## Youth Gambling International International Centre for Youth Gambling Problems and High-Risk Behaviors

eu et les comportements à risque chez les jeunes

#### **FEATURE ARTICLE**

## **VIDEO GAME "ADDICTION:" A GROWING CONCERN**

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t has become a familiar scenario to those of us at the Centre; a distraught parent or grandparent calls in desperation, concerned about a teenager whose computer gameplaying is having a negative impact on the rest of his life. We hear about how these teens are neglecting their schoolwork and ignoring their real, flesh-and-blood friends in favour of the virtual avatars they've met online. Some are going without enough sleep or exercise, and have isolated themselves from their families.

Their parents are worried – there is no gambling going on, no drugs or alcohol being consumed, but they feel that their loved ones have lost touch

with real life to the point that critical problems have emerged.

As addiction researchers and treatment providers, we have to tell them that there just is not yet much literature on this topic. Though no specific clinical criteria exist to give credence to the notion that some people, particularly adolescent males, young men and players of Massively Multiplayer Online Role Playing Games (or MMORPGs), are addicted to video games, there is sufficient anecdotal evidence mounting to establish at the very least that this is an area of grave concern to many.

A Harris Interactive poll in January 2008 found 23% of young gamers have felt "addicted to video games", with one-third of male respondents and one in 10 females reporting this situation." A survey reported by the BBC in November of 2006 indicated 12% of polled gamers exhibit addictive behaviours. A grassroots organization called Mothers Against Videogame Addiction and Violence (www.mavav.org) dedicates itself to "educating parents of the world's fastest growing addiction and the most reckless endangerment of children today."

Dr. Richard Wood (2004) argues that though a small percentage of the total number of game players may be said to have problems, there is nothing about the structural characteristics of video game playing itself which could be termed inherently problematic. The inability of some individuals to

control the amount of time they spend playing video games, or to control their impulses to play cannot, he argues elsewhere, be termed addictive in the same sense as gambling, substance abuse or alcoholism.

However, Dr. Wood also notes that contemporary theories of addiction have moved away from a notion of any individual activity as having inherently causative properties, and towards a more nuanced concept of the complex inter-relationship of factors having to do with the individual, their actions and the sociocultural framework in which they live (Larkin et al., 2006). Addictive behaviours appear to be rooted in poor coping abilities in the face of stressors (Gupta & Derevensky, 2001).

Whether or not excessive computer and video game playing actually meets the formal criteria for addiction is somewhat beside the point when it comes to the worried parents seeking help for their kids. It is clear that problems are being experienced at very concrete levels, in a reasonably widespread sector of the population. It is also logical to expect they will only get worse, as the use of computerized gadgets becomes ever quicker and more firmly entrenched in our lives, moving from computers and televisions to tiny, handheld gadgets that make game-playing possible and convenient everywhere, all the time.

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In his book Being Digital (1995), Nicholas Negroponte of the MIT Media Lab made the prophetic observation that the growth of video gaming is just another indication of the way computers are increasingly transforming so many aspects of human communication. "We are not waiting on any invention. It is here. It is now. It is almost genetic in its nature, in that each generation will become more digital than the proceeding one. The control bits of that digital future are more than ever before in the hands of the young. Nothing could make me happier."

Though his breathless optimism seems miscast through the lens of youth addictions, Negroponte underscores the need for a parallel awareness of accompanying social and psychological effects of our digital culture. Educators and mental health professionals need to play a bit of catch-up in terms of prevention of these problems, whether we term them impulse control issues, behavioural problems or full-on addictions. We need to research, implement, practice, and continuously re-evaluate strategies for dealing with the concomitant challenges posed by

mushrooming digital technologies.

Media literacy needs to become a core part of early elementary pedagogy, so that responsible media use and media reading habits are taught alongside the ABCs. These need to be reinforced throughout childhood and adolescence, for both parents and kids, in the same way we reinforce other messages about good

Although studies of video gaming addiction are still in their infancy compared to other areas of adolescent risky behaviours, there is no reason to believe we cannot move quickly to examine the associated problems. Because for many families, the term 'addiction' may be little more than semantics when it comes to their very real concerns for their children.

#### For many families, the term 'addiction' may be little more than semantics when it comes to their very real concerns for their children.

nutrition, sexual health and the abuse of alcohol, tobacco and drugs. Parents, teens and educators need to be taught to recognize the warning signs of excessive use: inability to stop playing, thinking or talking about gaming, isolation from real world contact with friends and family, sliding marks and school absenteeism, neglect of physical health and daily responsibilities. Guidance counsellors, family physicians and mental health professionals must be ready to offer practical advice and support.

#### References:

Gupta, R., & Derevensky, L. (2001). An examination of differential coping styles of adolescents with gambling problems. Report presented to the Ministry of Health and Long-Term Care, Ontario, Canada.

Larkin, M., Wood, R. T. A., & Griffiths, M. D. (2006). Editorial: Towards addiction as relationship. Addiction Research and Theory, 14, 3.

