



Coping with Disaster: The Emerging Impacts of Gambling During a Pandemic

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On January 25, 2020, a Toronto resident returning home from the Chinese city of Wuhan fell ill with what would later be recorded as Canada’s first confirmed case of the novel coronavirus disease 2019 (COVID-19) (Canadian Press 2020). As of December 1, 2020, the country has confirmed over 380,000 cases with the vast majority being in Quebec (n=142,000) and Ontario (n=120,000). Over 12,000 Canadians have died from COVID-19.

In addition to the primary health effects of COVID-19, a costly economic exchange for our necessary public health response has impacted the financial security of millions of Canadians. By the end of March, 2020 emergency lockdown orders had been declared in several provinces, national air-travel restrictions and quarantine orders were put into effect, and the US-Canada border was officially closed to non-essential travellers (Canadian Press 2020). Many businesses and public services were forced to stop or scale back operations, leading to an 11% decline in employment from February to April, 2020 (Statistics Canada 2020). As of December, 2020, over 27 million applications to the Canada Emergency Response Benefit have been processed and more than \$81 billion have been paid out (Government of Canada 2020).

The summary above serves as an important background and context for reflecting on gambling in Canada during the pandemic. Namely it raises several research and policy questions that have serious implications for understanding the secondary health effects of COVID-19 and how gambling harm prevention efforts can pivot to address them.

Ontario’s COVID-19 Gambler Survey

In late April, 2020 the Responsible Gambling Council’s Centre for the Advancement of Best Practices launched the first wave of its COVID-19 gambler survey (n=2,005) (Price 2020). This survey focused on the impact of COVID-19 on gamblers during a provincial lockdown, six weeks after emergency measures were imposed—coinciding with the closure of land-based gambling venues and most professional sporting events. It also examined mental health status, alcohol and cannabis use, online gambling behaviours, and assessed risk for gambling harms. The results of the analyses present a stark picture of comorbidities that appear to be enabled by the isolation and disruptions caused by the pandemic.

