



CURRENT ISSUES IN GAMBLING RESEARCH 2018

Conference Presenters

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The Banff Centre, Banff, Alberta

Per Binde

Dr. Per Binde is an associate professor of social anthropology at the University of Gothenburg, Sweden. His interest in gambling is broad and focused initially on the cultural dimension of gambling and its social contexts. He conducted extensive field studies in Swedish gambling venues and using ethnographic and historical sources as a base, he analyzed the distribution of gambling in the pre-colonial world, the relationships between gambling and socio-economic systems, and between gambling and religion. Dr. Binde's more recent empirical studies have been mainly about problem gambling, for example mutual support societies of problem gamblers, the impact of gambling advertising, and problem gambling in the workplace. He has also analyzed data from population studies and written about regulation issues.

He was, for seven years, member of the Board of Directors of the Swedish Gambling Authority.



Presentation Topic: *Risk of Harm as a Function of Type of Gambling*

Problem gambling is a public health issue that needs to be addressed through regulation of the gambling market and preventive initiatives. An important question when designing such regulations and initiatives is whether some types of gambling are more harmful than others; if so, regulations and initiatives should focus on these types. Research results published in recent years appear to give conflicting answers to this question. Most of the literature presents findings in line with the conventional view that some forms of gambling, in particular electronic gaming machines, are more harmful than other forms. However, some studies suggest that participation in multiple forms of gambling is crucial. With reference mainly to findings from a Swedish population survey, I will explain the apparently discordant results of previous studies and show how these factors are related in the Swedish context.

Darren Christensen

Dr. Darren R. Christensen received his Ph.D in psychology from the University of Canterbury, New Zealand. He has previously worked at the University of Arkansas for Medical Sciences and the University of Melbourne examining the efficacy of contingency management as a treatment for substance dependence and problem gambling. He is currently the chair in gambling sponsored by the Alberta Gambling Research Institute in the Faculty of Health Sciences at the University of Lethbridge. His research includes developing behavioural treatments for problem gambling, counselling for problem gambling, evaluations of the effectiveness of harm minimisation measures, and an investigation of regular opioid antagonist dosing on gambling urge and brain function.



Presentation Topic: *The Structure of Problem Gambling*

The aim of this study is to examine the underlying dimensionality and structure of problem gambling using a comprehensive range of problem gambling assessments in a large and diverse sample of gamblers. A total of 12,521 gamblers from 105 countries were recruited through banner advertising placed on a popular online gambling portal to take an online survey. A total of 5,196 individuals completed the problem gambling section of the survey.

Participants were allocated to answer one of the four problem gambling assessments and the remaining unique items from the three other problem gambling assessments. The order of assessments was counterbalanced. Multidimensional scaling was used to assess the number of dimensions, change-point bootstrap analyses were conducted to investigate the variability across dimensions, nonlinear canonical correlations assessed the descriptive fit of each of the assessments, and factor analyses were run to characterize the nature of the dimensions.

An ordinal transformation using multidimensional scaling indicated a high degree of fit between the model and the data where the model appeared to stabilize at four dimensions. Multiple dimensions in the data were supported from subsequent change-point bootstrap analyses and nonlinear canonical correlations. The Problem and Pathological Gambling Measure appeared best able to describe multiple dimensions. The factor analyses suggest a core experience of problem gambling symptomology that we refer to as “gambling problems”, and three other factors: “financial problems”, “health and relationship issues”, and “difficulty controlling gambling”. Our conclusion is that gambling symptomology appears multi-dimensional. This suggests measures that capture a diverse range of problem gambling symptomatology are more comprehensive assessments of problem gambling.

Paul Delfabbro

Professor Paul Delfabbro is a researcher and lecturer in the School of Psychology at the University of Adelaide where he teaches learning theory and statistics. He has published over 250 papers, reports, and book chapters in a range of topics, including: the psychology of gambling, child protection and child welfare, and has been a regular advisor to State and Federal Government departments over the last 15 years. He has worked in a number of areas of gambling research: population prevalence studies, adolescent gambling, erroneous beliefs about gambling, and the structural characteristics of gaming machines and how they affect behaviour.