Wood, R. T. A., Griffiths, M. D., Chappell, D., & Davies, M. N. O. (2004a). The structural characteristics of video games: A psycho-structural analysis. *Cyberpsychology and Behavior*, 7, 1–10.

# TEENS AND NICOTINE ADDICTION: A NEUROBIOLOGY PRIMER

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am\* is fourteen years old and inhales for the very first time. Nicotine is distilled from the burning tobacco and carried on the tar droplets that are deposited onto the alveoli in his lungs. The nicotine is then absorbed rapidly into the blood-stream and quickly crosses the blood-brain barrier to affect his developing brain.

The commonly held belief is that nicotine dependence has a slow onset and occurs only after prolonged daily smoking (Abreu-Villaça et al., 2003). However, more recent studies are reporting that significant numbers of adolescent smokers are experiencing symptoms of nicotine addiction prior to the onset of habitual smoking, often within only

a few days of occasional tobacco use, suggesting that the adolescent brain is inherently more vulnerable to nicotine dependence (Abreu-Villaça et al., 2003).

Until late adolescence and early adulthood, the brain is undergoing dynamics changes such as neuroproliferation, synaptic plasticity and pruning. In particular, nicotinic acetylcholine receptors

(nACh), which are located throughout the brain, play a primary role in the final stages of neurological development (Abreu-Villaça et al., 2003).

#### **Rewards of Nicotine**

Animal models have shown that the early adolescent brain is particularly susceptible to the rewarding and stimulating effects of nicotine. When given a choice, early adolescent mice preferred nicotine solution over water, as well as showing preference for a nicotine-paired compartment, whereas adult mice did not (Adriani et al., 2002).

One key element of nicotine addiction is its ability to alter and commandeer the reward circuitry of the brain. Normally activated by naturally occurring neurotransmitters, nicotine short circuits the system by activating the pleasure circuits directly. Nicotine imitates the action of a natural neurotransmitter called acetylcholine (ACh), which plays a role in learning and memory, influences levels of arousal (sympathetic nervous symptom), and binds to a specific type of ACh receptor known as the nicotinic cholinergic (nACh) receptor.

While levels of ACh in the brain are normally controlled by the body, nicotine floods the brain and activates the different nACh receptor subtypes, which in turn release different neurotransmitters, depending on the receptor subtype and their location in the brain. These neurotransmitters include mood modulating serotonin, cognitive enhancing acetylcholine, memory improvement vasopressin, the natural pain killer betaendorphin, as well as norepinephrine and dopamine (Benowitz, NL. 1999).

The nACh receptors with the highest affinity to nicotine are those located within the reward circuitry of the brain and release dopamine, the neurotransmitter associated with strong feelings of pleasure and therefore essential to the reinforcement of motivated behaviour.

#### **Nicotine Addiction**

Nicotine activates the release of greater than normal levels of neurotransmitters in the brain and in an attempt to maintain its natural state, the brain adjusts itself. In the reward pathway, nACh receptors become desensitized and the brain increases the number of nACh receptors, a process called upregulation. Both desensitization and upregulation are hypothesized to play a role in the development of addiction (Abreu-Villaça et al., 2003).

Using rat models, a number of studies have been conducted to compare the effects of acute and chronic nicotine administration at different doses in adolescent versus adult rats. Results of these studies have shown that:

- 1. Adolescents exhibited more upregulation of nACh receptors, as compared to adults.
- 2. Changes in nAch receptors were elicited within a short period of adolescent nicotine exposure (as little as two days to two weeks) and at a dose one-tenth that of typical smokers.
- 3. Continuous exposure to nicotine was not required for many of the changes observed, intermittent dosing sufficed. (Abreu-Villaça et al., 2003).
- 4. Chronic nicotine treatment in adolescents, but not adults, produced persistent changes in nACh receptors in regions associated with reward (Adriani et al., 2002).

These findings and others suggest that adolescent exposure to nicotine may influence the maturation of the reward circuitry producing long term changes in reward threshold thereby increasing the vulnerability of drug dependence in the adolescent as well as other compulsive behaviours.

In support of such a theory recent studies have observed that exposure to low doses of nicotine during early adolescence enhances the reinforcing effects of cocaine (McQuown et al., 2007) and smoking status has also been associated with more serious gambling and psychiatric symptoms (Petry & Oncken, 2002).

When faced with age restrictions on certain 'adult only' activities, Sam and his peers may be correct in arguing that they are capable of better judgement and self-restraint in comparison to the compulsive habits of some adults. However, research suggests that such behaviour is likely the result of neurobiological alterations of the reward circuitry that occurred during their adolescence.

\*Sam is a fictional composite of a typical male adolescent.

#### References:

Abreu-Villaça, Y., Seidler, F.J, Qiao, D., Tate, C.A., Cousins, M.M., Thillai, I., & Slokkin, T.A. (2003). Short-Term Adolescent Nicotine Exposure has Immediate and Persistent Effects on Cholinergic Systems£: Critical Periods, Patterns of Exposure, Dose Thresholds. Neuropyshcopharmacology, 28, 1935-1949.