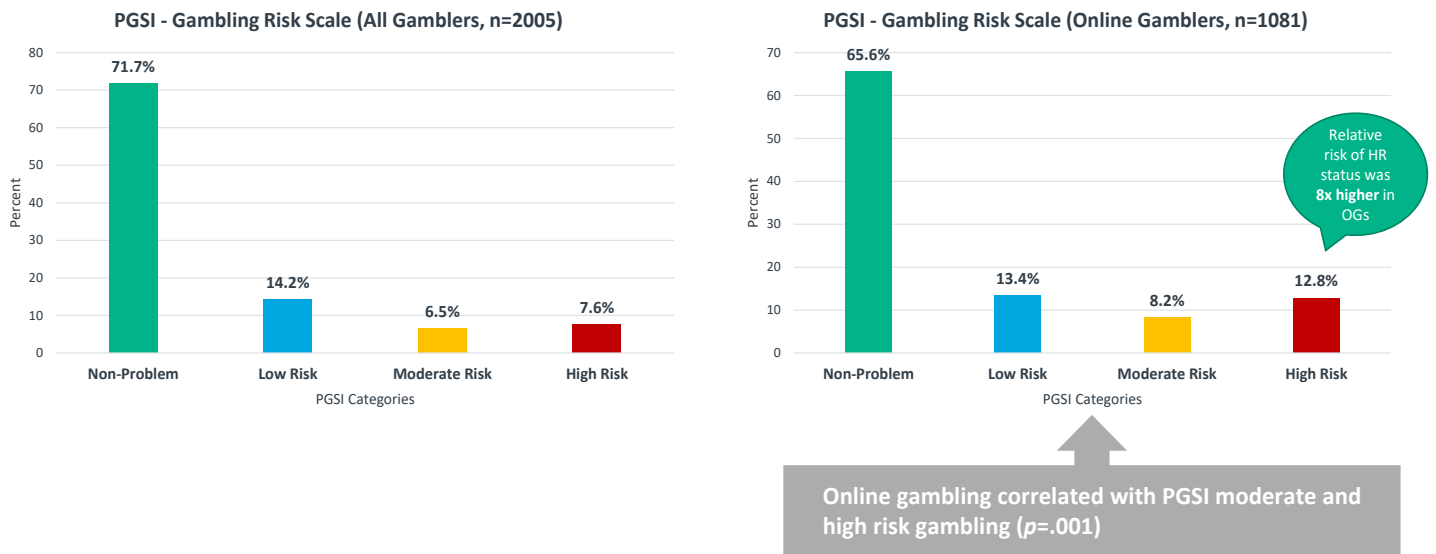
In this Issue

News Briefs	4
The Risks of Gaming in College	5
Centre News	7
Durand Jacobs Award	7
Holiday Campaign	8
Recent Publications & Presentations . . .	9
Upcoming Events	10

Financial security, which is considered a predictive social determinant of health (Weida et al. 2020), has been an area of significant secondary effects on gamblers during the pandemic. For instance, the survey findings show that nearly half (47%) of Ontarian gamblers experienced some form of employment disruption, including 23.4% who either lost their job or had their hours reduced. Among young adults (18-24 years), the impact has been even more severe with 48.5% reporting lost employment or reduced work hours and 65% experiencing negative impacts on household income due to COVID-19. As such, it was not surprising to also note that 50% of respondents, overall, indicated their personal finances had been negatively affected by COVID-19.

Despite these effects on financial security, over half (n=1,081) of respondents reported gambling online in the six weeks since emergency measures were declared. This included a substantial proportion (61%) of gamblers who typically only played at land-based venues before the pandemic. In addition, about one-third of online gamblers stated that the lockdown and emergency measures influenced them to gamble online.

Figure 1: Problem Gambling Severity Index (PGSI) for Total Sample Versus Online Gamblers



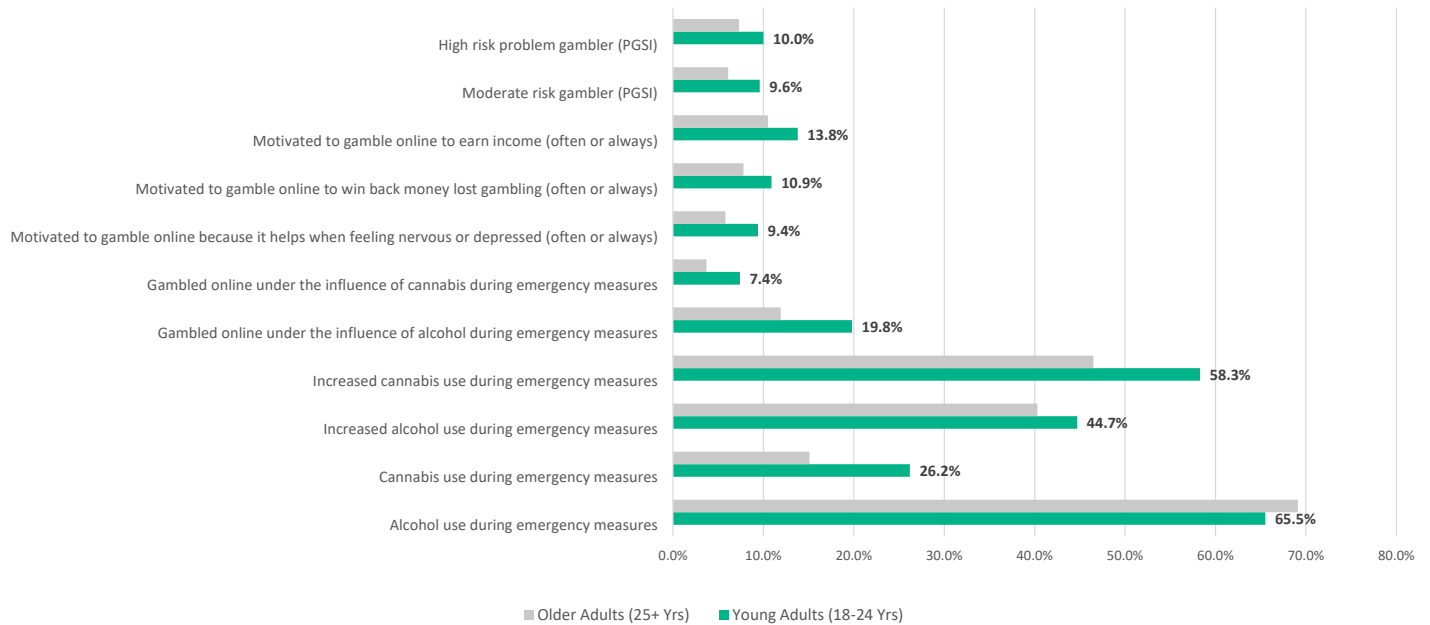
Other COVID-19 studies have reported that mental health concerns, including depression and anxiety, are on the rise (Brooks et al. 2020; Gritsenko et al. 2020). Amongst Ontarian gamblers, approximately 25% of respondents reported moderate or severe anxiety and 12% reported moderately severe or severe depression. Among young adults, specifically, these levels of anxiety and depression were significantly higher (45.4% and 28.8%, respectively). Overall, high levels of anxiety and depression were strongly correlated with both online gambling and problem gambling risk (according to the Problem Gambling Severity Index).

