

AGRI Conference Poster Presentations

Friday, June 24th; 2:40 pm - 4:30 pm

Kinnear Centre Room 205

Posters available for viewing until June 25th, 3:00pm

Listed by position, presenter (in bold)

<p>1</p> <p>Reviewing the Unique Factors and Characteristics of Forensic Populations to Optimize Problem Gambling Prevention Program Efficacy</p> <p>Jami Albright-Tolman</p> <p>University of Lethbridge</p> <p>jami.albrighttolman@uleth.ca</p>	<p>Problem gambling is a pervasive issue in our society that occurs more frequently in forensic populations (Turner et al., 2017). Despite this, there is no existing review on how to optimize gambling interventions for forensic populations. In this poster, I will present the results of a literature review on demographic and subculture factors that interfere with gambling program efficacy among forensic populations consisting of male offenders. To optimize program efficacy for male forensic populations, we must consider the forensic context (e.g., prison, parole, probation). This context includes demographic factors like low SES, belief in gambling fallacies, common comorbidities (e.g., depression and ADHD), and limited life skills (Anderson, 1999; Riciardelli, 2014). We must also consider the offender subculture context. Subcultures are specialized cultures embedded within a larger culture (Scott, 2014) and the male offender subculture is a hypermasculine counterculture that prioritizes respect and status (Mitchell et al., 2017). Subcultural factors that impact gambling intervention efficacy include gambling prominence, the increased status gambling brings, and the unique characteristics of gambling within the subculture (Beauregard et al., 2013; Turner et al., 2017). I provide recommendations for addressing these unique demographic and subcultural factors to improve the efficacy of gambling interventions in male forensic populations.</p>
<p>2</p> <p>Problem gambling risk factors in the general adult population: a meta-analysis</p> <p>Youssef Allami^{1,2} David C Hodgins³ Matthew Young^{4,5} Natacha Brunelle⁶ Shawn Currie³ Magali Dufour⁷ Marie-Claire Flores-Pajot⁴ Louise Nadeau⁸</p> <p>¹ ALLY Addiction Consulting, Montréal, QC ² CIUSSS du Centre-Sud-de-l'Île-de-Montréal ³ University of Calgary ⁴ Canadian Centre on Substance Use and Addiction ⁵ Carleton University ⁶ Université du Québec à Trois-Rivières ⁷ Université du Québec à Montréal ⁸ Université de Montréal</p> <p>youssef.allami@umontreal.ca</p>	<p>Background and aims: Few meta-analyses have been conducted to pool the most constant risk factors for problem gambling. The present meta-analysis summarizes effect sizes of the most frequently assessed problem gambling risk factors, ranks them according to effect size strength, and identifies any differences in effects across genders.</p> <p>Method: A random-effects meta-analysis was conducted on jurisdiction-wide gambling prevalence surveys on the general adult population published until March 2019. One hundred and four studies were eligible for meta-analysis. The number of participants varied depending on the risk factor analyzed, and ranged from 5327 to 273 946 (52% female). Weighted mean odds ratios were calculated for socio-demographic, psychosocial, gambling activity and substance use risk factors, allowing them to be ranked from largest to smallest regarding their association with problem gambling.</p> <p>Results: The highest odds ratio (OR) was for internet gambling [OR = 7.59, 95% confidence interval (CI) = 5.24, 10.99, p < .000] and the lowest was for employment status (OR = 1.03, 95% CI = 0.87, 1.22, p = .718). The largest effect sizes were generally in the gambling activity category and the smallest were in the socio-demographic category. No differences were found across genders for age-associated risk.</p> <p>Conclusions: A meta-analysis of 104 studies of gambling prevalence indicated that the most frequently assessed problem gambling risk factors with the highest effect sizes are associated with continuous-play format gambling products.</p>

