

GAMBLING RESEARCH



Self-Help Programs for Gambling Problems: An Interview with PhD Candidate Brad Brazeau



What is your academic background and how did you become interested in gambling research?

I earned my BSc in Psychology at the University of Saskatchewan in 2019 and, while I'd planned to go to medical school for psychiatry, once I got a taste of research (supervised by Dr. Valerie Thompson), I couldn't help but pursue graduate training. I received my MSc in Clinical Psychology from the University of Calgary in 2021, and I'm now in my third year of the Clinical Psychology PhD program under the supervision of Dr. David Hodgins.

My honours thesis was related to cognitive science and adult attachment – quite far removed from gambling research! I was, however, working as a bartender in a local pub at this same time, and thus regularly engaged with people who gambled. I noticed that, while the pub had strict rules for limiting people who had consumed too much alcohol, there were no protective measures or procedures in place for those suffering gambling harms in the same context. This was curious to me given the harms I witnessed regularly. Some patrons would spend more time gambling than I would spend working my shift, and not because they were enjoying it. Others

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.

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would demonstrate clear superstitions or fallacies – something I was familiar with given my background in cognitive science – such as believing in their lucky machine, rubbing the screen for good luck, or exclaiming that they're due for a win. Still others would become frustrated after losing money and argue with staff, claim the VLTs were rigged, damage the machines, or leave in tears. Some of those patrons were people I came to know and care about, so it felt imperative to get involved in gambling-related research and harm reduction.

Your Institute-supported graduate student research involved validating a new screening measure based on DSM-5 Gambling Disorder criteria using the Mechanical Turk (MTurk) crowdsourcing platform to recruit problem gamblers. What is the importance of that investigation and what were its findings?

It is essential that the tools we use to measure psychological constructs are reflective of the ways we understand them. Prior to our study, the screening measure we used (the NODS) had only been validated on the diagnostic criteria from the previous version of the DSM, published in 1994. It had also been nearly a decade since the DSM-5 was released in 2013. At that time, there were a few major changes to how we

think about gambling problems. First, the disorder was renamed from Pathological Gambling to Gambling Disorder, with the aim of reducing stigma. Second, the disorder was reclassified as an Addictive Disorder rather than an Impulse Control Disorder, reflecting the emerging knowledge that problem gambling is more akin to substance-related addictions in terms of etiology, consequences, and lived experience. Finally, the tenth criterion (i.e., engagement in illegal activities to fund gambling) was removed because it added no incremental value to the other criteria; if someone was engaged in illegal activities to fund gambling, they probably already met all the other criteria. Overall, our study found that the updated NODS was valid, reliable, and reflective of the revised understanding of gambling problems.

For More Information: Gambling Research Exchange Ontario (GREO) has published a brief [research snapshot](#) about this investigation. The full article was published in *Addictive Behaviors*. Brazeau invites those interested in using the updated NODS to email him at brad.brazeau@ucalgary.ca.

What was your experience like using crowdsourced data for gambling research?

This was my first-time recruiting participants from a crowdsourcing platform, so I learned a lot. It was a challenge to strike a balance for appropriate compensation – too little would be unfair and hinder recruitment, but too much could incentivize disingenuous responses or enable a population with potentially high financial motivations. It took some adjustments to find the right balance. I was also surprised at how quickly recruitment was in the first weeks, followed by a remarkably slower pace after that. While the quality of data was generally strong, I had to be thoughtful in selecting eligibility criteria, filtering out internet bots, and ensuring participants were attentive and honest in their survey responses. I would also note that crowdsourced participants are not always representative of the population of interest, so care must be taken when conducting this research. For instance, the prevalence of gambling problems on MTurk tends to be a bit higher than that of the general

population. While crowdsourcing may not be suitable for all research, it is certainly an efficient and cost effective way to conduct surveys when appropriate.

Another of your gambling research investigations, in collaboration with Dr. David Hodgins, evaluated the effectiveness of an online self-help program in reducing gambling problems. In it, individuals who used only an Internet self-help workbook were compared with those who also received a motivational interview.