Maladaptive Coping Amongst At-Risk Gamblers

These findings help raise awareness about the ways in which people cope with the significant social and individual stress of living through a pandemic. Specifically, they illustrate how some health behaviours manifest with gambling involvement during this historically significant time. For instance, our findings show that substance use, namely alcohol and cannabis, have a possible part to play in maladaptive coping behaviours, which may also encompass comorbid health risks. On the surface, study results indicated nearly 70% of respondents had used alcohol in the six weeks since a state of emergency was declared; the incidence of cannabis use was a much lower 16%. Most notable was that, overall, alcohol and cannabis use during this period of time had increased 40.7% and 48.7%, respectively, compared to the time before the government’s declaration. Amongst those who chose to gamble online while under the influence of alcohol or cannabis (17%), strong correlations ($p<.001$) were noted with problem gambling, moderate and severe levels of anxiety, and moderately severe and severe levels of depression.

Young adult gamblers, in particular, appeared to be especially vulnerable to risky coping behaviours in addition to more severe outcomes related to financial security and mental health status. With the exception of alcohol use during the lockdown, young adults were characterized by much higher incidence of cannabis use, increased alcohol and cannabis use during lockdown, gambling online under the influence of alcohol or cannabis, endorsement of risky gambling motives, and elevated rates of moderate and high risk gambling compared to older adults (see Figure 2).

Figure 2: Indicators of Behavioural Health Risk Among Young Adults (n=229) and Older Adults (n=1776)



Endorsement of risky gambling motives provided the strongest indicators of gambling risk, comorbid mental health concerns and substance use, and financial insecurity. At a glance, respondents who endorsed gambling because it helps when feeling nervous or depressed, to win back money lost gambling, and to earn income all had significantly increased odds for being assessed as problem gamblers. These individuals also featured a strong correlation with higher levels of anxiety and depression as well as negative financial impacts due to COVID-19, such as losing employment, reduced work hours and decreased household income.

Looking Forward

The findings of this research provide an important cross-sectional look at gambling during the pandemic and in the midst of a provincial lockdown. They provide an emerging picture of social determinants of health relating to financial security, mental health status, substance use, and gambling that is characterized in some cases by complex comorbidities. Health promotion and harm prevention efforts should take note of these relationships, particularly in the online gambling context, to address health outcomes holistically.

As Canadian jurisdictions, such as Ontario, move to reopen land-based gambling venues, several key questions present themselves. For instance, how do gamblers feel about returning to land-based venues and what public health precautions do they expect? How has their financial security and mental health status changed or been maintained since the lockdown? Is online gambling continuing to expand? All of these questions, and more, will be carefully examined in the second wave of this survey research, which has recently completed data collection. Notably, this second wave includes a longitudinal sample of over 1,000 respondents from the first wave, who will help describe self-reported changes over time. The total survey sample of over 2,000 respondents will also provide robust findings in additional areas, including similarities and differences in ethnicity, other online behaviours (e.g., social media, online shopping, video games, etc.), domestic living arrangements, perceptions and feelings about returning to land-based play, and more.