3

Young Adults' Motives for Investing in and Abstaining from Cryptocurrency

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Background/Rationale: In recent years, the popularity of cryptocurrency has grown substantially. Increasingly, young adults are trading/investing in numerous stable coins, meme coins, and altcoins. However, it remains poorly understood why young adults engage in or abstain from this volatile financial space. In the gambling literature, motivational models have been useful in illustrating reasons for engaging in the activity. Moreover, self-generated responses have also demonstrated utility for identifying individuals' key motivations. As such, the goal of this study was to qualitatively identify top motives for cryptocurrency engagement and non-engagement using open-ended responses. **Methods:** A sample of young adult cryptocurrency users, as well as a matched cohort of non-cryptocurrency users, were recruited from a university setting. Participants were asked to provide their top three reasons for using (or not using) cryptocurrency. **Results:** Self-generated motivations in both groups were then categorized based on conceptual similarity. Level of cryptocurrency participation was also measured to compare how motives differed between casual versus more heavily involved cryptocurrency traders/investors. **Conclusions/Impact:** Understanding the nature of young adults' involvement in cryptocurrency is essential to identifying those at greatest risk for making worse financial decisions. This information is also necessary for designing and informing cryptocurrency policy decisions.

4

Distinct Emotion Regulation Deficits in Binge Eating and Food Addiction Versus Gambling and Substance Addiction among Community Women

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The inclusion of gambling disorder as a behavioral addiction in DSM-5 has led to a debate on what other behaviors may be considered addictions. Theories propose that emotion dysregulation may help explain binge eating, food addiction, gambling, and substance dependence. Much of the limited research on these associations has focused on select facets of emotion dysregulation (i.e., negative urgency). The present study aimed to elucidate similarities and differences of eating pathology with behavioral and substance addiction by comparing strength of associations of emotion dysregulation facets including positive urgency (PU; the disposition to act impulsively when experiencing positive emotions) with binge eating, food addiction, substance dependence, and gambling. Participants were 202 community-recruited women (Mage = 36.0 years; 87.2% White) who engaged in at-risk binge eating, at-risk gambling, or both (i.e., exhibited symptoms just below the DSM-5 diagnostic threshold). PU was associated with increased substance abuse severity. ($p < .01$) and frequency ($p < .01$) and gambling ($p < .05$), but a decreased likelihood of binge eating ($p < .05$) or a food addiction "diagnosis" ($p < .01$) across participants. These findings highlight distinct emotion regulation deficits in those with eating pathology compared to addiction, suggesting these problems differ in important ways.

5

Augmenting an online self-direction intervention for gambling disorder with a single motivational interview: A randomized controlled trial

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Despite the success of gold standard cognitive-behavioural therapy for problem and disordered gambling, most individuals with gambling problems do not seek or receive professional treatment. Thus, the development of less intrusive interventions has been encouraged. A two-arm randomized controlled trial was conducted. Eligible participants (N = 123) were randomly assigned to complete an online self-directed workbook either alone or in combination with a digital motivational interview completed upon enrollment. Gambling severity, frequency, and expenditures were assessed along with other mental health outcome data at baseline and 3-month follow-up time points. Participant retention (83.7%) was very high compared to similar prior trials. Gamblers in both groups experienced similar reductions across all outcomes except alcohol consumption. Some methodological limitations and theoretical explanations could account for the overall lack of differential improvement by group, including inadequate interview completion rate and short duration of intervention. Participants' use of the online program was limited but their ratings were generally positive; they emphasized information quality as a strength and program engagement as a weakness. Given that time spent on the program and number of logins were positively associated with reductions in gambling problems, future research should examine ways to enhance online intervention engagement and uptake.

6

Dichotomous and Weighted Scoring of the Problem Gambling Severity Index Converge on Predictors of Problem Gambling

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The Problem Gambling Severity Index (PGSI) is a popular measure of problem gambling in the general population (Ferris & Wynne, 2001). The nine items on the PGSI are graded on a 4-point frequency scale. When developing the PGSI, Ferris and Wynne (2001) considered adopting dichotomous scoring as is used for the DSM measure of problem gambling. The present study examined the psychometric properties of dichotomous and weighted scoring methods and whether predictors of problem gambling severity were moderated by the scoring method. 1,269 gamblers (569 sports gamblers) completed an online survey which included the PGSI and measures of impulsivity, gambling motivations, and gambling cognitions. Both scoring methods demonstrated high internal consistency and a univariate factor structure. Stochastic search variable selection and dominance analyses were applied to index the relative importance of the predictors of problem gambling severity. When compared for sports and non-sports gamblers, standard weighting and dichotomous scoring converged on four predictors of problem gambling: positive urgency; amotivation; luck/perseverance; and gambling identity. Our results suggest that the two scoring methods are similar in both their psychometric properties and their predictors, however, the dichotomous scoring has the advantage of not relying on accuracy of judgments of frequency.