Presentation Topic: *Responsible Gambling and Harm in Low Risk Gamblers: All Quiet on the Western Front?*

The aim of this presentation is to focus attention on some of the conceptual, methodological, and practical issues relevant to the study of harm and the application of responsible gambling principles to populations of lower risk gamblers. The presentation will acknowledge the importance of harm prevention and early interventions in modern approaches to responsible gambling, but argue that these goals are not easily realized. How does one promote behavioural change in populations who will often not believe that they have a problem? And do lower risk gamblers genuinely experience harm? The presentation will commence with a review of how harm is defined and its relationship to responsible gambling, and how well it has been captured clinically and in population surveys. It will be argued that previous research has generally not been fully effective in measuring harm and that the recent focus on capturing a wider spectrum of harms is an important development in the field. The paper reflects on some of the challenges associated with measuring harm in lower risk populations. In particular, it will examine the validity of arguments predicated on the Prevention Paradox argument, the importance of distinguishing between harm and opportunity cost, and the importance of differentiating between ‘harmed individuals’ as opposed to ‘individuals with harm’. The presentation will also reflect on what would appear to be the best approaches to approach harm prevention strategies with lower risk populations.

Mike Dixon

Dr. Mike Dixon is a professor of psychology at the University of Waterloo where he has twice served as chair of the Department of Psychology. He is the director of the Research Stream at the Waterloo Gambling Research Laboratory. This lab is best known for their work on “losses disguised as wins” and “near-misses,” two structural characteristics that underlie the allure of multiline and single line slot machines. They have recently published their research on scratch cards and “fermium” games such as Candy-Crush. Dixon has been continuously funded by the Natural Sciences and Engineering Research Council since 1997. His gambling research has been supported by the Ontario Problem Gambling Research Centre, Gambling Research Exchange Ontario, and the Manitoba Gambling Research Program. He has published over 90 articles in journals such as *Addiction*, *Journal of Gambling Studies*, *International Gambling Studies*, *Nature*, *Journal of Cognitive Neuroscience*, *Cognitive Neuropsychology* and *Cortex*.



Presentation Topic: *"Dark Flow" and "Reactivity to Rewards": Distinct Routes to Slot Machine Enjoyment for Problem and Recreational Slots Players*

I will describe two routes to enjoying slots play. One route involves the degree to which players react to rewards. We measured reactivity using either post-reinforcement pauses following wins of various sizes, or the force with which players initiate the next spin following these differentially exciting outcomes. The other route involves what we call dark flow – a pleasurable state where players experience distortions of time and become completely engrossed in slots play. Our measures of reward reactivity were correlated with slots enjoyment but uncorrelated with gambling problems. Dark flow was strongly correlated with slots enjoyment but also was strongly related to gambling problems, depression, and mind wandering in everyday life. Our research suggests that of the two routes to enjoying slots, dark flow is the more dangerous. Our findings suggest that dark flow may be the state to which escape gamblers retreat to avoid thinking about their troubled lives.

David Euston

Dr. David Euston is an associate professor of neuroscience at the University of Lethbridge. He received his Ph.D. in Psychology at the University of Oregon in 2000, and then did postdoctoral training at in neuroscience at the University of Arizona with Dr. Bruce McNaughton. His research involves a combination of behavioral, lesion, and multi-electrode single-cell electrophysiological techniques in rats to address questions about the neural bases of behavior addiction, decision making, and social communication. Dr. Euston is relatively new to the field of gambling research but has been working for the past three years on developing a rodent model of gambling addiction, as well as assessing the role of impulsivity and drugs in the addiction process.



Presentation Topic: *Gambling Rats: Motivation but not Compulsion*

What makes gambling such an engaging activity? Arguably, it is the uncertainty of reward. In the case of problem gambling, it has been hypothesized that the positive surprise provided by gambling wins may overdrive the brain's reward circuits, causing pathological behavior. In my lab, we are attempting to capture this addiction process in an animal model with the eventual goal of elucidating its neural mechanisms. We have exposed rats to rewards delivered on gambling-like reward schedules. Compared to predictable reward, the random reward schedules induce higher levels of motivation, confirming previous reports. However, unlike continued exposure to drugs of abuse, continued exposure to random reward schedules does not induce the compulsive aspects of gambling addiction (i.e., persistent engagement despite rising consequences and a lack of sensitivity to reward schedules). These data suggest that rats are highly resilient to developing gambling addiction. While we cannot rule out species and reward modality as factors, the data suggest that surprising reward, by itself, may not be sufficient to induce addiction. Other factors, such as early-life stress or co-morbid drugs of abuse may be needed to tip the scale towards addiction. One such factor may be the drug pramipexole, a dopamine D3 agonist given to help those with Parkinson's disease. In humans, the drug causes flagrant gambling or other compulsions in roughly a tenth of those given the treatment. Currently, we are testing whether chronic pramipexole will likewise cause a subset of rats to develop compulsive symptoms. Preliminary data will be presented. By elucidating the neural mechanisms of addiction, this research ultimately seeks to foster the development of new pharmaceutical interventions for those suffering from problem gambling.

