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Youth Gambling: A Clinical and Research Perspective

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Abstract

This paper provides an overview of the current state of knowledge of youth gambling problems. The goals and contributions of the McGill University Youth Gambling Research & Treatment Clinic are highlighted. The authors integrate their clinical and research program findings within the context of the necessity of identifying risk factors associated with problem gambling amongst adolescents. Specific recommendations are made as well as a call for collaborative effort between the public, industry, legislators, clinicians and researchers to help resolve this growing problem.

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With the proliferation of gambling venues worldwide, there has been a renewed interest in the social, economic and psychological costs associated with problem gamblers. While problem gambling has been primarily thought of as an adult problem, there is a growing body of empirical evidence to support examining problem gambling during adolescence (Derevensky, Gupta & Della Cioppa, 1996; Gupta & Derevensky, 1998a, 1998b; Jacobs, in press; Ladouceur & Dubé, 1994; Ladouceur, Dubé & Bujold, 1994; National Gambling Impact Study Commission, 1999; National Opinion Research Center, 1999; National Research Council, 1999; Stinchfield, in press; Volberg, 1998; Wiebe, 1999; Wynne, Smith & Jacobs, 1996).

There is little doubt that gambling and wagering remains a popular activity amongst both children and adolescents. Research conducted over the past decade suggests that gambling activities remain particularly attractive to today's youth. Moreover, its popularity is on the rise amongst both children and adolescents. Large-scale prevalence studies and reviews all confirm the high prevalence rates of youth gambling. In particular, it is estimated that between 4% and 8% of adolescents presently exhibit a serious gambling problem with another 10% to 14% of adolescents at risk for developing or returning to a serious gambling problem (Shaffer & Hall, 1996).

An alarmingly high percentage of children and adolescents have reported engaging in gambling activities. In one of our recent studies, we found 80.2% of adolescents between the ages of 12 and 17 reported having gambled (defined as wagering money) during the past 12 months, with 35.1% admitting gambling at least once per week. The data further revealed that while 55% of adolescents were casual or recreational gamblers, 13% reported having some gambling related problems and 4% to 6% had a serious problem (Gupta & Derevensky, 1998a).

It is important to note that differences in findings are often related to the sampling procedure employed (e.g., telephone interview versus school survey), the types of instruments used (e.g., SOGS-RA, DSM-IV-J, GA20), cut-off criteria established and access to both legal and illegal gambling opportunities (see Derevensky & Gupta, in press, for a more comprehensive discussion of these issues). While some discrepancies may be attributable to differences between assessment instruments, similar rates of problem/pathological gambling for older adolescents (age 17 - 19) were found comparing different instruments on the same sample (Derevensky & Gupta, in press). Independent of differences, Shaffer and Hall's (1996) Harvard meta-analysis concluded that "...compared to adults, youth have had more exposure to gambling during an age when vulnerability is high and risk-taking is a norm; consequently, these young people have higher rates of disordered gambling than their mature and less vulnerable counterparts."

The growing concern with adolescent gambling was the focus of the North

American Think Tank on Youth Gambling held at Harvard University in April 1995. It was part of the NORC gambling impact and behaviour study (NORC, 1999), and was of particular concern to the members of the Committee on the Social and Economic Impact of Pathological Gambling, U.S. National Research Council (NRC, 1999). This renewed interest in youth gambling has resulted in a significant increase in the number of funding opportunities and empirical research studies concerning youth gambling. More recently, the field has begun to go beyond merely conducting prevalence studies in an attempt to broaden our understanding of youth gambling behaviours and to identify specific characteristics and high-risk indices associated with problem/pathological gambling (Gupta & Derevensky, 1998a; Griffiths & Wood, in press).

Of significant importance is that for most adults, teens, educators and many psychologists, gambling continues to be viewed as an innocuous behaviour with few harmful or negative consequences. Our clinical experience shows that even when adolescents with serious gambling and gambling-related problems enter our treatment program they don't perceive themselves as compulsive or pathological gamblers (Gupta & Derevensky, 1999; Hardoon, Herman, Gupta & Derevensky, 1999). As one adolescent remarked, "everyone seems to think I have a gambling problem, but I don't think I have one." Their perception of a pathological gambler is a classic stereotypical picture, one that bears no resemblance whatsoever to a teenager. As a result, most adolescents often fail to present themselves for treatment.