7

The schedule preference task: a method for examining the relationship between impulsivity and preference for random rewards

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As time goes on, the subjective value of a delayed reward decreases, a phenomenon referred to as delay discounting. People who are more impulsive (i.e., who show preference for immediate reward) discount future rewards at a faster rate. Perhaps this relationship explains why gambling-like schedules of reinforcement are so attractive to impulsive people: gambling reward schedules (also known as random-ratio schedules) offer the tantalizing possibility of an immediate win. Random-ratio schedules contrast with fixed-ratio schedules, where reward is delivered predictably after a fixed number of responses. We have developed a rodent task which measures the preference of random-ratio over fixed-ratio rewards. In this task, rats are given the choice between two levers: one that delivers reward randomly and one that delivers reward on a fixed-ratio schedule. The probability of reward (and hence the average value of that option) adjusts dynamically based on previous choices until the animal chooses equally between both levers. Using this task, we have shown that all animals tested so far show a strong preference for random-ratio schedules. This task provides a new method for studying the allure of gambling schedules and how factors like impulsivity may influence reward-seeking behaviour. It also opens the possibility of studying gambling, impulsivity and their relationship in an animal model.

8

**Keep your head in the game:
Demographic and clinical correlates of
attention deficit hyperactivity
disorder in gambling disorder**

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Background: Gambling disorder (GD) and attention deficit hyperactivity disorder (ADHD) have a 5.8 to 20.0% comorbidity rate. However, few studies have examined the correlates of their co-occurrence. This study examined the demographic, psychosocial, and clinical correlates of ADHD in a sample of treatment-seeking individuals with GD (N = 415). **Methods:** Semi-structured interviews were conducted on treatment-seeking individuals with GD from a clinical outpatient setting in São Paulo, Brazil. The Shorter PROMIS Questionnaire and Mini International Neuropsychiatric Interview (MINI) were used to assess additional addictive behaviours and psychiatric comorbidities. Demographic factors, psychosocial functioning (Social Adjustment Scale), personality dimensions (using the Temperament and Character Inventory) and gambling variables were also examined. **Results:** Of the total sample, 153 (36.9%) met diagnostic criteria for comorbid ADHD (GD+ADHD). Compared to individuals without ADHD (GD-ADHD), those with GD+ADHD were more likely to be female, have greater gambling symptom severity, and lower gambling abstinence self-efficacy. Interestingly, those with GD+ADHD displayed less gambling-related cognitive distortions than GD-ADHD individuals. Individuals with GD+ADHD had higher rates of psychosocial dysfunction (leisure, work, housework, family, and financial) and had a unique personality profile (higher novelty seeking, harm avoidance, persistence, self-directedness, and cooperativeness). Higher rates of psychiatric comorbidities (major depressive disorder, suicidality, agoraphobia and substance dependence) and addictive behaviours (alcohol, tobacco, compulsive shopping, food bingeing, work, caffeine, prescription drug use, and exercise) were also observed among the GD+ADHD group. **Discussion:** Given the significant psychopathology observed among those with GD+ADHD, greater focus on systematic clinical investigation and concurrent treatment approaches are warranted.

