth, I looked up to the top window of the bank. Perched on the window ledge was a lone pigeon, which huddled on the ledge with its feathers ruffled outward, the small head turned around and buried into its back feathers as it sought shelter from the bitter night cold, and I wondered in whose grip we both were held.

Then a series of events came out of reading horoscopes, an amusing pastime for some. My sister, who was also born under the sign of Libra as I was, played a game with me during our evening telephone calls.

We speculated for what we read made us believe that soon the heavens would be

with us. We found a new horoscope that forecast hope and promises for us both. I took special meaning from a forecast that urged me to look into a relationship from far back in my past and deal with it, for there I would find the key. I remembered a love I had encountered when I was 17 and the great dysfunctioning that had begun for me with that love. I began to explore my early past and how I was still living with it.

I continued to go to the racetrack, but I carried a memory of someone I had loved, now dead. My betting frenzy increased and my feet dragged with the sheer hopelessness of it all. Then one night my gambling frenzy peaked as I sat in the smoking room, hanging my hopes on the outcome of the televised races. I bargained with God that he should let me win one time and secure enough money to walk away forever from that place and go no more. I kept making trips to the banking machine, buying more and more vouchers, only to lose.

I was in more of a fever that night than ever before. As I frantically purchased my last voucher, I believed I heard the ticket sellers talking about me, but I made a bet and sat at a table to watch the outcome of the race. The force of my need to win was so great that I called upon Heaven to let me win as a sign that I could walk away. Heaven answered with silence and I lost the race. But I got up and walked away feeling that something had left me.

In the weeks that followed I went no more to Greenwood. I told those who loved me and who grieved over my compulsion that it was gone. What took hold of me was a thirst for the beauty and caring of life - the small joys. I began to have money in my pocket and was now able to purchase the little things I had learned from gambling to do without. I looked to a future when I would have enough money to buy more expensive items.

This metamorphosis had not begun just with the horoscope. With my sister's help, encouragement and sympathy, we talked and I exposed the true horror of the gambling and my helplessness. Many factors all came together. In the end, I was someone who cared about smiling at people and listening to them. However, because of my nature I still cared too much about everything else, but not myself.

I took myself back to age 17, when my odyssey had began and then arrived at 50, still the same person. I lived the filling of those years trying to deal with the disapproval the world had heaped on me when I was 17. I sought safety in marriage and created a child. My reality for many years was to put my heart and soul into being a dutiful wife, but all that I offered my husband was rejected and I began gambling. I heaped scorn and abuse on myself by gambling, but within I knew I had been true to myself. I never stole or cheated to gamble, and if I borrowed money, I always paid it back.

I was 50 and my future was to learn to find small joys and the perks of life. I bolstered myself with daydreams of a man I once loved and a sometime belief that we could be together. Perhaps true heaven, even on earth, is the ability to dream dreams.

Our mood of the moment is how we look to our end. The gamble of life and the chances we deal with are our reality. In despair we want oblivion, but if we have ever achieved the brass ring, we cling to the pleasures of life and want more.

At 50 years of age, I cared again. I never made a mark on the world, save for those who loved me and those with whom I dealt fairly. I wondered sometimes if I even wanted to go 'round on the go 'round of life yet another time, if I had the chance. I was not certain if I wanted to go.

I took better care of myself and I laughed more; I gained my daughter's respect and I functioned and went to work everyday. I had money in my pocket and most days I lived in the reality of the world. I had come to terms with life.

But someday, if you feel a hollowness or if you're in a place and it sparks an echo within - you know - they call it deja whatchamacallit, then remember this tale and think of me. If you listen closely, you may hear me laughing as I go around again with a certain someone, reaching for the brass ring.