Sally Gainsbury

Dr. Sally Gainsbury, PhD, Doctor.ClinPsych, BPsych (Hons), has over ten years' experience conducting research on the topics of gambling, addiction, and new technology with the aim to inform policies to reduce harm. She is deputy director of the University of Sydney Gambling Treatment and Research Clinic and senior lecturer within the School of Psychology. Dr. Gainsbury holds an Australian Research Council Discovery Early Career Research Award to understand the role of the online environment and social cues on online risk taking. She has over 90 peer-review publications, given over 60 keynote and invited conference presentations internationally, written two books, and won numerous awards including Southern Cross University Vice Chancellor's Award for Excellence in Research for Early to Mid-Career Researchers (2015), and an Australian Psychological Society Early Career Researcher Award (2014). Dr. Gainsbury is often invited to provide expertise to guide the development of government and industry policies and practices. She is the editor of the academic journal *International Gambling Studies*.



Presentation Topic: *The Technological Transformation of Gambling*

Internet and new technology have transformed the way that gambling is provided and consumed. Innovations include augmented and virtual reality, blockchain and cryptocurrencies, the merging of online gaming and gambling, and social media. Technology has been embraced by gambling operators and consumers, while regulators, and treatment professionals need to understand the impact of change on the development and prevention of problems.

David Hodgins

Dr. David C. Hodgins, Ph.D., is a professor in the Program in Clinical Psychology in the Department of Psychology, University of Calgary and a coordinator with the Alberta Gaming Research Institute. He is registered as a Clinical Psychologist in Alberta. His research interests focus on various aspects of addictive behaviours including relapse and recovery from substance abuse and gambling disorders. Dr. Hodgins co-chairs the Scientific Working Group of the National Low Risk Gambling Guidelines development project.



Presentation Topic: *Mental Health and Substance Use Disorders in Gambling Disorder: What Does It Mean for Treatment?*

Individuals with disordered gambling often report at least one other lifetime mental health or substance use disorder. Although prevalence estimates vary, there is substantial evidence that co-morbidity is the rule rather than the exception. This presentation will present the results of a systematic scoping review of published research that identified 251 articles. Co-morbidity is associated with more severe and persistent gambling problems, but is not necessarily linked to poorer treatment outcome. Various models explaining the association between gambling disorder and other disorders will be described. Discussion will focus on the implications of co-morbidity for how we offer treatment for gambling disorder.

Mark Johnson

Dr. Mark R. Johnson is a Killam Postdoctoral Fellow in the Department of Political Science at the University of Alberta. His research focuses on the intersections between games, play, work, labour, and money, such as Esports, live streaming, fantasy sports, gamification, and skin betting. His first monograph, "The Unpredictability of Gameplay," is soon to be published by Bloomsbury Academic and presents a Deleuzian analysis of randomness, chance, and luck in games, and the cultures and practices that arise around unpredictable gameplay (in gambling, video games, board games, and beyond). Alongside his academic work, he is also a former professional poker player, an independent game developer, and a regular games blogger, podcaster, and freelance writer. He is currently developing two new monograph projects on the labour politics of live video game streaming and on the design, ideological content, and legality of daily fantasy sports betting.



Presentation Topic (with Dr. Fiona Nicoll): *Conflicts of Interest in Gambling and Gaming Product Reviews*

Our paper draws on video gaming scholarship to reflect on ethical issues raised by gambling products. Our case study is a comparison of how Conflicts of Interest (COI) are negotiated in publicly accessible reviews of video games and electronic gaming machine games. We find that the chain of interest connecting video game producers to video game reviewers is comparatively transparent; beta-testing on large markets of players, together with critical feedback from consumers, clearly shapes video-gaming products and values. However, despite the complex legal, political, economic and social entanglements of gambling, the processes through which electronic gaming machines are developed, tested and reviewed remain relatively opaque. With reference to specific examples, we argue that more attention to COI issues in reviews of gambling products contributes to the project of making gambling industries, academics and political stakeholders more transparent and accountable.