Characteristically, most individuals perceive the typical problem gambler to be an adult, usually male, who has lost his job and family, who has committed a crime in order to support this behaviour, who has deserted his children, etc. While these gambling related problems are synonymous with adult pathological gambling, the adolescent gambler with serious problems looks somewhat different. Many are still students, who have never been married, who reside with their parents, and who have never held a full-time job or deserted their families. As a result, treatment paradigms must be modified to accommodate their developmental needs, interests, concerns, behaviours and the difficulties they experience (Gupta & Derevensky, 1999; in press).

Problematic gambling among adolescents has shown results in increased delinquency and crime, the disruption of relationships, and impaired academic performance and work activities (Ladouceur, Dubé & Bujold, 1994). While these youth present themselves differently when they compare themselves to adults, they nevertheless have similar characteristics. They repeatedly lie to family and friends, borrow and steal money to support their gambling behaviour, preoccupy themselves with gambling, sacrifice school, parents and friends in order to continue their gambling, and engage in 'chasing' behaviour (Derevensky & Gupta, in press; Fisher, in press; Gupta & Derevensky 1998a; 1998b; Wiebe, Cox & Mehmel, in

press).

Contrary to public opinion, our research and clinical work (Derevensky & Gupta, 1996; 1998; Gupta & Derevensky 1998a; 1998b; 1999) suggests that money is not the predominant reason why children and adolescents gamble. For adolescents with gambling problems, money is used as the vehicle that enables them to continue playing. Most adolescents report that the primary reasons for gambling are for the excitement and enjoyment derived from these activities. Through their gambling activities (video lottery terminals, sports betting, cards, lotteries, bingo or other forms of gambling) adolescents with gambling problems exhibit a number of dissociative behaviours, such as escaping into another world, often with altered egos (Gupta & Derevensky, 1998b). When gambling, adolescents with serious gambling problems report that nothing else matters and that all their problems disappear. They view gambling as a coping mechanism, albeit an ineffective one, for dealing with their daily stresses and feelings of depression (Gupta & Derevensky, 1998b; 1999). For an adolescent with a gambling problem, a good day is walking into a gaming room with \$20, playing all day, and losing all their money. A bad day is when the \$20 only lasts 10 minutes.

While parents and educators remain concerned about student smoking and use of alcohol and drugs, little attention has been focused upon youth gambling behaviour. Both elementary and secondary school students regularly engage in gambling and do so more frequently than any other potentially addictive behaviour (Gupta & Derevensky, 1998a).

Our research program has been designed to identify risk factors associated with youth gambling problems, to examine the antecedents of the problem, and to delineate effective strategies for prevention and the treatment of youth with serious gambling problems. Despite some conflicting findings, there appears to be an overall consensus that:

- a. gambling is more popular amongst males than females (Fisher, 1990; Govoni, Rupcich & Frisch, 1996; Griffiths, 1989; Gupta & Derevensky, 1998a; Ladouceur, Dubé & Bujold, 1994; Stinchfield, Cassuto, Winters & Latimer, 1997; Wynne et al., 1996)
- b. probable pathological gamblers are greater risk-takers (Arnett, 1994; Breen & Zuckerman, 1996; Derevensky & Gupta, 1996; Powell, Hardoon, Derevensky & Gupta 1999; Zuckerman, 1979; 1994; Zuckerman, Eysenck & Eysenck, 1978)
- c. adolescent prevalence rates of pathological gamblers are two to four times that of adults (Gupta & Derevensky, 1998a; Shaffer & Hall, 1996)

- d. adolescent problem/pathological gamblers have lower self-esteem (Gupta & Derevensky, 1998b)
- e. problem gamblers have higher rates of depression (Gupta & Derevensky, 1998a; 1998b; Marget, Gupta & Derevensky, 1999)
- f. youth problem gamblers dissociate more frequently when gambling compared with peers who have few gambling problems (Gupta & Derevensky, 1998b)
- g. adolescents with gambling problems are at heightened risk for suicide ideation and suicide attempts (Gupta & Derevensky, 1998a)
- h. while adolescents with gambling problems report having a support group, old friends are often replaced by gambling associates (Derevensky, 1999)
- i. adolescents remain at increased risk for the development of an addiction or polyaddictions (Gupta & Derevensky, 1998a; 1998b; Kusyszyn, 1972; Lesieur & Klein, 1987; Winters & Anderson, in press).