For more information on how this research is progressing and informing policy and program development, please visit www.responsiblegambling.org.

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News Briefs

Congratulations

Congratulations to Dr. Marc Potenza on being named Director of the Division on Addictions Research in the Yale Department of Psychiatry. Dr. Potenza, a renowned addictions researcher, is widely regarded as being amongst the most important contributors to the study of gambling and gaming disorders, compulsive sexual behavior disorders, and other addictive behaviors.

UK Bans Credit Cards to Pay for Gambling

Since April 2020, UK gamblers can no longer use credit cards as payment for bets. This ban also extends to credit card gambling through e-wallets. This new measure is seen as a welcome consumer protection during a period when there has been an increase in the use of some online gambling products such as online slots and virtual sports. Neil McArthur, chief executive of the Gambling Commission, said "It's a ban which ultimately reduces the risks of harm to consumers from gambling with money they do not have."

UK to Increase Age for Lottery Play

UK lawmakers have announced their intention to increase the minimum legal age for National Lottery play from 16 to 18. There have been calls for the government to close this so-called "lottery loophole," which allows those who are legally underage to buy scratch-off tickets and play digital instant-win style games. In most countries around the world, the minimum age to gamble is at least 18. According to the UK paper, *The Times*, the 16-17 age group spent £47 million (\$60 million) on National Lottery games in 2017-18. There is also a pending agreement to raise the minimum age on Fruit Machines.

Electronic Arts (EA) Introduces New Monitoring Tool in FIFA 21

In an effort to enhance player protection, Electronic Arts (EA) will introduce a new tool, FIFA Playtime, that will allow the monitoring of different aspects of game play. Players themselves, or parents of players, can set limits on how much premium currency can be purchased, how many matches can be played and this tool can even be used to restrict the number of card packs that can be opened in FIFA Ultimate Team, the game's very popular card-collection game. According to the EA website, "The integration of both tracking and limits in FIFA Playtime is grounded in research that shows that having access to more information helps players feel comfortable with how they play."

Princeton Grads Win \$6 Million on the Lottery

A group of at least four Princeton grads have won millions of dollars by purchasing thousands of lottery scratch tickets in multiple U.S. states. Over the last 18 months, this group bulk purchased lottery tickets from gas stations and convenience stores in Indiana, Missouri, Washington and the District of Columbia. Pundits have theorized that this group may have been researching public records on lottery winnings, ticket sales and unclaimed prizes to determine when and how many tickets to purchase. It is speculated that they may have spent around \$2 million to acquire the tickets. While the success of these Princeton grads is being questioned, there is no indication that their activities have been unlawful or illegal. It may pay to be an Ivy school grad!

The Risks of Gaming in College: Are College Students at Increased Risk for Problems?

Cam Adair, Game Quitters

Every year millions of students arrive at university with the dream of obtaining a degree and securing a future for themselves. While most students graduate and progress into successful careers, others do not, with up to 40% of undergraduate students dropping out (Bustamante, 2019). Dropout occurs for a variety of reasons including not being ready for college, poor effort, financial issues, lack of motivation, and poor relationships with professors (Movahedzadeh et al., 2014), but the modern student has another phenomenon to navigate - video games.

Most students today are gamers, with 92% playing regularly and 35% playing most days (YGAM, 2019). 75% play more than 20 hours per week and over 40% report playing more than 30 hours per week (Reed et al., 2018). Video game overuse habits have been shown to be a high-risk activity that can negatively impact academic success and 48% of student gamers agree that gaming keeps them from studying (Pew, 2003).

Jake Uskoski was one of these students. As a Canadian high school student, Jake excelled at school without much effort. He didn't play video games excessively, enjoyed playing sports and had a wide circle of friends. That was until he went off to school at the University of Guelph and away from his family in Toronto. Faced with the anxiety of a first-year college student, Jake turned to gaming to cope with school and personal issues. Without his parents monitoring his play, Jake began playing all night long and missing class. He began to lose weight and stopped showering as often. He hit rock bottom during his second year when he missed the registration cutoff date and was on the verge of being evicted from his residence hall because he was no longer technically a student. That is when he sent an email to his mother asking for help. When she arrived at his dorm, she said he was "pale, shaking and smelled foul."