Sylvia Kairouz

Dr. Sylvia Kairouz is an associate professor in the Department of Sociology and Anthropology at Concordia University. She published extensively in sociology, social epidemiology, and public health journals and won the Brain Star Award of the Canadian Institute of Health Research for her innovative work on the role of social contexts in addictive behaviors. She is currently engaged in funded research examining comprehensive multilevel models of determinants of gambling behaviours. She has piloted six large population surveys in Quebec over the last five years and collaborates with scholars and key institutions in Quebec, Canada, and internationally. She holds an FQRSC research chair on the study of gambling and is the head of the Lifestyle and Addiction Research Lab at Concordia University.



Presentation Topic: *The Intersection between Gaming and Gambling*

With the digitalization of gambling and gaming, the lines of inquiry are more likely to cross over various systems raising questions about their distinctive natures and overlaps. The impact of the translation of gambling and gaming onto the Internet might be multiple with several points of convergence and differences. This presentation will discuss the implication of the hybridization process between gambling and some forms of games in the digital space, and the challenges with which we are confronted with the emergence of new forms of games. It will: 1) address the epistemological and methodological shifts that has been occurring with the overlapping of gambling and pay-to-win games; 2) present an epidemiological analysis of the profile of users of traditional gambling activities and new emerging pay-to-win games; and 3) investigate the harms associated with forms of games using a public health approach.

Hyoun S. (Andrew) Kim

Mr. Hyoun S. (Andrew) Kim is a Ph.D. candidate in clinical psychology at the University of Calgary. His research focuses on developing transdiagnostic treatments for addictions and impulse control disorders, examining transdiagnostic mechanisms of co-morbid substance use and mental health disorders, as well as examining novel facilitators of treatment seeking (e.g., self-discontinuity and nostalgia).

Kim has published over 30 peer reviewed journal articles and has been an invited speaker at national and international conferences. His research has been funded by the National Council on Responsible Gaming, Gambling Research and Exchange Ontario, and the Alberta Gambling Research Institute. Kim holds a Canada Graduate Scholarship from the Social Sciences and Humanities Council of Canada, a Doctoral Scholarship from the Alberta Gambling Research Institute, a Graduate Studentship from the Alberta Innovates Health Solutions, and is a Killam Laureate. He has also helped to establish an International Addictions and Impulse Control Disorders Network with the University of Sao Paulo.



Presentation Topic: *Back to the Future: Memories of the Non-Gambling Self Facilitates Behavioural Change*

A significant number of people with gambling problems do not engage in behavioral change despite the significant harms that their gambling may yield. In this presentation, a series of studies that highlight a novel means of increasing motivation and attempted change as well as overcoming barriers to change among people with a gambling problem will be presented. Specifically, the utility of heightening a person's sense that gambling has fundamentally changed their sense of self (i.e., self-discontinuity) facilitates behavioral change by inducing nostalgia for the past non-gambling self. Future avenues, implications, as well as potential limitations of self-discontinuity induced nostalgia will be discussed.

Carrie Leonard

Ms. Carrie A. Leonard is a Ph.D. candidate at the University of Lethbridge. Her doctoral research is focused on the identification of individual differences that increase susceptibility to erroneous gambling-specific and paranormal beliefs. Leonard's research interests include how individual differences, such as intelligence, cognitive style, and personality, contribute to enhanced ability, various forms of psychopathology, and cognition. Her recent publications include: "The relationship between gambling fallacies and problem gambling" (2016), "Gambling Fallacies: What are they and how are they best measured?" (2015), "Characteristics of good poker players" (2015), "The development and validation of the Poker Skills Measure (PSM)" (2014), and "Prospective memory, personality, and individual differences" (2013).



Presentation Topic: *The Relationship between Gambling Fallacies and Paranormal Beliefs*

Gambling fallacies, erroneous beliefs about gambling, are prevalent in the general population. Relatively little is understood about the individual differences that lead to increased susceptibility to these fallacious beliefs. It was hypothesized that factors responsible for gambling fallacies may be similar to factors that create susceptibility to other types of fallacious beliefs, such as belief in the paranormal. Using a sample of 266 Lethbridge community members and university students, the individual differences associated with, and predictive of, endorsement of gambling fallacies were identified. Comparisons were then made between these factors and the factors predicting belief in the paranormal. Consistent with our hypothesis, a very similar set of factors was found to be predictive of belief in both gambling fallacies and paranormal phenomenon.