9

**The Differences Between Gamblers
and Substance Users Who Seek
Treatment: An Exploratory Analysis**

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Gambling disorder (GD) and substance use disorder (SUD) are diagnostically similar and share many etiological, clinical, and psychosocial factors. Despite their similarities, reports suggest that treatment seeking rates are roughly two times higher for SUD than GD. To help elucidate the factors that may account for this discrepancy, an exploratory analysis was conducted on data from the Alberta Gambling Research Institute National Project's Online Panel Survey. Chi-squared tests and one-way analysis of variance were used to investigate bivariate differences between those who sought treatment for (a) gambling (TS-G) or (b) substance use (TS-SU) on non-specific predictors of treatment seeking identified from previous research. Factors that displayed significant between-group differences were entered in a binary logistic regression using a forward stepwise procedure to identify and rank multivariate predictors that best differentiated each group. Factors included in the model were primarily related to mental health comorbidities, providing a possible explanation for the increased prevalence of treatment seeking observed among substance users. Conversely, TS-G were more likely to endorsed having heavier or longer engagement as symptom of their addiction. Despite these findings, the final model accounted for less than 15% of the explained variance, suggesting that similar factors predict treatment seeking in each group. This study has important implications for intervention efforts, given recent interest surrounding transdiagnostic models of addiction and treatment.

10

**Psychometric Properties of the Problem
Gambling Severity Index in Older Adults**

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Gambling among older adults is receiving increased attention in the literature. Empirical and prevalence studies among older adults commonly utilize the nine-item Problem Gambling Severity Index (PGSI), originally developed for use with general adult samples. To evaluate age-equivalence of PGSI scores, this study examined the psychometric properties of the PGSI in older adults. Self-report data from single waves of adults 60+ years from the Leisure, Lifestyle, and Lifecycle Project (N=195) and Quinte Longitudinal Study (N=518) were analyzed (accessed from the Gambling Research Exchange of Ontario). Factor structure was evaluated using principal axis factoring and confirmatory factor analysis, and concurrent validity was assessed using bivariate correlations. Results showed 1) a single-factor structure; 2) factorial invariance by gender; 3) good internal consistency ($\alpha = .86$); and statistically significant ($p < .001$) concurrent validity with gambling frequency, playing electronic gaming machines, bingo, and instant win tickets, for both total PGSI score and interpretive problem gambling severity categories (defined by original and revised cut-points). Implications and future directions will be discussed.

11

A Scoping Review of the Relationship Between Loot Boxes, eSports, Skin Betting, and Token Wagering

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We conducted a scoping review to (a) synthesize the existing empirical research literature that has assessed gambling-like activities (specifically loot box engagement, eSports engagement, skin betting, and token wagering) and their associations with gambling and video gaming behaviours, including problem gambling and video gaming; (b) identify sociodemographic, psychological, and motivational factors associated with gambling-like activity engagement; and (c) identify research gaps and emerging areas that will require further research. A systematic search of seven electronic databases and Google Scholar was last updated in September 2021, yielding a total of 30 articles. Statistically significant associations were found between gambling behaviours and loot box engagement (15/16 studies), eSports engagement (11/12 studies), skin betting (3/3 studies), and token wagering (1/1 study). Additionally, statistically significant associations between video gaming behaviours and loot box engagement (8/9 studies), eSports engagement (6/8 studies), skin betting (1/1 study), and token wagering (1/1 study) were identified. Results of this review also showed that various sociodemographic factors, including age, gender, marital status, ethnicity, employment, educational attainment, income were associated with gambling-like activities. However, the directionality of these associations was mixed. Psychological factors such as mental distress and impulsivity were positively associated with gambling-like activity engagement. Gaps identified included a lack of inquiry into skin betting and token wagering, a lack of diversity in the research methods used (mainly cross-sectional surveys), and a paucity of research that has focused on more ethnically, culturally, and geographically diverse populations.

12

Video Game Engagement, Gambling Engagement, and Impulsivity Among Video Game Players Who Do and Do Not Purchase Loot Boxes

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A robust literature has demonstrated a link between loot boxes and problem gaming and gambling. Limited research, however, has examined associated psychological characteristics, such as impulsivity, that may help explain this link. The present research thus aimed to compare problem gaming, gambling engagement, and impulsivity among video game players who had and had not purchased loot boxes. Canadian undergraduate students (N = 1085, Study 1) and community members recruited through Prolific (N = 334, Study 2) completed self-report measures of video game engagement, loot box purchases, problem gaming, gambling engagement, and impulsivity (UPPS-P). One-hundred and eighty-two video game players (15%) in Study 1 and 50 (17%) in Study 2 reported purchasing loot boxes. In both Studies, participants who had purchased loot boxes displayed greater problem gaming severity, spent more time playing video games, and were more likely to gamble. In Study 1 (but not Study 2), participants who had purchased loot boxes displayed significantly greater positive urgency, negative urgency, and sensation seeking compared to participants who had not purchased loot boxes. The results replicate previous findings between loot boxes and gaming and gambling as well as provide preliminary support for important differences in psychological characteristics among those who purchase loot boxes.

