

# GAMBLING RESEARCH

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## Introducing Dr. Carrie Leonard: Project Coordinator for the Institute's National Study of Gambling in Canada

Over the course of the past year Dr. Carrie Leonard has been working as Project Coordinator for the Institute's national investigation of gambling and problem in Canada<sup>1</sup>. In this position, she has been a key member of a team of academic researchers involved in the collection and analysis of data for the studies being undertaken for the project. Dr. Leonard recently answered the following questions related to her interest in gambling research and her involvement in the national investigation of gambling in Canada.



### What is your academic background and when did you first become interested in gambling research?

Since my undergraduate years, my research focus has remained on individual differences and the role of these differences in various psychological phenomena. These have included sanction judgments, prospective memory, poker skill, and, most recently, erroneous belief

susceptibility. My interest in individual differences as they relate to gambling began with my research on poker skill. I found that highly skilled poker players demonstrated fewer gambling fallacies despite exhibiting greater problems with gambling<sup>2</sup>. This finding directed my research focus to the investigation of erroneous beliefs<sup>3</sup> and their differing effects on individuals<sup>4</sup>.

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The primary aim of the Alberta Gambling Research Institute, a consortium of the Universities of Alberta, Calgary, and Lethbridge, is to support academic research related to gambling.

### MISSION

To facilitate evidence-based broad research that informs gambling public policy and educates Albertans and the wider audience about the effects of gambling.



### **What interested you in the role of Project Coordinator for the national study?**

As Project Coordinator I'm provided with an unparalleled opportunity to work in collaboration with some of Alberta's top gambling researchers and engage in a large-scale project that is novel and uniquely multidimensional. Though I'd previously worked with principal investigator Rob Williams (U. of Lethbridge), it's the first time I've worked with David Hodgins (U. of Calgary), Fiona Nicoll (U. of Alberta) and the other co-investigators on the research team. Each of the collaborators have their own areas of expertise which differ from my own so it's also proving to be a fantastic learning experience.

### **Can you tell us about more about your research regarding erroneous gambling beliefs? How are they studied?**

My current program of research focuses on both gambling-specific and paranormal erroneous beliefs. Most specifically, I'm interested in the different predictors of erroneous beliefs between individuals, the consequences of these beliefs, and how these beliefs might be corrected. I've been using an instrument called the Gambling Fallacies Measure<sup>5</sup> to study erroneous beliefs. It employs a series of ten multiple-choice response options. Respondents who select more correct responses are deemed to be more resistant to gambling fallacies. In the

context of erroneous beliefs specific to gambling, my research has demonstrated several findings. First, gambling fallacies are best predicted by both an individual's reliance on intuitive thinking style and their lack of probabilistic reasoning ability. Second, gambling fallacies are a weak but robust predictor of subsequent gambling problems. And finally, interventions designed to reduce erroneous beliefs have shown promising, albeit early, results.

### **Are erroneous beliefs more common within a specific gambler demographic or particular gambling format?**

Gambling fallacies are, in fact, common throughout the population. All people are susceptible to gambling fallacies and we're all capable of forming false beliefs outside of what has been proven by natural science. I'm working on demonstrating that there are certain gambling games that attract those with gambling fallacies but it's a chicken-and-egg situation to determine which existed first. At present, it's not possible to conclusively determine such a relationship without longitudinal studies. I think it could be possible that skill-based game players might be less susceptible and that certain gambling features like stop buttons on slot machines might induce false beliefs.

## **What Are Erroneous Gambling Beliefs?**

Erroneous beliefs about gambling are mistaken beliefs about how gambling works (e.g., the belief that certain items may be "lucky"). They are thought to have a role in the onset of gambling and the development of problem gambling. These beliefs are also known as "gambling fallacies" or "cognitive errors/distortions."

## Dr. Leonard's Involvement in the Institute's National Study

### **What is the scope of the national study and what do you expect it to achieve?**

With the data obtained throughout this project we anticipate that we'll be able to achieve four main objectives: (1) to document current gambling prevalence rates with a truly representative national sample of gamblers; (2) to comment on the similarities and differences in gambling and problem gambling by province; (3) to explore Canadians' perspectives on gambling engagement, harms, current gambling availability, and opinions on the regulation and provision of gambling across the country, and; (4) to provide qualitative context for understanding gambling in Canada using data from our key informant subgroup investigations (i.e., casino patrons, First Nation leaders, provincial stakeholders, and problem gamblers in treatment) which will complement data from our larger population based samples.

### **What data has now been collected for the national study of gambling?**

Data collection from 28,000 Canadians participating in the rapid response gambling module of the Canadian Community Health Survey (CCHS) was completed in December, 2018. This data will be available from Statistics Canada for analysis by mid-July and it will allow us to determine the prevalence rate of gambling and problem gambling in Canada. The gambling module itself is a short questionnaire developed by national gambling researchers that was added into the 2018 CCHS annual survey and administered by Statistics Canada.

The other large survey being undertaken as part of the national study is the collection of baseline gambling data from 10,198 Canadians from across the country. This first of two data collection waves for this survey was completed in late 2018 by Leger, a Canadian market research company. Leger has access to an online participant pool of individuals numbering in the thousands who complete surveys for small cash incentive payments. Participants taking part in the survey were those who had gambled in the past one-month. As such, there is a high likelihood that potential problem gamblers and those with comorbid conditions will be overrepresented in the sample. A second, follow-up wave of the data collection from these same participants is scheduled for completion in summer 2019. Interestingly, because the first data collection happened prior to

cannabis legalization in Canada it should be possible to determine whether legalization had any effect on Canadians' gambling behaviour.