Personality correlates reveal specific at-risk traits with adolescent pathological gamblers; they are more likely to be excitable, extroverted, anxious, and have lower self-discipline and are less able to conform (Gupta & Derevensky, 1997a; Vitaro, Ferland, Jacques & Ladouceur, 1998). These personality traits have been found to be positively correlated with risk-taking behaviours (Arnett, 1994; Gupta & Derevensky, 1997b; Zuckerman, 1979). Our research and clinical data seem to suggest that these adolescents have poor coping and adaptive skills. They remain unable to successfully cope with the many adversities they experience on a daily basis, which are particularly heightened during adolescence. As such, they use gambling as a form of escape from the realities of daily life (Marget et al., 1999).

Age of onset also appears to be a risk factor. Pathological gamblers reported starting serious gambling at early ages (approximately age 10) (Gupta & Derevensky, 1997b; 1998a; Wynne et al., 1996). Of particular concern is the finding that the time between the onset of their initial gambling and problem/disordered gambling appears to be significantly decreasing. Still further, results indicate that children start gambling with family members, especially parents and grandparents. Moreover, contrary to children's involvement with alcohol, drug and cigarette use, most of them do not feel the need to hide their gambling behaviour from their families (Gupta & Derevensky, 1997b; Ladouceur, Jacques, Ferland & Giroux, 1998). The early "big win" has also been reported to be a factor underlying problem gambling behaviour (Custer, 1982; Griffiths, 1995).

Problematic gambling during adolescence remains a growing social problem and public health concern with serious psychological, sociological, health and economic implications (Korn & Shaffer, in press). Results have shown that pathological gambling among adolescents increases delinquency and crime, antisocial behaviour, disruption of relationships, and negatively affects overall school performance and work activities. Given that there are frequently few observable signs of gambling dependence among children and adolescents, such problems have gone relatively undetected compared to other forms of addiction (e.g., smoking, substance and alcohol abuse). The psychosocial costs to the individual, his or her family and society as a result of problem and pathological gambling are numerous (Lesieur, 1998).

While occasional gambling should not necessarily be considered problematic, the probability of children and adolescents becoming problem or pathological gamblers remains worrisome. That many perceive gambling to be an innocuous behaviour with few negative consequences has been supported by findings that children and adolescents frequently gamble for money with their parents and other family members. Young children form partnerships with their parents in the purchase of lottery tickets and play cards and bingo for money with relatives (Gupta & Derevensky, 1997b).

Even in jurisdictions that prohibit sales of lottery and scratch tickets to youth, there is ample evidence that the enforcement of these laws is minimal. For example, New York State has legislation prohibiting the sale of lottery tickets to any person under the age of 18. Under state law, individuals selling even one lottery ticket to a minor can be charged with a misdemeanor. As part of its commitment to protect minors, the New York State Lottery launched Project 18+ to ensure the vigilant safeguarding of sales to minors. While improvement has occurred, a random spot check in 1998 of 65 retailers indicated a failure rate of 26%. In addition to the heightened vigilance prohibiting retailers from selling lottery tickets to minors and the threat of license revocation (after three offenses), every lottery advertisement (television, radio, print, etc.) explicitly contains a notice "You must be 18 or older to play lottery games." Public service announcements, billboards and stickers clearly visible to consumers also indicate only individuals over 18 can purchase them. In some jurisdictions no laws exist and unenforceable policies are in place. Many of the children in our research report both purchasing and receiving scratch lottery tickets as Christmas stocking stuffers. In yet another research study, we found that by the time children leave elementary school (age 12), less than 10% of children fear getting caught gambling (Gupta & Derevensky, 1999). Similar results would not be found for cigarette smoking, alcohol consumption or drug use.

Today, children and adolescents are educated about the dangers inherent in smoking, alcohol, and drug consumption. Few, however, are informed to

understand the potentially addictive qualities inherent in gambling activities. Many schools and religious groups inadvertently endorse gambling by sponsoring bingo or casino nights for both adults and youth as social events and for fund-raising. Frequently, adolescents only recognize the potential addictive quality of gambling after either they or their friends develop problematic gambling behaviours. The widely held belief that gambling is an innocuous behaviour with few negative consequences has contributed to the lack of public awareness that gambling amongst children and adolescents can lead to serious problems.