Darrel Manitowabi

Dr. Darrel Manitowabi is an associate professor and Director of the School of Northern and Community Studies, Laurentian University, Sudbury, Ontario. He holds a cross-appointment in the Northern Ontario School of Medicine, Human Sciences Division. He has a Ph.D in sociocultural anthropology from the University of Toronto and has published articles on Indigenous tourism and gaming, Ojibwa/Anishinaabe ethnohistory, urban Indigenous issues, and Indigenous health. He recently completed a research project examining the impact of social and economic interventions on Indigenous health and wellbeing. He is a citizen of the Wiikwemkoong Unceded Territory, and he currently resides in the Whitefish River First Nation.



Panel Discussion: Indigenous Problem Gambling Programs in Ontario: Examining the Prospect of an Indigenous-Centred Policy Framework

In this presentation I situate Indigenous gambling in Ontario in the context of history and the jurisdictional interface of the First Nation-federal-provincial relationship in gambling regulation. My emphasis is the multi-faceted Indigenous political relationships in the province and a review of the various Indigenous problem gambling programs in place. By incorporating the perspectives of Indigenous problem gambling stakeholders (service providers, researchers and leaders), I discuss pathways to navigating the Indigenous political landscape in Ontario in relation to gambling regulation and problem gambling programs with a view to proposing a unified Indigenous-centred and controlled problem gambling prevention program policy framework.

Daniel McGrath

Dr. Daniel McGrath is an assistant professor in the Department of Psychology at the University of Calgary and holds the Alberta Gambling Research Institute (AGRI) Chair in Gambling Research. His research is primarily focused on the co-morbid relationship between commonly used substances (e.g., tobacco, alcohol) and gambling behaviour as well as exploring attentional biases in gambling disorder. Most of this work involves conducting experiments in a controlled laboratory environment using drug-challenge designs and video lottery terminals. The goal of this work is to help researchers and clinicians better understand the interaction between use of addictive substances and gambling disorder. Dr. McGrath has been the recipient of numerous grants to support his research and has published over two dozen peer-reviewed journal articles.



Presentation Topic: *Psychological Factors Associated with Gambling Attentional Biases in Electronic Gambling Machine Players*

Models of addiction suggest that important associations exist between attentional bias (AB) for substance-related cues and psychological mechanisms such as craving, expectancies, and impulsivity. An AB is the tendency to preferentially attend to stimuli which have gained incentive motivational properties as a result of frequent pairing with substance use. However, little research has focused on similar relationships between these constructs and AB in disordered gambling. In this presentation, preliminary findings from a laboratory-based investigation of AB in a sample of electronic gaming machine (EGM) players will be discussed. The study employed eye-gaze tracking to measure attention to gambling-related stimuli including proportion of initial fixations, total fixation time, and first fixation dwell time. Specifically, we compared EGM players to non-gamblers on indices of AB as well as associations between AB for gambling stimuli and several psychological factors known to contribute to disordered gambling such as subjective craving, gambling expectancies, and trait impulsivity. To our knowledge, this is the first eye-tracking laboratory experiment to systematically isolate individual psychological factors that could be especially predictive of AB for gambling. Ultimately, it is expected that the results of this research will have important implications for treatment and relapse-prevention for disordered gambling by identifying potential targets for modification.

Sandeep Mishra

Dr. Sandeep Mishra is an associate professor at the Hill/Levene Schools of Business at the University of Regina. His research program is inherently interdisciplinary, encompassing diverse research questions in the broad areas of judgment and decision-making, individual differences, and health. A large portion of Dr. Mishra's research is focused on understanding decision-making under risk, including gambling.



Presentation Topic: *Minding the Gap: Inequality, Socioemotional Comparisons, and Risk-sensitivity*

Substantial epidemiological evidence shows that higher levels of income inequality are associated with a wide array of negative societal-level outcomes, ranging from greater risk-taking and crime to poorer mental and physical health. However, surprisingly little research has examined individual-level consequences of inequality. Risk-sensitivity theory, developed in the field of behavioral ecology, may help to shed light on why inequality has such wide-ranging harmful effects. Risk-sensitivity theory specifically posits that that risk-taking is a product of conditions of need (i.e., disparity between one's present and desired/goal states). In this presentation, I explore how risk-sensitivity can be applied to understanding risk-taking - including gambling - under conditions of inequality. I also address research suggesting that proximate-level emotional reactions to social comparisons and disparity can shed light on risk-sensitive decision-making specifically, and mental health (including problem gambling) more generally.