13

Does dopamine agonist treatment create brains that are vulnerable to gambling addiction?

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Prolonged use of dopamine agonist medications like pramipexole (PPX) are thought to produce long-lasting changes in the brain which may produce a vulnerability to drug and behavioural addictions. In this study we compared the brains of rats that were administered PPX or saline solutions while they worked for food reward on either a fixed ratio or a slot machine-like, random ratio schedule of reinforcement. Using immunofluorescence antibody staining we looked for changes in dopamine D2 and D3 receptor density as well as the distribution in brain regions associated with reward processing and addiction. We found a multivariate effect of schedule on signal intensity in brain regions stained with fluorescently labelled D2 receptor antibodies ($p = .029$). In contrast, regions stained with a D3 receptor antibody were primarily affected by PPX administration ($p = .004$). Particular regional changes to D2 and D3 receptor density, relationships to addiction-like behaviour, and the implications of these findings will also be discussed. Results from this study provide insight into exactly how the brain is affected by changes in dopamine signaling and the relationship of these brain changes to behaviour and addiction symptomatology.

14

A Profile of Gamblers Based on Their Preferred Gambling Mode – Preliminary Results

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Previous research has shown that compared to offline gamblers, online gamblers typically exhibit the greatest levels of disordered gambling (PG). However, when mixed-mode (i.e., both online and offline) gamblers have been identified and analyzed as a separate group, online and mixed-mode gamblers have shown the lowest and highest PG severity, respectively. Additionally, although mixed-mode gamblers typically experience more gambling-related harms, they are not the most likely to seek help for PG. Although stigma has been recognized as a common barrier to seeking help, there is a paucity of research that has examined the relationship between stigma and PG. Thus, the goal of the present research was to determine if the results of past studies could be replicated in a sample of online ($n = 74$), offline ($n = 64$), and mixed-mode ($n = 77$) problem gamblers and compare them across indices of stigma. Consistent with previous research, mixed-mode gamblers endorsed more harms and greater PG severity; however, no differences were found for help-seeking. Additionally, no differences were found between groups in terms of perceived or experienced (i.e., internalized) gambling-related stigma. This research helps to improve knowledge about stigma and help-seeking behaviours across gambling subtypes and may have implications for targeted harm reduction and treatment strategies.

15

Responsible Gambling? An Assessment of Department of Defense Responsible Gambling Strategies on German Military Installations

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Background: As of 2016, the US Department of Defense (DoD) managed 3,141 slot machines on overseas bases in Europe and Asia.¹ Several organizations have begun to address programmatic and treatment shortfalls within the DoD^{2,3,4}; however, little is known about responsible gambling measures at DoD managed gambling sites.

Methodology: Five common responsible gambling modalities were identified from a recent review of the literature⁵: self-exclusion, player behavior tracking, limit-setting, gaming machine features, and staff training. Researchers with access to DoD managed slot rooms in Germany observed gaming rooms and slot machines and questioned on site staff in person (n=2) and via telephone (n=3).

Results: Out of the five locations, none utilized any of the responsible gambling strategies assessed. **Conclusion:** Though generating millions of dollars from slot machines, the DoD locations examined use none of the responsible gambling methods described in recent scientific literature.

Significance: To our knowledge, this the first direct observational study of responsible gambling measures in DoD gaming rooms. Future research should examine responsible gambling measures used in other DoD locations and identify how to improve responsible gambling for US service members.