He moved back home to begin his video game recovery and with the support of his family and a counsellor he turned his life around. Today, he hasn't played a game for two years, instead spending his time with new activities and a job he obtained with a software company. He has also graduated from college.

Jake isn't alone and his story is one I hear regularly from young people who reach out for help on GameQuitters.com – a peer support community for people who struggle with gaming issues. Over 50,000 people search for help on the website every month and the typical person seeking help is a male college student between 18 and 24 years old. The cycle works like this: roughly 9% of students develop problematic gaming in high school (Gentile, 2011) but are often able to cope with gaming and academic requirements. Classwork in high school is typically easier than college work, living at home enables more parental supervision, and gamers have been proven to perform significantly better in terms of reasoning and short-term memory (McDermott, 2014) which helps them perform well academically.

The transition to college is a different story. College students usually have less parental supervision, more independence, increased academic responsibilities, and a change in social environment which all lead to increased levels of stress. The student gamer often turns to video games as a way to cope. Gaming becomes an escape. Instead of doing their classwork, they game. They get further behind in class causing more stress and they escape further into games to cope with their anxiety. This creates a cycle of academic self-destruction. Ville, a college gamer shared with me that, "I'm currently taking a Bachelor's degree in Software Engineering, and during this semester my gaming habit really screwed me over. I've stopped reading and attending classes, meaning that in some of the courses I'm now so far behind, that it seems hopeless to catch up again." Another student named Anana shared, "I quit university because I didn't study, attend classes, or attend exams. Instead I sat in front of my computer the entire day."

To make matters worse, 2 in 3 students say they tend to keep issues or problems to themselves (YGAM, 2019) with those aged 18-24 showing the lowest rate of help-seeking (SAMHSA, 2006). Stigma—the fear of being judged, dismissed, or misunderstood—is the main reason for not seeking aid (Driver, 2014). And even if a student wanted to seek help, they may not know where to turn as reported by CAMH (2017). Student affairs departments are overwhelmed with many issues in college and it is easy to miss the potential negative consequence gaming has on student retention and success, especially during a time of increased political turmoil and a global pandemic that has shifted most classes online. Further complicating the relationship, colleges are rapidly adding esports programs and gaming-related scholarships.

To support students, university and college campuses should consider:

1. Increasing the knowledge about student support services and how to access these services. This could include campaigns aimed at reaching students who play video games and/or who are being negatively impacted by video games.
2. Raising awareness of healthy gaming, including the risks associated with excessive gaming and how to address co-morbid mental health issues. Practically, encourage self-monitoring, physical activity, engagement in alternative activities and device-free environments.
3. Providing training on digital media literacy to students, especially those in their first-year, and also for faculty and staff.
4. Providing support for research on the impact of video games on students, including attitudes, related behaviors and challenges.

College is a life-changing experience for students all over the world. Today, increasingly these students play video games whether on a computer, console or smartphone. In order to empower students to obtain their degree and become impactful members of society, we must become better equipped to navigate the unique challenges student gamers face. As a student named Koll shared, "Swapping 6 hours a day playing World of Warcraft for studying can only be positive."

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Centre News

Raschkowan Webinar Series

The International Centre for Youth Gambling in collaboration with the National Council on Problem Gambling (NCPG) have been presenting the Raschkowan Lecture series titled “Gambling During a Digital Revolution.” This four-webinar series examines issues with internationally recognized gambling researchers. There are two more webinars scheduled for 2021. The webinars are FREE to attend but registration is required. Presenters include(d):

- August 21, 2020 - Dr. Marc Potenza - Gambling and Gaming Disorders: A 2020 View of Clinical Considerations
- October 13, 2020 - Dr. Mark Griffiths - Sports Betting, In-Play Sports Betting, and Sports Betting Advertising: A Personal Overview
- February 2, 2021 - Dr. Sally Gainsbury - Policy Considerations for Digital Payment Systems in Gambling Venues
- March 9, 2021 - Dr. David Hodgins - Brief Motivational Telehealth and Online Treatments. Helping Gamblers Change.

For more information and to register, visit www.ncpgambling.org/raschkowan.