Adriani, W., Spijker, S., Deroche-Gamonet, Laviola, G, Le Moal, M., Smit, A.B. Piazza, P.V. (2003). Evidence for enhanced neurobehavioural vulnerability to nicotine during periadolescence in rats, Journal of Neuroscience, 23, 4712-4716.

McQuown, S.C., Belluzzi, J.D., & Leslie, F.M. (2007). Low dose nicotine treatment during early adolescence increases subsequent cocaine reward. Neurotoxicology and Teratology, 29, 66-73.

Petry, N.M., & Oncken, C. (2002). Cigarette smoking is associated with increased severity of gambling problems in treatment-seeking gamblers. Addiction, 97, 745-753.

# Largely unregulated Salvia emerges as popular teen drug

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long with federal and provincial police forces, Health Canada is keeping a close watch on a new drug known as Salvia that is becoming popular with adolescents.

Salvia divinorum is a medicinal and psychoactive herb of the sage and mint genus, and is known colloquially as "Magic Mint" or "Diviner's Sage." Originating from Oaxaca, Mexico, it is traditionally used by Mazatec shamans for spiritual healings and ritual divination, and has emerged in Western popular culture consciousness through popularization on the internet.

Salvia is neither addictive nor toxic, and unlike other hallucinogenic drugs such as LSD, PCP, or marijuana, the duration of Salvia's effects are far shorter, usually less than an hour. Nonetheless, its long-term consequences of use are unknown;

consequently, a number of countries including Australia, Italy, Finland, Denmark, and some American states, have pre-emptively banned the drug. For the time being, it is still both legal to sell and consume Salvia in Canada.

Teens typically smoke, chew, or drink the leaves in a brewed tea. When smoked, the effects are felt within 30 seconds and last for about 30 minutes to an hour. When chewed, the effects appear within 5 to 10 minutes. Users experience visionary trances (bright lights, vivid colors, pronounced shapes), a loss of bodily control, slurred speech, and a sense of being transported to a different time and place. The experience is reportedly intense. The Internet is littered with videos of teens depicting themselves high on the herb. A search for Salvia on YouTube turned up more than 3,500 hits.

Salvia is cheap and easy to obtain, whether through health food stores, or online. There are many Internet sites touting and selling this herb, with language that positions its effects as a life-altering substance: "If you never try it, you'll always wonder. . ... what if? .... Salvia is capable of changing you, your family and friends and the world around you." In one case, a site guaranteed "high quality," "discount prices," "great customer service," and "outstanding potency levels." That site, and dozens of others like it, is easily accessible to the very same generation of kids who concerned parents have been encouraging to "just say no" to drugs for years. As with all unregulated Internet sites, there is no quality control or assurance about the substance end users will actually get and eventually ingest.

## Ottawa vs. online gambling

n March 4<sup>th</sup> the federal government announced it was considering new measures to abolish internet gaming sites located on native reserves in Québec, an announcement that has strained relations between Ottawa and Canada's First Nations.

Ottawa has judged the approximately 400 poker and sports betting sites

operating on the Kahnawake reserve near Montréal to be illegal. Previously ignored by both the federal and provincial governments, Ottawa is reconsidering its position.

To assist in its efforts, Ottawa is investigating the possibility of restricting financial institutions from conducting transactions with illegal internet operators. Similar legislation, the *Unlawful Internet Gambling Enforcement Act*, was enacted in the United States in 2006 with some success.

Referring to their status as a sovereign nation, the Mohawks of Kahnawake say these gaming laws are not applicable to them, and cite section 35 of the Canadian Constitution, an addition intended to protect native

culture. The Mohawks claim that gaming has been central to their culture as a means of settling disputes through competition, not violence. Native groups from other provinces have said they plan to follow Kahnawake's lead.



## Ingesting "Energie" - one pill at a time

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eed to relax, feel energized, cure a hangover, or increase your libido? The solution to your woes will soon be available at your local Couche-Tard depanneur for the low price of \$2.99. The chain, in partnership with Astral Media, has developed a line of natural health products bearing the name of the 10-station Energie radio network.

Natural energy capsules sold in packs of two are being strategically placed at the cash registers in all Couche-Tard locations. They contain cinnamon, ginger, and coriander, as well as medicinal ingredients ginkgo Sajo believes that placing the Energie capsules in depanneurs and convenience stores will allow those who don't frequent health food stores easier access to these kinds of products.

While representatives from Astral Media and Couche-Tard say that these products are marketed towards people aged 18 and over, the overall appeal of the product would lead consumers to believe otherwise. The bright colour of the packaging and the names given to the tablets are clear indications that a much younger age group is being targeted. As well, there is absolutely no plan for

free of risk. In his opinion, selling these individual capsules to children and adolescents is equivalent to selling cigarillos by the unit. Ingesting any medication without the supervision of a physician or pharmacist can be dangerous. The effects that these products have when combined with other medicines is currently unknown and could potentially cause unforeseen complications.