Educators have long advocated that the way to succeed in life is through hard work, study and academic achievement. Yet governments throughout the world, via state-supported lotteries, argue that for \$1 you can become an instant millionaire. The fantasy of winning that Harley-Davidson motorcycle, a luxurious automobile, or an exotic vacation may be extremely tempting for many youth. While marketing arms of lottery corporations report not to gear their advertisements toward youth, they nevertheless use sophisticated and alluring advertisements particularly attractive to today's youth. Our data suggests that sports pools, sports lotteries and sports betting are extraordinarily appealing to youth, especially boys, as they believe their knowledge ensures their accurate prediction of the outcome of sports events (Gupta & Derevensky, 1998a). For children and teens, allowance and lunch money are often used to purchase these tickets. Sports wagering (both legal and illegal) continues to be a growing problem on college campuses in the United States and Canada.

State and provincial lottery associations need to adopt responsible advertising programs. Advertisements that dissuade youth from engaging in these activities should form part of their public service announcements, print, and television campaigns. Lottery associations, and state and provincial legislatures should provide severe penalties for retailers that permit underage gambling. A systematic procedure for the enforcement of laws prohibiting youth gambling must be initiated.

We need to change the focus from the "treatment of the dysfunctional" or "disease model" to a prevention model aimed at youth. While little has been done in the field of gambling prevention (there are several in development at the present time), there are ample successful models from the substance abuse literature to emulate (Baer, 1993; Baer, MacLean & Marlatt, 1998; Botvin, 1986; Shuckit, 2000; Winick & Larson, 1996).

Prevention models must incorporate:

1. the need for awareness of the problem
2. activities that increase knowledge about youth gambling problems

3. programs to help modify and change the attitude that gambling is a harmless behaviour
4. the teaching of successful coping and adaptive skills that would prevent the development of problematic gambling
5. the changing of inappropriate cognitions concerning the role of skill and luck, the illusion of control, and the misperception of the independence of events in gambling activities, and
6. the identification, assessment, and referral of students whose gambling behaviour is indicative of being at risk. These programs should be school-based and incorporated at both elementary and secondary school levels.

Gambling venues and outlets continue to grow with government agencies throughout the world sanctioning and encouraging participation despite rising social costs. The reality remains that most individuals gamble responsibly, that gambling has become a mainstream socially accepted form of entertainment, and that governments throughout the world have become dependent upon and addicted to the enormous revenues so generated. While gambling is illegal for minors in many jurisdictions, there is clear evidence that underage youth continue to gamble and many report doing so with family members.

Our research efforts have been focused upon basic issues such as assessing gambling severity; identifying physiological, psychological and socio-emotional mechanisms that underlie excessive gambling behaviour among youth; the efficacy of our treatment model; and the development of effective, empirically validated prevention programs. Why some individuals continue to gamble in spite of repeated losses is a complex problem. How to best educate, prevent and treat these problems has become the focus of our research program.

Little doubt remains that gambling amongst youth is an important area in need of further basic and applied research. It also needs a substantial infusion of funding to support empirically based studies, and the development and implementation of responsible social policy. Clinicians and researchers must advocate for stronger legislation and enforcement of laws prohibiting gambling by underage youth. Only a collaborative effort between the public, industry, legislators, clinicians and researchers will ultimately help resolve this problem.