16

The Manitoba Gambling Research Program: Overview of a Research Funding Model

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Between 2012 and 2017 researchers interesting in gambling research could access grants from an organization called the Manitoba Gambling Research Program (MGRP). The MGRP was an important funder of gambling research, and was unlike most other gambling research funders as it was housed in and funded by a provincial lottery corporation, the Manitoba Lottery Corporation. Interestingly, the lottery corporation became the Manitoba Liquor and Lotteries Corporation (MLLC) in 2012 as the result of the merger of two crown corporations. The MGRP was based in the Social Responsibility department of the MLLC with no staff specifically dedicated to its operation. Instead, the MGRP Board appointed by the MLLC reviewed and administered funding applications and reports. This poster will provide an overview of the MGRP including the make-up of its board, range and extent of funded research, and the proposed intent of the MGRP at its inception. Areas of particular interest are the MGRP's emphasis on gambling pathology research as opposed to sociocultural gaming research and the decision to fund gambling research using lottery revenues – these questions are relevant to ongoing discussions in the field of critical gambling studies.

17

Online Gambling in Pennsylvania

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Interactive gaming, also known as online gambling, was legalized in the state of Pennsylvania in 2017. The first certificates for online gambling operators were granted in 2018, and as of the 2020/2021 fiscal year 19 sites were operated by 10 different certificate holders. During this time, online gambling generated over \$1.1 billion in revenue within the state. In order to better understand the impacts of this legislation on the state, a random digit dialing (RDD) study was conducted between 2020 and 2021. Sixty thousand RDD records, evenly distributed between cellphones and landlines, were included in the study. At the conclusion of the study a total of 1,158 Pennsylvanians over the age of 18 participated in the survey. The data was weighted to be approximately representative of the population of Pennsylvania in terms of both age and sex distributions. After data weighting, results demonstrated that approximately 11% of Pennsylvanians engaged in online gambling within the past 12 months. Furthermore, of those that engaged in online gambling 44.6% of respondents endorsed at least one item on a brief screen of problem gambling.

18

How the Team Lets Us Down: Social Structural Characteristics in Video Games and Their Association With Gaming Disorder

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Previous literature has suggested that video games with structural characteristics that encourage social play, such as multiplayer features and leaderboards, can facilitate greater engagement to video games. The present scoping review study seeks to explore the contemporary literature to elucidate further and collate the contribution of social structural features to gaming disorder (GD) or a proxy of GD. Two independent reviewers screened studies from a pool of 2810 studies. Following exclusion, the final pool of texts included 41 studies relevant to social features implicated with GD and/or a proxy. Of the studies included, there was considerable evidence of multiplesub-categories of social features having positive associations, including general social features (n = 22), multiplayer (n = 14), capacity to play in guilds/clans/teams (n = 7), leaderboards (n= 7), chat feature (n = 1). Only one study found no significant relationships between general social features and GD and/or a proxy of GD. These findings aid in further understanding the etiology of GD as an emerging mental health concern.

19

Examining the gender publication gap in gambling research and addiction science

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Researchers who are men typically publish more papers and receive higher citations than researchers who are women. We examine this gender publication gap in gambling studies as a subfield of addiction science. We scraped publication and citation data from 2003 to 2021 and used an automated gender inference procedure based on author first names. The primary analysis selected publications in eight journals that either specialize in gambling research or publish gambling articles in the context of addictions research. Number of publications was fit to a negative binomial regression (given natural positive skew) over unique authors, testing their gender. For gambling publications, we observed an overall gender gap with men authoring 61% (95% CI [59.6, 62.5], $z = 30.24$, $p < .001$) of papers. The incident rate ratio (IRR) of 1.22 (95% CI [1.14, 1.30]) means that authors who are men have approximately 22% more publications than authors who are women. This gap varies by journal and will be benchmarked against non-gambling papers in addictions journals. A gender publication gap continues to exist in the field of gambling studies, and we recommend that journals monitor authorship diversity and take concrete steps to reduce these disparities.