According to Canadian law, natural products are considered medication, and it is therefore imperative that all consumers receive ingredient information for any product they consume. Selling natural products in depanneurs is illegal, yet it seems that the federal minister of health has no intention of stopping the sale of these energy capsules.

Despite there being many other products sold at convenience stores that are more dangerous to your health, the fact remains that these products are purveying a false image that pill popping will provide a "quick fix" to whatever ailments might come your way.

## Just because something is natural does not mean it is necessarily free of risk.

balboa, ginseng, and velvet from deer antlers. According to Chantale Sajo, the director of marketing for Couche-Tard in Eastern Canada, the product is targeted at active people who are in need of rapid solutions to help them cope with their daily life, from morning to bedtime.

According to Health Canada, 70% of Canadian consumers currently purchase natural health products.

supervision by those who work in the convenience stores; the capsules will be sold to anyone who requests them, even children.

Though these energy pills claim to be harmless since they are made solely from natural ingredients, Claude Gagnon, the president of the Order of Pharmacists of Quebec, says that just because something is natural does not mean it is necessarily

## Russell Crowe's battle with the pokies

scar-winning actor Russell Crowe is fighting a gladiatorial combat in an attempt to ban slot machines, known as "Pokies," from the rugby club he co-owns with businessman Peter Holmes à Court.

The South Sydney Rabbitohs depends on its poker machines to produce a monthly revenue of \$150 000, about half the club's annual \$3.5 million income.

Although aware of the controversial nature of gambling, the club's chairman believes the club may go broke without the proceeds from the machines. Unless a viable business proposal is introduced to replace the lost revenue, being rid of the pokies may be nothing more than wishful thinking.

Poker machines are a serious business in Australia, a country that is home to more than one fifth of all the poker machines in the world. And more, these machines are responsible for relieving gamblers of up to \$8.8 billion U.S. per year.

Crowe and Holmes à Court's mission is to create a healthy and positive relationship between the rugby club and its community. Unfortunately, the pokies' presence is just not coherent with that objective.

## **Profession: bluffeuse**

Le dépistage de risques : Critique du roman de Mme Mercier

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l'heure où le poker est devenu une activité populaire, Isabelle Mercier, joueuse de poker, a publié un livre intitulé Profession: bluffeuse (Flammarion, 2007). Ce livre décrit le parcours de vie de la joueuse de poker, de sa plus tendre enfance à sa nomination comme porte-parole d'un site de poker sur Internet (Poker Stars.com), et à sa participation à divers tournois de poker internationaux. Ce livre, présenté comme l'autobiographie d'une joueuse «professionnelle» de poker, illustre avec brio la situation actuelle de l'industrie du poker: faire la promotion des jeux d'argent à travers la glorification des joueurs, en faire des symboles de la célébrité, du succès instantané, de la liberté, de la fortune financière et de l'accomplissement de soi.

L'ironie du livre est qu'il traite, bien involontairement, des problèmes fréquemment associés au jeu excessif alors que l'objectif visé est clairement le contraire, soit dissocier le poker des jeux d'argent et de normaliser le choix de carrière des joueurs dits «professionnels ». En effet, à travers le récit de ses expériences depuis l'enfance à l'âge adulte, l'auteure dévoile, malgré elle, un parcours marqué par l'adoption de comportements à risque associés au développement du jeu problématique, notamment la consommation d'alcool et de drogues, et la recherche de sensations

On peut conclure de la lecture du parcours d'Isabelle Mercier que la prise en charge des frais associés à sa participation aux tournois par son principal commanditaire (frais de transport, d'hébergement, inscription aux tournois) lui aura permis de

participer aux tournois internationaux et de tenter, sans jamais toutefois y parvenir, de remporter le fameux bracelet d'or. La liberté, tant vantée par Mme Mercier, celle dépourvue de toute responsabilité familiale ou professionnelle, semble rendue possible, en totalité ou en partie, grâce au généreux financement de ce commanditaire. La promotion de d'une l'image joueuse «professionnelle» dont les gains assurent une existence «dorée» nous laisse perplexe. On est porté à croire que le statut et la réputation de Mme Mercier ne seraient possiblement pas ce qu'ils sont sans cet appui financier. Ceci est apparent dès la première partie du livre où elle mentionne ses nombreuses défaites et ses conditions de vie précaires qui en découlaient.

Le principal message que l'auteure tente de passer est le suivant: le succès au poker dépend principalement de la discipline, de l'entraînement, du caractère et enfin, de la chance. Cette vision du jeu de poker est biaisée puisqu'elle exagère la part d'habiletés impliquées dans le jeu et qu'elle néglige le rôle du hasard. L'auteure va encore plus loin en associant le poker au sport, reprenant les arguments véhiculés largement par la communauté des ioueurs de poker «professionnels» et par les promoteurs de jeu. Un tel message vise à inciter les plus jeunes, et les adultes, à investir temps et argent dans le développement des compétences nécessaires à la réussite au poker pour ultimement détenir le statut convoité de joueur «professionnel».