References

- Arnett, J. (1994). Sensation seeking: A new conceptualization and a new scale. *Personality and Individual Differences, 16* (2), 289–296.
- Baer, J.S. (1993). Etiology and secondary prevention of alcohol problems with young adults. In J. S. Baer, G.A. Marlatt, & R.J. McMahon (Eds.), *Addictive Behaviors Across the Lifespan*. Thousand Oaks, CA: Sage.
- Baer, J.S., MacLean, M.G. & Marlatt, G.A. (1998). Linking etiology and treatment for adolescent substance abuse: Toward a better match. In R. Jessor (Ed.), *New Perspectives on Adolescent Risk Behavior*. Cambridge, UK: Cambridge University Press.
- Botvin, G.J. (1986). Substance abuse prevention research: Recent developments and future directions. *Journal of School Health, 56*, 369–374.
- Breen, R.B. & Zuckerman, M. (1996, September). *Personality and cognitive determinants of gambling participation and perseverance*. Paper presented at the Tenth National Conference on Problem Gambling, Chicago, IL.
- Custer, R.L. (1982). An overview of compulsive gambling. In P. Carone, S. Yoles, S. Keiffer & L. Krinsky (Eds.), *Addictive Disorders Update*. (pp. 107–124). New York: Human Sciences Press.
- Derevensky, J.L. (1999, April). *Prevention of youth gambling problems: Treatment issues*. Paper presented at the Canadian Foundation on Compulsive Gambling Annual Conference, Ottawa, ON.
- Derevensky, J. L. & Gupta, R. (1996, September). *Risk-taking and gambling behavior among adolescents: An empirical examination*. Paper presented at the Tenth National Conference on Problem Gambling, Chicago, IL.
- Derevensky, J.L., & Gupta, R. (1998, June). *Youth gambling: Prevalence, risk factors, clinical issues, and social policy*. Paper presented at the Annual Meeting of the Canadian Psychological Association, Edmonton, AB.
- Derevensky, J.L., & Gupta, R. (in press). Adolescent problem gambling: A comparison of the SOGS-RA, DSM-IV-J, and the G.A. 20 Questions. *Journal of Gambling Studies*.

Derevensky, J.L., Gupta, R. & Della Cioppa, G. (1996). A developmental perspective on gambling behavior in children and adolescents. *Journal of Gambling Studies*, 12, 49–66.

Fisher, S. (1990). *Juvenile gambling: The pull of the fruit machine*. Paper presented at the Eighth International Conference on Risk and Gambling, London, GBR.

Fisher, S. (in press). Developing the DSM-IV-MR-J to identify adolescent problem gambling in non-clinical populations. *Journal of Gambling Studies*.

Govoni, R., Rupcich, N. & Frisch, G.R. (1996). Gambling behavior of adolescent gamblers. *Journal of Gambling Studies*, 12, 305–318.

Griffiths, M.D. (1989). Gambling in children and adolescents. *Journal of Gambling Behavior*, 5, 66–83.

Griffiths, M. (1995). Technological addictions. *Clinical Psychology Forum*, 76, 14–19.

Griffiths, M.D., & Wood, R.T. (in press). Risk factors in adolescence: The case of gambling, video game playing, and the Internet. *Journal of Gambling Studies*.

Gupta, R. & Derevensky, J. (1997a, May). *Personality correlates of gambling behavior amongst adolescents*. Paper presented at the First Annual New York State Conference on Problem Gambling, Albany, NY.

Gupta, R. & Derevensky, J.L. (1997b). Familial and social influences on juvenile gambling. *Journal of Gambling Studies*, 13, 179–192.

Gupta, R. & Derevensky, J.L. (1998a). Adolescent gambling behavior: A prevalence study and examination of the correlates associated with excessive gambling. *Journal of Gambling Studies*, 14, 227–244.

Gupta, R. & Derevensky, J.L. (1998b). An empirical examination of Jacob's General Theory of Addictions: Do adolescent gamblers fit the theory? *Journal of Gambling Studies*, 14, 17–49.

Gupta, R. & Derevensky, J.L. (1999, August). *Treatment programs for adolescent problem gamblers: Some important considerations*. Invited address presented at the annual meeting of the American Psychological Association, Boston.