20

Impulsivity as a Predictor of Co-occurring Problem Gambling and Compulsive Sexual Behaviours

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The goals of the present study were to examine the facets of impulsivity that may account for the high co-occurring rates of problem gambling (PG) and compulsive sexual behaviours (CSB) found in the literature. Participants were 143 university students recruited from across Canada who engaged in gambling and excessive sexual behaviours. Impulsivity was assessed using the UPPS-P. PG and CSB were both assessed using the SSBA. PG was endorsed by 16.8% of the sample and CSB was endorsed 68.5%. Twenty-four (1.3%) individuals endorsed both PG and CSB. Participants were classified by one of the following three groups: neither PG or CSB (n = 45), either PG or CSB (n = 74), and co-occurring PG and CSB (n = 24). Multinomial logistic regression analysis revealed that compared to participants that did not endorse either PG or CSB, those with either PG or CSB or both reported greater levels of positive (OR = 2.49; OR = 3.47) and negative urgency (OR = 2.25; OR = 2.99) but lower levels of sensation seeking (OR = .45; OR = .19). The results suggest that different facets of impulsivity may help to explain the co-occurrence of PG and CSB.

21

How Does Romantic Conflict Impact Gambling Problems? Test of a Chained Mediation Model

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Motivational models of gambling posit that individuals may gamble to cope with negative affect (Stewart & Zack, 2008). Conflict with one's romantic partner is a strong predictor of negative affect, which may elicit coping motives for gambling and, in turn, gambling-related problems. Support for this mediational model was obtained in relation to drinking problems in a dyadic study of 100 romantic couples (Lambe et al., 2015). We extended this model to the gambling field. The present cross-sectional study examined links between romantic conflict (measured with Partner-Specific Rejecting Behaviors Scale; Murray et al., 2003), negative affect (measured with the Depression, Anxiety, and Stress Scales-21; Lovibond & Lovibond, 1995), gambling coping motives (measured with the Gambling Motives Questionnaire; Stewart & Zack, 2008), and gambling-related problems (measured with the Problem Gambling Severity Index; Ferris & Wynne, 2001) in 206 gamblers (64% men; mean age=44.7 years; mean PGSI=8.7) who were in a romantic relationship and recruited through Qualtrics Panels. Results supported our hypothesis that the association between conflict and gambling-related problems would be sequentially mediated through negative affect and, in turn, coping motives. Interventions may wish to target both negative affect and coping gambling motives in response to romantic conflict to reduce gambling-related problems.

22

An Examination of the HEXACO Model of Personality in Cryptocurrency Users and Non-users

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Background/Rationale: Cryptocurrency is one of the fastest growing financial products today. There has been a shift towards viewing cryptocurrency as a speculative asset, associated with numerous types of financial risk. These risks make speculative cryptocurrency trading similar to gambling. The tendency to engage in these financially risky activities can, in part, be explained by personality. For instance, the HEXACO model of personality has utility when applied to individuals who engage in gambling. Yet, our understanding of which personality characteristics drive people to engage in cryptocurrency is limited. **Methods:** This study compared HEXACO personality dimensions between cryptocurrency users and non-users in a sample of young adults.

Results: Scores on each of the six HEXACO dimensions in cryptocurrency and non-cryptocurrency users are compared. Furthermore, cryptocurrency involvement and intensity of engagement is analyzed as potential moderators of this relationship.

Conclusions/Impact: The implications of these findings in terms of identifying potential underlying mechanisms for engaging in financially-risky activities will be discussed.

23

Emotion Dysregulation as a Mediator of the Relationship Between Adverse Childhood Experiences and Gaming Disorder

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Adverse childhood experiences (ACEs), such as physical abuse and neglect, are risk factors for gaming disorder. However, the precise mechanisms that underlie this relationship remain unclear. Previous studies have demonstrated that emotion dysregulation mediated the relationship between ACEs and other behavioural addictions such as gambling disorder, social media addiction, and food addiction. The present research thus sought to investigate whether emotion dysregulation similarly mediates the relationship between ACEs and gaming disorder, which has not yet been tested. Samples of Canadian undergraduate students (N = 1085; Study 1) and community members recruited through Prolific (N = 417; Study 2) completed self-report measures of ACEs, emotion dysregulation, and gaming disorder. Results revealed that ACEs predicted gaming disorder in the student sample but not in the community sample. In both samples, ACEs predicted emotion dysregulation, which in turn predicted gaming disorder. Importantly, the bootstrap confidence interval of the indirect effect of emotion dysregulation on ACEs and gaming disorder was significant in both studies, supporting our hypothesized mediation model. Findings suggest that those who endorse both a history of ACEs and gaming disorder may benefit from treatments that also address deficits in emotion regulation.