Enfin, Isabelle Mercier n'hésite pas à faire grand usage des ingrédients traditionnellement utilisés par les médias et l'industrie pour vendre : le sexe, la célébrité, la richesse et la liberté. Les comparaisons entre le jeu de poker et le sexe sont multiples et l'auteure n'hésite pas à dévoiler son goût pour la frivolité. Le texte est d'ailleurs enrichi de diverses allusions à ses nombreuses rencontres et à sa vie luxueuse; ces éclats d'extravagance vont certainement charmer une certaine catégorie de lecteurs.

Le passage final du livre fera certainement sourciller plusieurs intervenants œuvrant auprès des jeunes. Mme Mercier y affirme que le joueur qui connaît les risques associés au poker ne court aucun risque et que celui-ci peut toujours revenir en arrière. En effet, connaître les risques est un pas en avant mais ça n'est en rien un gage de sécurité. Connaître les risques est une chose, savoir les reconnaître en est une autre.



## Sex infections found in one quarter of U.S. teen girls

From the New York Times, March 12, 2008.

he first national study of four common sexually transmitted infections among girls and young women has found that one in four are infected with at least one of the diseases, U.S. federal health officials have reported.

Nearly half the African-Americans in the study of teenagers ages 14 to 19 were infected with at least one of the STDs monitored in the study — human papillomavirus (HPV), chlamydia, genital herpes and trichomoniasis, a common parasite.

This 50% figure compares to the 20% of white teenagers that are

About 19 million new sexually transmitted infections occur each year among all age groups in the United States.

"High STD infection rates among young women, particularly young African-American women, are clear signs that we must continue developing ways to reach those most at risk," said Dr. John M. Douglas Jr., who directs the Center's division of STD prevention.

The president of the Planned Parenthood Federation of America, Cecile Richards, said the new findings "emphasize the need for real comprehensive sex education." diseases center through state and local health departments.

"What we found is alarming," said Dr. Sara Forhan, a researcher at the Center and the lead author of the study.

Dr. Forhan added that the study showed "how fast the STD prevalence appears."

"Far too many young women are at risk for the serious health effects of untreated STDs," she said.

The Center conducts the annual study, which asks a representative sample of the household population a wide range of health questions. The analysis was based on information collected in the 2003-4 survey.

Extrapolating from the findings, Dr. Forhan said 3.2 million teenage women were infected with at least one of the four diseases.

The 838 participants in the study were chosen at random with standard statistical techniques. Of the women asked, 96% agreed to submit vaginal swabs for testing.

Health officials recommend treatment for all sex partners of individuals diagnosed with curable sexually transmitted diseases. One promising approach to reach that goal is for doctors who treat women diagnosed with and STD to provide or prescribe the same treatment for their partners, Dr. Douglas said. The goal is to encourage men, who may not have a physician or who have no symptoms and may be reluctant to seek care, to be treated without a doctor's visit.

# The findings underscored the need to strengthen screening, vaccination and other prevention measures for the diseases.

infected, health officials and researchers said at a news conference at a scientific meeting in Chicago.

The two most common STDs among all the participants tested were HPV, at 18%, and chlamydia, at 4%, according to the analysis, part of the National Health and Nutrition Examination Survey.

Among the infected women, 15% of them had more than one of these infections.

Officials of the Centers for Disease Control and Prevention said the findings underscored the need to strengthen screening, vaccination and other prevention measures for these STDs, which are among the highest public health priorities. "The national policy of promoting abstinence-only programs is a \$1.5 billion failure," Ms. Richards said, "and teenage girls are paying the real price."

Although earlier annual surveys have tested for a single sexually transmitted disease in a specified population, this is the first time the national study has collected data on all the most common sexual infections in adolescent women at the same time. It is also the first time the study measured human papillomavirus.

Dr. Douglas said that because the new survey was based on direct testing, it was more reliable than analyses derived from data that doctors and clinics sent to the

# Texas Hold'Em poker in universities: a preliminary study

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exas Hold'Em is one of the most popular forms of gambling in North America today. An ever-expanding line-up of poker television shows, poker websites and professional high stakes poker matches has made its mark on popular culture.

The surge in the popularity of Texas Hold'Em poker, in particular, has led more and more university students to gamble and spend money on this activity, with both formal and informal poker clubs being formed on campuses. Some universities and colleges even promote their own tournaments. Gambling marketers are targeting university students in order to develop a future customer base, hosting tournaments in which students can win their college tuition, as well as developing websites that have programs in place to recruit poker representatives on campuses.

To date, there has been very little investigation into what motivates individuals to play Texas Hold'Em. A 2007 study by Colin Campbell and Dr. Jason Doiron at the University of Prince Edward Island sought to establish the extent of Texas Hold'Em play among university students, and to determine the motivating factors that are involved in its play. Participants were recruited from each of the on-campus student residence buildings at the University of Prince Edward Island. Of the 395 students who live in residence at UPEI, 98 students completed the survey; 34.7% were male and 65.3% were female.