Congratulations to Dr. Loredana Marchica

It has been an exciting year for Loredana Marchica of our lab. In the summer, she successfully defended her thesis and earned her Ph.D., started a position as a clinical psychologist at the Montreal Childrens’ Hospital, and got engaged. Congratulations! All of your very hard work has paid off.

Welcome to Anthony Sciola

Our lab welcomes Anthony Sciola, B.A., a Master’s student in the School/Applied Child Psychology Program at McGill University. He completed his B.A. in Psychology in 2020 at Long Island University. Anthony previously served as a research assistant at LIU Brooklyn, focusing on how people’s ideologies are related to their political orientation, attitudes, and social policy preferences. In addition, Anthony worked at a social skills center in New York City that strived to help children develop stronger social and academic skills. His current research interests include the factors influencing high risk and gambling behaviours among student athletes. Email: anthony.sciola@mail.mcgill.ca.

Durand Jacobs Award

The recipient of the 2020 Durand Jacobs Award is Gillian Russell for her manuscript titled “Implicit Memory Associations and Video Gaming.” The Durand Jacobs Award recognizes outstanding work related to the psychology of addictive behaviors, and is dedicated to the late Dr. Durand Jacobs’ lifelong efforts to help mentor students.



Gillian Russell holds a BSc in Psychology from the University of British Columbia Okanagan, an MSc in Psychology from the University of Lethbridge, and is currently in the final year of her Ph.D. in Evolution and Behaviour at the University of Lethbridge. Her dissertation research is examining the longitudinal influence of implicit memory associations on gambling behaviours in both adolescent and adult populations. She is currently the principal investigator on a major research grant from the Alberta Gambling Research Institute (AGRI) that she received for her ongoing research evaluating the effectiveness of comprehensive school-based prevention programming for gambling, alcohol and cannabis use utilizing both implicit and explicit cognitive methods. She has several first-authored publications and has presented her research at numerous national and international research conferences.

Congratulations Gillian!

Abstract

Background and Objectives: The aim of this study was to develop measures to assess implicit memory associations for video gaming and to examine the relationship between implicit memory associations, video gaming involvement, and problem video gaming. **Methods:** A survey of online panelists from across Canada was conducted that included 166 problem video gamers who were recruited for participation in a larger study examining the relationship between gambling, video gaming, and collectible card play. Memory associations were assessed using a 10-item measures of word associations and behaviour associations. Video gaming involvement was assessed via self-report of time and frequency of play, and problem video gaming was assessed using the Behavioral Addiction Measure for Video Gaming (BAM-VG). **Results:** Significant Kendall tau-b correlations ranging from .297 to .405 were found between measures of memory associations and both level of video gaming involvement and problem video gaming. **Conclusions:** There is a robust relationship between memory associations for video gaming with level of video gaming involvement and problem video gaming. The results suggest that implicit associations may have utility in the assessment of problem video gaming.

The 2020 Holiday Campaign



Each year, McGill University's International Centre for Youth Gambling Problems and the National Council on Problem Gambling (NCPG) ask lottery corporations to support our responsible gambling campaign and help raise awareness regarding the risks of underage lottery play during the holiday season.

In 2020, once again, 100% of Canadian and U.S. lotteries, along with numerous international lotteries and non-lottery organizations, have joined the Campaign to promote responsible gambling. The Campaign is also endorsed by the North American Association of State and Provincial Lotteries (NASPL).

The 2020 Responsible Gambling Holiday Lottery Campaign participants include:

Lottery Level 3: Alberta Gaming, Liquor and Cannabis, British Columbia Lottery Corporation, Connecticut Lottery Corporation, DC Lottery, Hoosier Lottery, Illinois Lottery, Mississippi Lottery Corporation, New York State Gaming Commission – Division of the Lottery, Oregon State Lottery, Virginia Lottery.

Lottery Level 2: Arkansas Scholarship Lottery, Colorado Lottery, Florida Lottery, Georgia Lottery Corporation, Hrvatska Lutrija (Croatia), Iowa Lottery Authority, Kentucky Lottery Corporation, Lotto New Zealand, Massachusetts State Lottery, Minnesota Lottery, Missouri Lottery, North Carolina Education Lottery, Ohio Lottery Commission, Österreichische Lotterien GmbH (Austria), Pennsylvania Lottery, Rhode Island Lottery, South Dakota Lottery, Tennessee Education Lottery Corporation, Texas Lottery Commission.