- Gupta, R. & Derevensky, J.L. (in press). Adolescents with gambling problems: From research to treatment. *Journal of Gambling Studies*.
- Hardoon, K., Herman, J., Gupta, R. & Derevensky, J.L. (1999, August). *Empirical measures vs. perceived gambling severity among adolescents*. Poster presented at the annual meeting of the American Psychological Association conference, Boston.
- Jacobs, D.F. (in press). Juvenile gambling in North America: An analysis of long term trends and future prospects. *Journal of Gambling Studies*.
- Korn, D. & Shaffer, H. (in press). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies*.
- Kusyszyn, I. (1972). The gambling addict vs. the gambling professional. *International Journal of the Addictions*, 7, 387–393.
- Ladouceur, R., & Dubé, D. (1994). Gambling among primary school students in the Quebec metropolitan area. *Journal of Gambling Studies*, 10, 363-370.
- Ladouceur, R. Dubé, D., & Bujold, A. (1994). Prevalence of pathological gamblers and related problems among college students in the Quebec metropolitan area. *Canadian Journal of Psychiatry*, 39, 289–293.
- Ladouceur, R., Jacques, C., Ferland, F. & Giroux, I. (1998). Parents' attitudes and knowledge regarding gambling among youths. *Journal of Gambling Studies*, 14, 83–90.
- Lesieur, H. (1998). Costs and treatment of pathological gambling. *The Annals of the American Academy of Social Science*, 556, 153–171.
- Lesieur, H.R. & Klein, R. (1987). Pathological gambling among high school students. *Addictive Behaviors*, 12, 129–135.
- Marget, N., Gupta, R. & Derevensky, J.L. (1999, August). *The psychosocial factors underlying adolescent problem gambling*. Poster presented at the annual meeting of the American Psychological Association, Boston.
- National Gambling Impact Study Commission. (1999). *National Gambling Impact Study Commission: Final Report*, June. Washington, DC: Author.
- National Opinion Research Center at the University of Chicago (NORC). (1999). Report to the National Gambling Impact Study Commission, February. Chicago:

Author.

National Research Council (NRC). (1999). *Pathological Gambling: A Critical Review*. Washington, DC: National Academy Press.

Powell, J., Hardoon, K., Derevensky, J. & Gupta, R. (1999). Gambling and risk-taking behavior among university students. *Substance Use & Misuse*, 34(8), 1167–1184.

Shaffer, H.J. & Hall, M.N. (1996). Estimating prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. *Journal of Gambling Studies*, 12, 193–214.

Schuckit, M.A. (2000). *Drug and Alcohol Abuse: A Clinical Guide to Diagnosis and Treatment*. (5th ed.) New York: Kluwer Academic/Plenum Publishers.

Stinchfield, R. (in press). Gambling and correlates of gambling among Minnesota public school students. *Journal of Gambling Studies*.

Stinchfield, R., Cassuto, N., Winters, K. & Latimer, W. (1997). Prevalence of gambling among Minnesota public school students in 1992 and 1995. *Journal of Gambling Studies*, 13, 25–48.

Vitaro, F., Ferland, F., Jacques, C. & Ladouceur, R. (1998). Gambling, substance use, and impulsivity during adolescence. *Psychology of Addictive Behaviors*, 12 (3), 185–194.

Volberg, R. (1998). *Gambling and Problem Gambling among Adolescents in New York. Report to the New York Council on Problem Gambling*. Albany, NY.

Wiebe, J. (1999). *Manitoba Youth Gambling Prevalence Study*. Winnipeg, MB: Addictions Foundation of Manitoba.

Wiebe, J., Cox, B. & Mehmel, B. (in press). The South Oaks Gambling Screen – Revised for adolescents (SOGS-RA): Further psychometric findings from a community sample. *Journal of Gambling Studies*.

Winick, C. & Larson, J.J. (1996). Prevention and education, community action programs. In J.H. Lowinson, P. Ruiz, R.B. Millman & J.G. Langrod (Eds.), *Substance Abuse: A Comprehensive Textbook*. (3rd ed.) Baltimore: Williams & Wilkins.

Winters, K.C. & Anderson, N. (in press). Gambling involvement and drug use

among adolescents. *Journal of Gambling Studies*.

Wynne, H.J., Smith, G.J. & Jacobs, D.F. (1996). *Adolescent Gambling and Problem Gambling in Alberta*. Prepared for the Alberta Alcohol and Drug Abuse Commission. Edmonton, AB: Wynne Resources Ltd.

Zuckerman, M. (1979). *Sensation Seeking: Beyond the Optimal Level of Arousal*. Hillsdale, NJ: Lawrence Erlbaum.

Zuckerman, M. (1994). *Behavioral Expressions and Biosocial Bases of Sensation Seeking*. New York: Cambridge University Press.

Zuckerman, M., Eysenck, S. & Eysenck, H.J. (1978). Sensation seeking in England and America: Cross-cultural, age, and sex comparisons. *Journal of Consulting and Clinical Psychology*, 46 (1), 139–149.

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