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Hooked: A Gambler's Nightmare (1996)

Running time: 15 minutes

Producer: Loose Change Film Associates and Alberta Alcohol and

Drug Abuse

Commission (AADAC)

Distributor: Kinetic Canada 511 Bloor Street West, Toronto, Ont.,

M5S 1Y4

Phone: (416) 538-6613, 1-800-263-6910

:http://www.kineticvideo.com

Cost: \$99.00

Winning, Losing, Desperation and Exhaustion: these are the four parts of *Hooked: A Gambler's Nightmare*, a video profiling the progress of the problem gambler. This well-paced video combines professional commentary with the perspectives of both casual and problem gamblers to highlight the major elements that lead to problem gambling.

Hooked is comprehensive in the types of gambling considered - from bingo to casinos to VLTs. It shows that contributing factors to the increased risk of problem gambling are similar to those for alcohol and other drug use problems: early exposure, social difficulties, emotional or mental health problems, and for young people, problems at school.

Starting off with a montage of Las Vegas-style images of the gambling world, *Hooked* conveys some of the excitement of having the chance to win big. The high reward value of winning is another important factor, especially for beginners. The video suggests that this early phase is important; it contributes to an increasing commitment - like upping the ante in an attempt to relive the excitement of the first win. As the gambler's commitment progresses, he or she devotes more resources to

betting, and may continue or escalate betting to pay off debts. In more extreme examples, again like the problem alcohol user, the gambler becomes isolated from friends and family, may lie to hide the extent of the problem or steals money or sells valuables to finance continued gambling.

Hooked outlines two case histories and examines the destructive impact of problem gambling on family life. One family speaks of both damaged relationships and serious financial losses. The painful emotions and loss of trust are evident when the family appears together onscreen and in highly emotional moments clearly shows their great pain suffered from loss of trust. In another story, a single man relates how his inability to control his gambling, even though he knew he was in trouble, resulted in the loss of his family through divorce.

Strategies for getting help are mentioned briefly, from attending Gamblers Anonymous meetings to seeking professional counselling. More time could have been devoted to the kinds of treatment available and this area may have to be enlarged upon by a resource person. Though this is a weak point in the video, *Hooked* is never the less well-produced. Generally it moves at a fast pace, the slower segments where gamblers talk about their lives are emotional and have high impact.

Another issue some presenters may want to deal with is the close parallel made between problem gambling and alcohol or other drug use problems. The implication is that the pharmacological effects of substance use (e.g., tolerance and dependence) have some behavioural equivalent in the process of becoming a problem gambler.

This is a good video for presenting the major issues in problem gambling. Given its rather short running time, *Hooked* covers a great deal of material and would serve as a discussion-starter for general adult audiences, workplace presentations and senior students.

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Letters to the Editor

We invite our readers to submit **Letters to the Editor** on gambling topics. Please note that we can publish only a fraction of the letters submitted. All letters must be signed. We cannot publish anonymous letters, or those of a libellous nature. Letters to the Editor are reviewed and chosen by the editor and members of the editorial board. Letters may be sent to either the e-mail or the regular mail address given below. Once a letter has been accepted, we will request an electronic version. Each published letter will include the writer's first and last names, professional title(s) if relevant, city, province or state, and country. We reserve the right to edit each submission for uniform format and punctuation.

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For the **Calendar of Events** we invite our readers to submit notices of upcoming gambling-related conferences, presentations, symposiums and other educational events, civic events, and media events that are open to the public. We will gladly publish news of events that may occur years in the future.

We ask that these notices be submitted by electronic mail. With each submission we require the email address of someone with whom the editor can verify details about the event. (We understand that this e-mail address may perhaps not be part of the published calendar listing.) We reserve the right to edit each submission for uniform format, punctuation and grammar.