Fiona Nicoll

Associate Professor Dr. Fiona Nicoll is the AGRI Research Chair in Gambling Policy in the Department of Political Science at the University of Alberta. She is a founding member and vice-president of the Australian Critical Race and Whiteness Studies Association and editor of the inaugural issue of the *Critical Race and Whiteness Studies* journal (2005). In addition to co-editing two books in the field, *Transnational Whiteness Matters* and *Courting Blakness: Recalibrating Knowledge in the Sandstone University*, she is the author of numerous peer-reviewed articles and book chapters engaging questions of Indigenous sovereignty, whiteness, reconciliation, law, pedagogy, gambling and Indigenous art. She is completing a manuscript titled “Gambling in Everyday Life: Spaces, Moments and Products of Enjoyment” to be published by Routledge later this year.



Panel Discussion: *The Instrumentality of Human Rights for Evaluating and Shaping Gambling Policy in Canada*

This presentation examines gambling policy as an interface between Indigenous, provincial and national laws in a nation where racism and cultural genocide continue to surreptitiously define the horizon of political and human possibility. I investigate issues related to gambling provision, regulation and consumption through the prism of two political documents: the 2007 *United Nations Declaration on the Rights of Indigenous People* (UNDRIP), which Canada pledged to implement in 2016; and *Honouring the Truth: Reconciling for the Future*, the summary report and calls to action of the Truth and Reconciliation Commission, published in 2015.

I link specific articles and calls to action in these documents to three related bodies of academic literature: research on Indigenous gambling in North America; research on Indigenous law and sovereignty from scholars in Australia, North America and New Zealand; and critical race and whiteness theory. A research question that emerges from this exercise is: how do we reconcile recent Indigenous critiques of recognition and rights discourses with the potential of the TRC and UNDRIP to facilitate critical evaluations of and transformations to gambling policy in Canada? I argue that these documents should be understood, not as simple expressions or delimitations of ‘Indigenous’ political ambitions but, rather, as assertions of lawfulness brought by members of the different sovereign nations who co-authored them. I conclude with reflections on how gambling policy might be reshaped in a future where settler-colonizing institutions and individuals recognize ourselves as the addressees of these documents.

Presentation Topic (with Dr. Mark Johnson): *Conflicts of Interest in Gambling and Gaming Product Reviews*

Our paper draws on video gaming scholarship to reflect on ethical issues raised by gambling products. Our case study is a comparison of how Conflicts of Interest (COI) are negotiated in publicly accessible reviews of video games and electronic gaming machine games. We find that the chain of interest connecting video game producers to video game reviewers is comparatively transparent; beta-testing on large markets of players, together with critical feedback from consumers, clearly shapes video-gaming products and values. However, despite the complex legal, political, economic and social entanglements of gambling, the processes through which electronic gaming machines are developed, tested and reviewed remain relatively opaque. With reference to specific examples, we argue that more attention to COI issues in reviews of gambling products contributes to the project of making gambling industries, academics and political stakeholders more transparent and accountable.

Jonathan Parke

Professor Jonathan Parke is an independent research consultant at Sophro and has adjunct positions at the University of Salford, Manchester, and the University of Bangor, Wales. He has served as a principal investigator on a variety of government, industry, and research-council sponsored research projects most of which focusing on gambling behaviour. In his previous role, he was the Director of Commissioning for the Responsible Gambling Trust (RGT) in Great Britain. In terms of education and training, Dr. Parke has developed, delivered, and managed university-level courses and corporate training programs in gambling studies over the last decade including undergraduate and postgraduate degree programs in Gambling Studies at the University of Salford.



Presentation Topic: *Assessing the Role of Structural Characteristics in Problematic EGM Play*

By understanding how the structural characteristics of gambling games can influence gambling behaviour, stakeholders can be better equipped to promote and evaluate responsible gambling and harm-minimization strategies. In this presentation, I will review some of the key evidence and theory regarding the structural characteristics of electronic gaming machines (EGMs) and their potential associations with problematic play. The review will include the theory and evidence concerning different groups of structural characteristics including parameters relating to winning and losing, payment, game speed, and the payment process. While considerable evidence gaps impede progress in player protection, there are areas where work can start immediately, and these will be discussed.

Garry Smith

Dr. Garry Smith is a University of Alberta Professor Emeritus and a gambling research specialist with the Alberta Gambling Research Institute. Dr. Smith has researched gambling public policy issues for over 35 years and his scholarly contributions include; numerous articles in academic journals, book chapters, and presentations at national and international conferences. Dr. Smith has also served as an expert witness in gambling-related civil and criminal trials on numerous occasions.