Lottery Level 1: Arizona Lottery, Atlantic Lottery Corporation, California State Lottery, Delaware Lottery, Idaho Lottery, Kansas Lottery, Loto-Québec, Louisiana Lottery Corporation, Manitoba Liquor & Lotteries, Maryland Lottery and Gaming Control Agency, Michigan Bureau of State Lottery, Montana Lottery, Nebraska Lottery, New Hampshire Lottery, New Jersey Lottery, New Mexico Lottery, Nova Scotia Gaming Corporation, Oklahoma Lottery, Ontario Lottery and Gaming, Saskatchewan Lotteries, Sazka Czech Republic, South Carolina Education Lottery, Vermont Lottery, Washington's Lottery, West Virginia Lottery, Wisconsin Lottery, Wyoming Lottery Corporation.

Non-Lottery Participants: AdCare Educational Institute of Maine, Armstrong Indiana Clarion Drug & Alcohol Commission, Association of Problem Gambling Service Administrators, Big Village, CCDAEC, Council on Chemical Abuse, Employee & Family Resources, Holcomb Behavioral Health Systems, Illinois Council on Problem Gambling, Indiana Council on Problem Gambling, Jackpocket, Maine Council on Problem Gambling, Maryland Center of Excellence on Problem Gambling, Maryland Council on Problem Gambling, Massachusetts Council on Gaming and Health, Nebraska Council on Problem Gambling, Northstar Problem Gambling Alliance, Ohio Department of Mental Health and Addictions, Oklahoma Association on Problem and Compulsive Gambling, Problem Gambling Services, Rhode Island Council on Problem Gambling, Scientific Games, South Suburban Council, Substance Abuse Services Center, Treatment Alternatives for Safe Communities (TASC), The Florida Council on Compulsive Gambling, Umatilla County Public Health.



Recent Publications and Presentations

REFEREED PUBLICATIONS

Richard, J., Warith, H., Ivoska, W. & Derevensky, J. (in press). Vaping and smoking behaviors among adolescents: Associations with demographic factors and mental health symptoms. *Journal of Concurrent Disorders*.

Derevensky, J & Richard, J. (2020). The future of gaming disorder research and player protection: What role should the video gaming industry and researchers play? A response to commentary by Griffiths and Pontes (2019). *International Journal of Mental Health and Addiction*, 18(3), 800-805.

Fletcher, E., Richard, J., Derevensky, J., Ivoska, W., & Temcheff, C. (2020). Nonmedical benzodiazepine use in adolescents: Mediation effects of internalizing symptoms and behavioural problems. *International Journal of Mental Health and Addiction*.

Grande-Gosende, A., Richard, J., Ivoska, W. & Derevensky, J. (2020). The relationship between bullying victimization and gambling problems among adolescents. *International Gambling Studies*, 20, 80-96.

Marchica, L., Keough, M., Montreuil, T. & Derevensky, J. (2020). Emotion regulation interacts with gambling motives to predict problem gambling among emerging adults. *Addictive Behaviors*, 106, 1-9.

Marchica, L., Mills, D., Keough, M. & Derevensky, J. (2020). Exploring differences among video gamers with and without depression: Contrasting emotion regulation and mindfulness. *Cyberpsychology, Behavior and Social Networking*, 23, 119-125.

Marchica, L., Richard, J., Ivoska, W. & Derevensky, J. (2020). Adverse childhood experiences and addictive behaviors: The moderating effect of mental health symptoms. *International Journal of Mental Health and Addiction*.

Mills, D., Marchica, L., Keough, M. & Derevensky, J. (2020). Exploring differences in substance use among emerging adults at risk for problem gambling and/or problem video gaming. *International Gambling Studies*.

Richard, J., Fletcher, E., Boutin, S., Derevensky, J. & Temcheff, C. (2020). Conduct problems and depressive symptoms in association with problem gambling and gaming: A systematic review. *Journal of Behavioral Addictions*, 1-33.