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http://www.ncpgambling.org

National Council on Problem Gambling: to increase public awareness of pathological gambling, ensure the availability of treatment for problem gamblers and their families, and to encourage research and programs for prevention and education.

http://www.gov.ab.ca/aadac/addictions/subject_gambling.htm

Alberta Alcohol and Drug Abuse Commission: information, brochures and survey results

http://www.responsiblegambling.org

Responsible Gambling Council (Ontario): information, publications and calendar of international gambling-related events

http://www.unr.edu/unr/colleges/coba/game

Institute for the Study of Gambling and Commercial Gaming: an academically oriented program on gambling and the commercial gaming industries

http://www.ncrg.org

National Centre for Responsible Gaming: funding for scientific research on problem and underage gambling

http://www.problemgambling.ca

Problem Gambling: A Canadian Perspective Website (Gerry

Cooper): annotated international links

http://www.youthgambling.org

Youth Gambling Research & Treatment Clinic (McGill University, Montreal, QC, Canada): information, self-quiz and FAQ's



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Invitation to Contributors

We welcome contributions on gambling and gambling-related issues. Please note that submitted manuscripts are limited to 5000 words in length, not including a 150 word abstract and references. (For First Person Accounts and Reviews please see below.) Prospective authors should always read the last issue of *EJGI* for the latest version of Invitation to Contributors. We encourage electronic submission and accept mail submissions, but cannot accept fax submissions. For details, please see the submission process below. All authors whose manuscripts are accepted will receive a standard legal form to complete, sign and return by mail.

The Review Process

All submitted manuscripts (except Reviews) are reviewed anonymously by at least two people. Each reviewer will have expertise in the study of gambling and will assess and evaluate according to the criteria listed below. The editor will mediate their assessments and make the final decisions.

Submissions are either

- 1. accepted as is, or with minor revisions;
- 2. returned with an invitation to rewrite and resubmit for review, or
- 3. rejected. (Decisions of the editor are final and cannot be appealed.)

Authors will receive an e-mail copy of their manuscript before publication, and must answer all queries and carefully check all editorial changes. Please note that there will be a deadline for a response to queries and no corrections can be made after that date. Authors are responsible for the specific content of their manuscripts.

Feature articles

The editorial board will make specific invitations to chosen authors. All submissions will be peer-reviewed in confidence by at least two reviewers for their scientific merit and/or contribution to public debate in the field of gambling studies. All submissions will be mediated by the editor.

Research

We invite researchers to submit manuscripts that report new findings on gambling. All submissions will be peer-reviewed in confidence by at least two reviewers for their scientific merit, and mediated by the editor.

Policy

We invite manuscripts that examine policy issues involving gambling. All submissions will be peer-reviewed in confidence by at least two reviewers and mediated by the editor. The editor will evaluate how successful the author is in exploring how gambling affects public life and policy, historically and currently.

Clinic

All submissions will be peer-reviewed in confidence by at least two clinicians and mediated by the editor for their soundness and value to

practicing clinicians.

First Person Accounts

These narratives will show how gambling affects the author and others (perhaps as family, friends, gambling staff, or clinicians). Submissions will be reviewed in confidence by at least two reviewers and mediated by the editor. The editor will evaluate how successful the author is in making gambling issues come alive to the readers. First Person Accounts do not need abstracts or references.

Reviews

Reviewed by the editor, these brief summaries and discussions will evaluate gambling-related books, videos, Web sites and other media in 1,000 words or less. Reviews should have references if cited, but do not need abstracts.

Letters to the Editor

We invite our readers to submit letters on gambling topics. Please note that we can publish only a fraction of the letters submitted. All letters must be signed. We cannot publish anonymous letters, or those of a libellous nature. Letters to the Editor are reviewed and chosen by the editor and members of the editorial board. Letters may be sent by e-mail or to the mail address given below. Once a letter is accepted, we will request an electronic version. Each published letter will include the writer's first and last names, professional title(s) if relevant, city, province or state, and country. Alternatively, for good cause, the editor may confirm a letter's authorship and publish it as 'Name withheld on request.' We reserve the right to edit each submission for readability, uniform format, grammar and punctuation.