Presentation Topic: *The Bemused Observations of a Veteran Battle-Scarred Gambling Researcher*

The presentation will feature three themes: a brief chronology of the evolution of gambling in Canada; a discussion on the history of gambling research in Canada; and my thoughts on where we are now in terms of how gambling is operated and regulated in Canada. The areas to be covered include: 1) Gambling in Canada from 1892 to 1969, 1969 to 1985, and 1985 to the present. 2) How my own gambling research agenda was established, how gambling research capacity evolved, and how research priorities developed. 3) The extent to which research has impacted Canadian gambling operations and regulations and a discussion on what remains to be done in terms of commercial gambling operators adopting harm-minimization practices that protect consumers from unnecessary and entirely foreseeable harm.

Sherry Stewart

Dr. Sherry Stewart holds a Tier 1 Canada Research Chair and is a professor in the Departments of Psychiatry, Psychology and Neuroscience, and Community Health and Epidemiology at Dalhousie University. Dr. Stewart is also a licensed clinical psychologist in the province of Nova Scotia. She is well known for her research on psychosocial factors contributing to problem gambling, alcohol misuse, and the comorbidity of emotional and addictive disorders. She is a member of the Scientific Advisory to the Canadian Centre on Substance Abuse, and editor-in-chief for the *Journal of Gambling Issues*. Dr. Stewart founded the Centre for Addiction Research at Dalhousie (CARD), a virtual centre at Dalhousie fostering collaborations among faculty members conducting research on addiction.



Dr. Stewart sits on the executive committee of the Quebec-Maritimes node of the CIHR-funded Canadian Research Initiative in Substance Misuse (CRISM) and leads the Maritime component of this node. She also co-directs the new MSc program in psychiatry research at Dalhousie. Dr. Stewart receives funding from several research agencies including the Social Sciences and Humanities Research Council, the Canadian Institutes of Health Research, the Nova Scotia Health Research Foundation, the National Center for Responsible Gambling, the Manitoba Gambling Research Program, Gambling Awareness Nova Scotia, and the Canadian Foundation for Innovation. Her current research examines implicit cognition in addiction, different motives for addictive behaviors including gambling, and social influences on addictive behaviors within romantic couples and the broader social network.

Presentation Topic: *Implicit Cognition in Problem Gambling: New Horizons for Understanding and Intervention?*

Implicit cognition refers to cognitive processes that are relatively automatic and that can occur outside of an individual's conscious awareness. While there is an established history of the study of the role of such processes (e.g., attentional bias, implicit memory associations) in other addictive behaviors (e.g., alcohol misuse), their study in the problem gambling field is more recent. The first purpose of this talk is to discuss methods used to assess several such implicit cognitive processes in problem gambling with illustrative examples from my lab. The second purpose is to introduce the audience to how to intervene with such implicit cognitive processes (cognitive bias modification) as a potential novel method for treating problem gambling with an illustrative example from intervention work that is ongoing currently in my lab. The promises and limitations of implicit cognition for increasing understanding of problem gambling and for providing novel intervention opportunities will be discussed.

Rachel Volberg

Dr. Rachel Volberg has been involved in epidemiological research on gambling and problem gambling since 1985 and has directed or consulted on numerous gambling studies throughout the world. Dr. Volberg is currently the Principal Investigator on the two cornerstones of the Massachusetts Gaming Commission's research agenda, including the Social and Economic Impacts of Gambling in Massachusetts (SEIGMA) study and the Massachusetts Gambling Impact Cohort (MAGIC) study. In addition to her work in Massachusetts, Dr. Volberg is a member of several international research teams conducting large-scale longitudinal cohort studies to identify predictors of transitions into and out of gambling and problem gambling.



Presentation Topic: *Monitoring Gambling Impacts in Massachusetts: Taking Stock in 2018*

In November 2011, an [Act Establishing Expanded Gaming in the Commonwealth](#) of Massachusetts was signed into law (Chapter 194 of the Acts of 2011). This legislation permits casinos and slot parlors in Massachusetts under the regulatory auspices of the Massachusetts Gaming Commission (MGC). Section 71 of the Expanded Gaming Act requires the MGC to establish an annual research agenda to assist in understanding the effects of casino gambling in Massachusetts and minimizing the negative impacts.