The survey determined the extent of gambling during the past year, including Texas Hold'Em and other types of gambling. Participants were asked about their motivations for Texas Hold'Em play based on previous findings in a study by Neighbors, Lostutter, Cronce, and Larimer (2002), which examined gambling motivations for university students. Participants were given statements about Texas Hold'Em play and were asked to respond on a seven point Likert scale which ranged from "strongly disagree" to "strongly agree." The motivations participants were asked about included fun, excitement, social interaction, boredom relief, in order to win, competition, risk taking, to practice their skill, stress relief, challenge, something to do while drinking alcohol, and in order to pay expenses.

Hold'Em was a popular activity amongst the male students, with 50% of all males in the study reported playing.

The most strongly endorsed statement among the individuals who play Texas Hold'Em was that individuals play for fun, followed by interaction with friends, because they enjoy the challenge, and to relieve boredom. The least popular reason for playing Texas Hold'Em was to help pay for expenses. In addition to these questions, participants also answered a section in which they were allowed to write their own thoughts about Texas Hold'Em and what they enjoyed about it. It was found that the qualitative data supported the quantitative findings. The top reason stated by individuals for playing Texas Hold'Em was that it was fun. The next most common

## Improving skill was a strong motivator for playing Texas Hold'em.

Despite not being the most common form of gambling (n= 20), the study found that among those individuals who gambled, Texas Hold'Em had the next most money spent on it in a typical month after casino gambling. When considering individuals who have participated in each separate form of gambling, Texas Hold'Em was the type of gambling played most often. Fifty-five percent of individuals who played Texas Hold'Em played it monthly or more often. This was the only form of gambling in which more than half of participants reported playing at least once a month. Texas

reason stated was that it was an opportunity to socialize or spend time with their friends.

It was interesting to note differences in motivation between the UPEI study and previous research on gambling motivation by Neighbors et al. (2002). In the current study, participants rated playing Texas Hold'Em for the challenge it provided as the third most motivating factor, whereas in previous research "challenge" was not a commonly cited reason for gambling. As well, playing to improve skill was a much stronger motivator for playing Texas

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Hold'Em. A reason for this disparity is likely due to the nature of Texas Hold'Em play. Unlike many forms of gambling such as lottery and VLT play, Texas Hold'Em incorporates an element of skill. With a form of gambling that has no skill element associated with it, such as a lottery, individuals will not feel challenged. Gamblers who participate in skill-based forms of gambling are more likely to report motivations that are intrinsic, such as challenges associated with improving their skill as motivating factors (Chantal & Vallerand, 1996). Gamblers who participate in forms of gambling that do not have an element of skill

associated with them are more likely to be motivated by extrinsic rewards, such as winning money (Chantal & Vallerand, 1996).

Future research should aim for larger sample sizes. Although the response rate included roughly 25% of all students who lived in residence at UPEI, the university has a small student population. More participants would have made interpretation of results easier and made it possible to examine pathology in relation to certain aspects of Texas Hold'Em play. Furthermore, this study did not explore many of the motivations in great depth, since most written descriptions of Texas Hold'Em play were brief. Despite these limitations, the study does provide a glimpse into the poker playing habits and motivations of university students and may help to generate research questions for future investigations.

#### References

Chantal, Y., Vallerand, R.J. (1996). Skill versus luck: A motivational analysis of gambling motivation. *Journal of Gambling Studies*, 12, 407-418.

Neighbors, C., Lostutter, T.W., Cronce, J.M., Larimer, M.E., (2002). Exploring College Student Gambling Motivation. *Journal of Gambling Studies*, Vol. 18 (4), 361-370

http://www.usatoday.com/tech/news/2 004\_11\_07\_slots\_x.htm; accessed July 25, 2006.

### CASINO FINED FOR UNDERAGE GAMBLER

ow much would it take before you are caught by the officials at the Borgata Hotel Casino & Spa for underage gambling? Apparently for one 20-year-old it was one year of unrestricted entrance into the casino, \$34,000 in chips and at least \$1,000 worth of complimentary goods and

underage-gambling fine ever on a casino. They have been additionally fined another \$75,000 for allowing six underage patrons to drink at a casino bar. Officials at the Borgata seem to downplay the charges, saying that these have been the first charges of this kind against the casino since it opened in 2003.

### This isn't the first time that an Atlantic City casino has been fined for allowing underage youth to play

services. Despite the New Jersey law that sets the legal age for gambling at 21, this young man was permitted to lead the high life for an entire year without once being asked to show some form of identification.

The Borgata has been fined a whopping \$105,000, the highest

Casino officials believe that they are actively involved in responsible gaming efforts by claiming that all of their staff undergo training to spot underage customers. However, according to Terry Elman, the acting executive director of the non-profit organization Council on Compulsive Gambling of New

Jersey, the Borgata is the least cooperative participant in their responsible-gaming programs, and has yet to join the Council, and does not support the school curriculum developed by the Council.