### What can you tell us about the status of data collection from the first two key informant surveys?

In addition to the two large national surveys, a survey of provincial gambling stakeholders (e.g., casino executives, regulators, etc.) was completed in Spring, 2019 and a survey of casino patrons at venues across the country was initiated in May. Smaller surveys like these will allow us to obtain responses from individuals with unique perspectives on gambling in order to contextualize the state of gambling in Canada.

They are asked to engage in a survey that includes both quantitative and qualitative questions. A pilot data collection trial that was run in June at River Cree Resort & Casino near Edmonton yielded a 30% response rate despite encountering logistical difficulties. Engaging and incentivizing patrons to stop and complete a survey was a challenge given that people were leaving the casino when we approach them. We were also struck by the spectrum of languages we encountered in addition to English and French. We're planning to take into consideration what we learned from conducting the pilot survey as we survey casino patrons in other provinces.

In-person interviews of First Nations leaders and a survey of problem gamblers in treatment are still in the planning phase but are expected to begin later this year.

### When might people expect to see the first research results from the national project?

I expect that data analysis for the Statistics Canada's CCHS data and for the key informant survey of gambling stakeholders will be complete by September so the first reports are expected in late fall. All reports will be posted on our website as they become available.

*Dr. Carrie A. Leonard is the Project Coordinator for the National Gambling Project and a member of the Psychology Department at the University of Lethbridge. Her doctoral research focused on the identification of individual differences that increase susceptibility to erroneous gambling-specific and paranormal beliefs. She can be contacted at <carrie.leonard@uleth.ca>.*

- 1 For more about the project, see <https://www.ucalgary.ca/research/national-gambling-study/>
- 2 Leonard, C. A., & Williams, R. J. (2015). Characteristics of good poker players. *Journal of Gambling Issues*, 45-68. <http://dx.doi.org/10.4309/jgi.2015.31.5>
- 3 Leonard, C. A., & Williams, R. J. (2019). Fallacious beliefs: Gambling specific and belief in the paranormal. *Canadian Journal of Behavioural Science*, 51(1), 1-11. <http://dx.doi.org/10.1037/cbs0000113>
- 4 Leonard, C. A., & Williams, R. J. (2016). The relationship between gambling fallacies and problem gambling. *Psychology of Addictive Behaviors*, 30(6), 694-704. <http://dx.doi.org/10.1037/adb0000189>
- 5 Leonard, C. A., Williams, R. J., & Vokey, J. (2015). Gambling fallacies: What are they and how are they best measured? *Journal of Research Therapy and Addiction*, 6(4), 256. <http://dx.doi.org/10.4172/2155-6105.1000256>

The survey of gambling stakeholders was completed online by participants and it collected both quantitative and qualitative responses. I'm fairly sure that we're amongst the first to undertake this type of study on as there were no methodologies published that could provide a framework on which to build. Finding contact information for survey participants was a difficult and time-consuming task. Obtaining responses from these informants was also challenging as these people have extremely busy schedules. Our persistence was ultimately rewarded as we ended up with a very credible participant response rate of 65%.

Our in-progress casino patron survey involves recruiting gamblers by approaching them in person as they leave a participating casino venue.



## 2019-2020 Scholarship Recipients

The Institute is pleased to announce the following 2019-20 Scholarship and Research Allowance Award Recipients:



### **Jami Albright-Tolman**

**Program:** PhD (Health Sciences, U. of Lethbridge)  
**Supervisor:** Dr. Robert Wood

### **Megan Cowie**

**Program:** PhD (Psychology, U. of Calgary)  
**Supervisor:** Dr. David Hodgins

### **Julie Gorenko**

**Program:** PhD (Clinical Psychology, U. of Calgary)  
**Supervisor:** Dr. Candace Konnert

### **Catherine Laskowski**

**Program:** PhD (Neuroscience, U. of Lethbridge)  
**Supervisor:** Dr. David Euston

### **Josh Leota**

**Program:** Master's (Psychology, U. of Alberta)  
**Supervisor:** Dr. Kyle Nash

### **Dallas Novakowski**

**Program:** PhD (Business, U. of Calgary)  
**Supervisor:** Dr. Mehdi Mourali

### **Gillian Russell**

**Program:** PhD (Psychology, U. of Lethbridge)  
**Supervisor:** Dr. Robert Williams

### **Magdalen Schluter**

**Program:** PhD (Psychology, U. of Calgary)  
**Supervisor:** Dr. David Hodgins

### **Maryam Sharif-Razi**

**Program:** PhD (Clinical Psychology, U. of Calgary)  
**Supervisor:** Dr. David Hodgins

### **Maegan Trottier**

**Program:** Master's (Health Sciences,  
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**Supervisor:** Dr. James Sanders

### **Sean C. Wilcox**

**Program:** PhD (Cultural, Social & Political  
Thought, U. of Lethbridge)  
**Supervisor:** Dr. Robert Wood

# Critical Gambling Studies: A New Open-Access Journal

Institute Research Coordinator Dr. Fiona Nicoll (Dept. of Political Science, U. of Alberta) recently announced the launch of a new journal entitled Critical Gambling Studies. It is an open access, double-blind peer-reviewed journal that will be published bi-annually and hosted by the University of Alberta Libraries. Journal co-editors are Dr. Nicoll and Dr. Mark R. Johnson (Dept. of Political Science, U. of Alberta). Critical Gambling Studies welcomes original research and writing from researchers working in a wide range of academic disciplines. The editors are also keen to consider interdisciplinary approaches to gambling research within an activist tradition.

Visit the journal's web site to learn more about journal, read the author guidelines or submit your manuscript.

<https://criticalgamblingstudies.com/index.php/cgs>

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\*The Institute is funded by the Alberta government.

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ISSN: 1911-8724 (Online)  
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