Richard, J., Grande-Gosende, A, Temcheff, C., Ivoska, W. & Derevensky, J. (2020). Externalizing problems and mental health symptoms mediate the relationship between bullying victimization and addictive behaviors. *International Journal of Mental Health and Addiction*, 18, 1081-1096.

REFEREED PUBLICATIONS (CONT'D)

Richard, J., Marchica, L., Ivoska, W. & Derevensky, J. (2020). Sports-related gambling among U.S. Adolescents: A comparison of 2018 and 2020 survey data. *Annals of Sports Medicine and Research*, 7(3), 1152-7.

Richard, J., Temcheff, C. & Derevensky, J. (2020). Gaming disorder across the lifespan: A scoping review of longitudinal studies. *Current Addiction Report*, 7, 561-587

BOOK CHAPTERS

Derevensky, J. & Gilbeau, L. (in press). Understanding youth gambling problems: Prevention and treatment strategies. In J. Grant & M. Potenza (Eds.), *Pathological gambling: A clinical guide to treatment*, Second edition. Washington, DC: American Psychiatric Association publishing.

Marchica, L. & Derevensky, J. (in press). Prevention of impulse control disorders. In J. Grant & M. Potenza (Eds.). *Oxford handbook of impulse control disorders*. New York: Oxford University Press.

Marchica, L., Temcheff, C., Bowden-Jones, H. & Derevensky, J. (in press). Addiction, an overview. In A.C. Michalos (Ed.). *Encyclopedia of quality of life research*. Revised. Netherlands: Springer Dordrecht Publishing.

Derevensky, J. (2020). The prevention and treatment of gambling disorders: Some art, some science. In S. Sussman (Ed.). *Cambridge handbook of substance and behavioral addictions*. New York: Cambridge University Press.

Farhat, L. C., Derevensky, J. & Potenza, M. (2020). Behavioral addictions in youth: Gambling and gaming disorders. In Y. Kaminer and K. Winters (Eds.). *Youth substance abuse and co-occurring disorders*. Washington, D.C.: American Psychiatric Press.

CONFERENCE PRESENTATIONS

Richard, J., Temcheff, C. & Derevensky, J. (2020). Comorbidity of conduct problems, depressive symptoms and behavioral addictions in adolescents and young adults: A systematic review. Poster presented at the Canadian Psychological Association annual conference, Montreal, June.

Marchica, L., Mills, D., Keough, M. & Derevensky, J. (2020). Exploring differences among video gamers with and without depression. Poster presented at the Canadian Psychological Association annual conference, Montreal, June. (Presented remotely)

CONFERENCE PRESENTATIONS (CONT'D)

Marchica, L., Ivoska, W. & Derevensky, J. (2020). The protective role of friend disapproval on the relationship between aggression and risky behaviors. Paper presented at the 2020 Society for Research on Adolescents biennial meeting, San Diego, March. (Presented remotely)

INVITED ADDRESSES

Derevensky, J. (2020). Youth gaming: How much is too much? Invited presentation to McGill's Department of Educational and Counselling Psychology's annual Effective Parenting series, Montreal, November.

Derevensky, J. (2020). Excessive gaming among children and adolescents: Do we need to be concerned? Invited plenary presentation to the 40th Annual Canadian Academy of Child and Adolescent Psychiatry (CACAP) Conference, Calgary, September. (Presented remotely)

Upcoming Events

- **Raschkowan Webinar Series**
February 2, 2021 - Dr. Sally Gainsbury
March 9, 2021 - Dr. David Hodgins
Visit ncpgambling.org/raschkowan for details
- **IMGL Spring Conference**
March 10-12, 2021
Athens, Greece
- **Alberta Gambling Research Institute's 20th Annual Conference**
April 27-29, 2021
Virtual Event
- **International Gambling Conference 2021**
June 30-July 2, 2021
Auckland, New Zealand
- **13th European Conference on Gambling Studies and Policy Issues**
September 7-10, 2021
Oslo, Norway



YGI Newsletter

A Publication by the International Centre for Youth Gambling Problems and High-Risk Behaviors

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Design: Ozalid Graphik

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