This presentation focuses on social and economic impacts identified in the initial phase of the study, from 2013 to 2017, associated with the construction and first two years of operation of the slot parlor in Plainville, MA, and the first phase of construction of the two resort-style casinos in the Western Massachusetts and Greater Boston regions. By highlighting the positive and negative impacts of the introduction of a slot parlor in one U.S. jurisdiction, the presentation will underscore the importance of understanding the full range of impacts of gambling expansion and highlight the need to understand the balance of those impacts on individuals and communities.

Sheila Wahsquaiakezhik

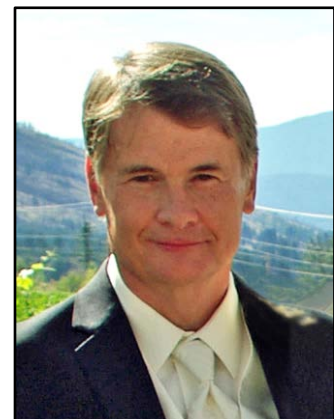
Sheila Wahsquaiakezhik, MES, is a member of the Batchewana First Nation of Ojibway's and is the founder of Indige-Spheres to Empowerment, an Indigenous NGO located in northern Ontario. Until recently, Sheila worked at Nishnawbe Aski Nation (NAN) in Thunder Bay, Ontario, as the Gambling Awareness Program Coordinator. Prior to her work at NAN, Sheila worked for the Responsible Gambling Council as a Service Coordinator in the Central North Region RGRC and Coordinator in the Central North Region RGRC and Coordinator of an Aboriginal Outreach Initiative. She holds a Master's degree in Environmental Studies from York University. In the past, Sheila developed and managed a land-based program for an urban indigenous treatment centre and implemented a palliative care training project for an urban indigenous ASO. Currently, Sheila is working on an anti-human trafficking initiative and continues to work with Indigenous youth from the north.

Panel Discussion: *Why Changes Are Needed*

I will show a series of images of a project from Northern Ontario that demonstrates why methodological changes are needed in how research is done in our community.

Robert Williams

Dr. Robert Williams is a professor in the Faculty of Health Sciences, University of Lethbridge, and also a research coordinator for the Alberta Gambling Research Institute. Dr. Williams teaches courses on gambling; provides frequent consultation to government, industry, the media, and public interest groups; and regularly gives expert witness testimony on the impacts of gambling. Dr. Williams is widely published and is a leading authority in the areas of: prevention of problem gambling, the etiology of problem gambling, Internet gambling, the socioeconomic impacts of gambling, the proportion of gambling revenue deriving from problem gamblers, the prevalence and nature of gambling in Aboriginal communities, and best practices in the population assessment of problem gambling.



Presentation Topic: *Gambling Fallacies of Gambling Researchers*

Considerable work has been conducted on identifying erroneous beliefs among gamblers ('gambling fallacies') that are thought to be etiologically related to the development of problem gambling. However, every field, including gambling research, operates within a zeitgeist that also creates blind spots. Historically, things that we hold to be true receive much less scrutiny than things of which we are uncertain. As a consequence, these 'truths' are often our most important fallacies and are the things that create the greatest impediment to scientific progress. This presentation will review several of the central beliefs of gambling researchers and will argue that most of these beliefs are erroneous and serve as impediments to true progress in our field.

Igor Yakovenko

Dr. Igor Yakovenko is a postdoctoral fellow in the School of Public Health, University of Alberta. His research focuses on the associated features and determinants of disordered gambling and substance use, co-morbidity of addiction and other psychiatric disorders (particularly schizophrenia), and implementation of evidence-based online platforms to increase access to care. A major goal of his research is to account for real-world conditions of mental health treatment delivery, such as frequent co-morbidity, in order to generate clinical guidelines and recommendations for integrated care of addiction and mental health.



Presentation Topic: *Mechanisms of Action in Disordered Gambling: Predictors of Chasing the Loss and Clinical Applications*

One of the hallmark features of disordered gambling is 'chasing', defined as an urgent need to continue playing within a single gaming session or come back at another time to attempt to recover lost money. Despite being a central phenomenon in maintaining gambling addiction, limited research has been conducted to validate chasing as a diagnostic criterion or to delineate specific factors associated with increased chasing behaviour. This presentation will review results from two studies that examined chasing, comparing patterns between disordered and social gamblers, as well as proposing chasing questions as a short-hand screener for gambling problems in psychiatric populations. The results will also be used to challenge the utility of in-lab gambling experiments as a proxy of real-world conditions. Implications for research, policy and treatment of disordered gambling will be discussed and recommendations for future research will be provided.