Submission Process

We accept submissions in Microsoft Word, WordPerfect (PC) or ASCII formats. We regret that we cannot accept Macintosh-formatted media. Communications can be sent electronically to (phil_lange@camh.net) to the editor for review. We will take all possible care with submissions. Neither the editor nor the Web site managers accept the responsibility for the views and statements expressed by authors in their communications.

Authors opting to submit hard copies should mail four copies to the address below and ensure that the guidelines are followed. If possible, an e-mail address should accompany mail submissions.

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Fax: (416) 595-6399

Manuscripts and Abstracts

Manuscripts should be word processed in Times New Roman 12-point typeface, and should be formatted with 1.25 inch margins on all four sides. Do not use a font size smaller than 10 anywhere in the manuscript. The first page should be a title page and contain the title of the manuscript, the names and affiliations of the authors, their addresses and e-mail addresses. The second page should only have the manuscript title and the abstract; this is for the purpose of anonymity. This abstract (of 150 words or less) should describe what was done, what was found and what was concluded. List up to eight key words at the bottom of the abstract page. Minimally, an abstract should be structured and titled with objective, methods or design, sample, results and conclusion. The structured abstract format is acceptable, but not required.

References

These should be placed at the end of each manuscript (not as footnotes on each page) and should be cited consecutively in the author/date system (e.g., author(s), year). Ultimate responsibility for accuracy of citations rests with the authors(s). Do not use italics, underlining or tabs in the references; *EJGI* will address these issues in the editing process. Please see the latest issue of *EJGI* for our referencing format.

Examples:

Books

Lesieur, H.R. (1984). The Chase: The Compulsive Gambler. (2nd ed.). Rochester, VT: Schenkman Books, Inc.

Book chapters

Shaffer, H.J. (1989). Conceptual crises in the addictions: The role of models in the field of compulsive gambling. In H.J. Shaffer, S.A. Sein, B. Gambino & T.N. Cummings (Eds.), Compulsive Gambling: Theory, Research, and Practice (pp.3-33). Lexington, MA: Lexington.

Journal articles

Gupta, R., & Derevensky, J. (1997). Adolescent gambling behavior: A prevalence study and examination of the correlates associated with problem gambling. Journal of Gambling Studies, 14 (4), 319-345.

Miscellaneous articles, including government publications

Ontario Ministry of Health. Schedule of Benefits, Ontario Health Insurance Plan. Kingston, Ontario: Ontario Ministry of Health; April 1987.

Papers presented at a conference, meeting or symposium presentation

Ganzer, H. (1999, June). A seven session group for couples. Paper

presented at the 1999 13th National Conference on Problem Gambling, Detroit, MI.

Signed newspaper article

Brehl, R. (1995, June 22). Internet casino seen as big risk. The Toronto Star, pp. D1, D3.

If the article is unsigned or the author's name is unavailable, begin with the title:

Man gambled crime returns at casino. (1996, February 9). The Christchurch Press, pp.32.

Electronic source

Brown, S., & Coventry, L. (1997, August). Queen of Hearts: The Needs of Women with Gambling Problems, (Internet). Financial and Consumer Rights Council. Available:

http://home.vicnet.net.au/~fcrc/research/queen.htm.

Tables

When submitting tables within the text, indicate the approximate position of each table with two hard returns and dotted lines above and below each location, as illustrated here.

Table 1 about here

Please submit your manuscript with the tables after the references.

Graphs and Illustrations

Authors whose manuscripts include graphs or illustrations should communicate with the editor regarding submission formats and standards.

Abbreviations

Well-known abbreviations (e.g., DNA, EKG) may be used without definition; all others must be defined when first used. Except in First Person Accounts, measurements should be stated first in metric units and, if desired, then using British, American or other local equivalents in parentheses. For example, "The two casinos are 10 km (6 miles) apart." However for First Person Accounts authors may use whatever measurements they prefer. Other units of measurement should be used in accordance with current custom and acceptability. Generic names of drugs are preferred; a proprietary name may be used if its generic equivalent is identified.



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