This isn't the first time that an Atlantic City casino has been fined for allowing underage youth to play. Both the Trump Taj Mahal Casino Resort and the Tropicana were penalized a combined \$50,000 for such violations. Considering the profits made in both of these establishments, such a fine will not put much of a dent in their finances.

And what happened to the young man who was caught? He was stripped of his driver's license for six months and fined a total of \$500.

## Recent publications and presentations

#### REFEREED PUBLICATIONS

Ellenbogen, S., Jacobs, D., Derevensky, J., Gupta, R., & Paskus, T. (in press). Gambling beahviour among college athletes. *Journal of Applied Sports Psychology*.

Magoon, M., Gupta, R., & Derevensky, J. (in press). Gambling among youth in detention centers. *Journal for Juvenile Justice and Detention Services*.

Dickson, L., Derevensky, J., & Gupta, R. (in press). Youth gambling problems: An examination of risk and protective factors. *International Gambling Studies*.

van Hamel, A., Derevensky, J., Dickson, L., & Gupta, R. (2007). Adolescent gambling and coping within a generalized high-risk behaviour framework. *Journal of Gambling Studies*, 23(4), 377-393.

Derevensky, J., Pratt, L., Hardoon, K., & Gupta, R. (2007). The relationship between gambling problems and impulsivity among adolescents: Some preliminary data and thoughts. *Journal of Addiction Medicine*, *I*(3), 165-172.

Derevensky, J., Gupta, R., & Baboushkin, H. (2007). Underlying cognitions in children's gambling behavior: Can they be modified? *International Gambling Studies*, 7(3), 281-298.

Derevensky, J., & Gupta, R. (2007). Internet gambling amongst adolescents: A growing concern. *International Journal of Mental Health and Addictions*, 5(2), 93-101.

Huang, J-H., Jacobs, D., Derevensky, J., Gupta, R., Paskus, T., & Petr, T. (2007). Pathological gambling amongst college athletes. *Journal of American College Health*, 56(2), 93-99.

Lussier, I., Derevensky, J., Gupta, R., Bergevin, T., & Ellenbogen, S. (2007). Youth gambling behaviors: An examination of the role of resilience. *Psychology of Addictive Behaviors*, *21*, 165-173.

Ellenbogen, S., Derevensky, J., & Gupta, R.. (2007). Gender differences among adolescents with G a m b l i n g related problems. *Journal of Gambling Studies*, 23, 133-143.

Huang, J-H., Jacobs, D., Derevensky, J., Gupta, R., & Paskus, T. (2007). Gambling and health risk behaviors among U.S. college student athletes:

Findings from a national study. *Journal of Adolescent Health*, 40(5), 390-397.

#### **BOOK CHAPTERS**

Derevensky, J., (in press). Youth gambling: A Canadian perspective. In J. F. Cosgrave T. R. Klassen (Eds.) *Gambling in 21st century Canada: Citizens, consumers and the state.* Toronto: McGill-Queen's Press.

Derevensky, J. (in press). Gambling. In W. A. Darity (Ed.). *International encyclopedia of the social sciences, 2nd edition.* London, U.K.: Elsevier.

Gupta, R., & Derevensky, J. (in press). Gambling practices among youth: Etiology, prevention and teatment. In C. A. Essau (Ed.), *Adolescent addiction: Epidemiology, assessment and treatment.* London, UK: Elsevier.

Gupta, R., & Derevensky, J. (in press). A treatment approach for adolescents with gambling problems. In M. Zangeneh, A. Blaszczynski & N. Turner (Eds.), *Problem gambling theory, research and treatment*. New York: Springer Books.

Derevensky, J. (in press). Preface. In G. Meyer, M. Griffiths & T. Hayer (Eds.). Problem gambling in Europe – Extent and preventative efforts. London: Springer Books.

Derevensky, J. (2008). Gambling behaviors and adolescent sbstance ause disorders. In Y. Kaminer & O. G.Buckstein (Eds.). Adolescent substance abuse: Psychiatric comorbidity and high risk behaviors. New York: Haworth Press, 399-429.

Martin, I., Gupta, R., & Derevensky, J. (2007). Jeux de hasard et d'argent. In Dubé, G. (Ed.). Enquête québécoise sur le tabagisme chez les élèves du secondaire. Québec: Institut de la statistique du Québec.

Sakloske, D., Schwean, V., Bartell, R., Mureika, J., Andrews, J., Derevensky, J., & Janzen, H. (2007). School psychology in Canada: Past, present, and future perspectives. In T. Fagan & P. Sachs-Wise (Eds.), School psychology: Past, present, and future, 3<sup>rd</sup> ed. Washington: National Association of School Psychology, 297-338.

Derevensky, J., & Gupta, R. (2007). Adolescent gambling: Current knowledge, myths, assessment strategies and public policy implications. In G. Smith, D. Hodgins, & R. Williams (Eds.)

#### RESEARCH REPORTS

Derevensky, J., Sklar, A., Gupta, R., Messerlian, C., Laroche, M., & Mansour, S. (2007). The effects of gambling advertisements on child and adolescent gambling attitudes and behaviors (Les effets de la publicité sur les attitudes et les comportements de jeu des enfants et des adolescents). Fonds de recherché en santé du Québec (FRSQ), Québec, 68 pp.

#### **CURRICULUM DEVELOPMENT**

Turchi, R., & Derevensky, J. (2007). Children and Gambling-Overcoming the Odds. Hot topic course, Pedialink. American Academy of Pediatrics, Washington, D.C. course ID #174.

#### Conferences

Derevensky, J., Sklar, A., & Taylor, A. (2007). Pathological gambling: Impulse control disorder or addiction? Paper presented at the Canadian Society of Addiction Medicine's 19th annual scientific conference, Ottawa, October.

Sklar, A., Derevensky, J., & Taylor, A. (2007). High risk youth and marketing of gambling: Lessons learned from the regulation of advertsing for alcohol and tobacco. Paper presented at the Canadian Society of Addiction Medicine's 19th annual scientific conference, Ottawa, October.

Derevensky, J. (2007). Youth prevention strategies. Paper presented at the Nova Scotia Responsible Gambling Conference, Halifax, October.

#### INVITED PRESENTATIONS & ADDRESSES

Derevensky, J. (2007). Youth gambling: Should we be concerned? Invited keynote address presented at the annual British Columbia Responsible Gambling Forum, Kelowna, British Columbia, November.

Derevensky, J. (2007). Treating youth with gambling problems: From research to practice. Invited address presented at the New York Council on Problem Gambling annual conference, Hauppauge, New York, November.

Derevensky, J. (2007). Youth Internet gambling: Some problems and possible solutions. Invited address presented at the Inaugural International Responsible Gaming Organization conference, Stockholm, Sweden, October.

## News from the Centre ...

#### NCPG Award for Jessica McBride

We are pleased to announce that Jessica McBride, a Ph.D. student affiliated with our Centre, is a winner of the National Council on Problem Gambling's 2008 Outstanding Master's Thesis Award. The National Council on Problem Gambling is based in Washington, D.C. Its mission is to increase public awareness of pathological gambling, ensure the widespread availability of treatment for problem gamblers and their families, and to encourage research and programs for prevention and education. Jessica's Master's Thesis was titled "An Exploratory Analysis of Internet Gambling Among University Students." Jessica will present details of her thesis at the NCPG annual conference in Long Beach, CA in June.

#### New staff

The International Centre for Youth Gambling Problems and High Risk Behaviors welcomes two new research assistants. Margot Nossal completed her bachelor's degree in English Cultural Studies at McGill University this past fall, and has worked as a personal and academic counsellor with adolescent students in the city. Her research interests include the influence of popular culture on youth identity, and high-risk behaviour prevention. She also enjoys riding bicycles, gardening, and playing music.

Julie Desormeau completed her undergraduate degree in psychology at Concordia University and will be pursuing her M.Sc. degree at l'Université de Montréal this fall. Her research interests lie primarily in neuropsychology, particularly with traumatic brain injury. Outside of academia, her interests vary from running to reading and spending time with her friends and family.

### Tiffany presides over St. Patrick's Day parade

Tiffany Doheny, daughter of Centre administrator Arlene Doheny, was crowned Queen of this year's Chateauguay St. Patrick's Day parade, held on Sunday, March 30<sup>th</sup>. She

perfected the royal wave throughout the procession and made us all proud. Way to go, Tiff!

#### Congratulations!

More congratulations are in order for Lei Chen, our technical administrator, for her February marriage to Huan Li, here in Montreal. We wish them many years of happiness and good health.

#### Baby updates

Our co-director, Dr. Jeffrey Derevensky, welcomed the birth of his first granddaughter, Zoe Becca, on April 1<sup>st,</sup> at 7 lbs., 1 oz. Proud parents are Seth and Melanie Derevensky, who live in Florida.

Best wishes also to our former post-doctoral fellow, Dr. Richard Wood and his wife Sabrina on the birth of their son, Oscar Timothy Robert Wood, on March 11<sup>th</sup>, in Montreal; and to former graduate student Laurie Dickson and her husband Ryan, who gave birth to a daughter named Adaiah, on Feb. 29<sup>th</sup> in California.

## **Upcoming Events**

## Western Regional Conference on Problem Gambling Awareness

April 29 - 30, 2008 - Seattle, Washington, USA

### **2008 Massachusetts Conference on Gambling Problems**

May 9, 2008 - Boston, Massachusetts, USA

## Poker, jeu par Internet : questions de santé, de société et de culture

May 9, 2008 - Quebec City, Quebec, Canada

## **2nd Asian Pacific Problem Gambling and Addictions Conference**

May 22 - 24, 2008 - Kowloon, Hong Kong

## 7th European Conference on Gambling Studies and Policy Issues

July 1 - 4, 2008 - Nova Gorica, Slovenia

## YGI Newsletter

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