What is it about self-help programs that makes them of interest to gambling researchers?

Self-help programs like our online workbook are an interesting topic for several reasons. People who experience gambling harm are particularly reluctant to seek professional help, partly due to shame and stigma, but also because they prefer to tackle their problems privately and independently. Self-help programs, especially those delivered via the Internet, lower the threshold for treatment access because they don't require synchronous, face-to-face, and prolonged contact with a professional as would typically be required with psychotherapy. On the treatment provider side, these programs are also cost-effective, resource efficient, and very useful for many clients with gambling concerns. The challenge, however, is that user engagement with self-help programs remains remarkably low despite their high demand. Our hope was that a single motivational interview could increase engagement given that it has been a successful adjunct to the paperback version of our online workbook.

What did you find out in this study?

Our main finding was that everyone seemed to benefit from the online workbook regardless of treatment group, and especially within the first three months. People spent fewer hours, days, and dollars gambling. On average, they reduced their NODS scores (i.e., number of criteria met for Gambling Disorder) by three criteria. The benefits also translated to general mental health, as people tended to experience meaningful reductions in anxiety, depression, and general distress.



We also found that the number of workbook modules completed was associated with greater reductions in gambling behaviors, which provides further evidence that treatment engagement is important for treatment success. However, about 40% of participants did not return to use the workbook after their initial login, and only 11% completed all of the workbook modules.

Finally, we asked participants to evaluate our workbook on a survey with rankings and open-ended questions. They generally found the information and activities to be useful, practical, informative, and trustworthy. They recommended that our workbook be more interactive, engaging, personalized, and aesthetically appealing, which mirrors the feedback similar interventions have received from users.

Who were your participants and how were they recruited?

We recruited adults across Canada seeking help for their gambling from social media and other websites. We also reached out directly to participants from previous studies that indicated interest in future contact. Our sample was generally representative of treatment-seeking Canadian adults (i.e., most had exceeded the Low-Risk Gambling Guidelines and met criteria for Gambling Disorder), although a few differences stand out. First, our sample had significantly less experience with previous gambling treatment compared to prior studies. Second, they were solely recruited via the Internet, rather than supplemented through posters or treatment providers getting the word out. Finally, they had a much higher

rate of unemployment than typical since recruitment occurred primarily during the pandemic.

Did you detect any difference between those who received the motivational interview versus those who did not?

On the whole, we did not detect any differences, as both groups improved equally over time. There were two exceptions in favour of the group which received a motivational interview. First, they were much quicker to reduce their expenditures per gambling episode, although the other group caught up to them by 12 months. Second, they experienced a greater reduction in general distress, and they maintained this difference throughout the study period. Importantly, there were no group differences in workbook engagement. These findings imply that while engagement is important for treatment success, motivational interviewing did not increase engagement, although it is not immediately clear why. One explanation could be that the motivational interview group was subject to a common treatment barrier (i.e., lack of privacy) whereas the other group had zero verbal contact with the research team. The lack of privacy could have thus cancelled out any improved engagement derived from the motivational interview. Alternatively, participants and/or therapists may have been experiencing "Zoom fatigue" which could have limited the effectiveness of the motivational interviews given their virtual delivery.

What were the key takeaways for improving the effectiveness of online self-help programs for gambling disorder?

Although we generally did not find group differences, it is important to note that online self-help programs for gambling disorder are still effective. In line with previous research, both groups experienced meaningful reductions in their gambling behaviors and improvements in mental health. We also found further evidence that more treatment engagement leads to more treatment success, particularly in terms of the number of modules completed. Finally, we highlight that the problem of treatment engagement remains, and perhaps the focus should shift from making participants more engaged to making programs more engaging.

For More Information: For those interested in the study methods, the open-access [protocol](#) has already been published in *Trials*. The 3-month outcomes were also reported in Brazeau's master's thesis. The investigators are now in the process of publishing the study's 12-month outcomes and are also collecting data on the 24-month outcomes, which they plan to publish in 2024.

Why is "user engagement" an important concept to further investigate?

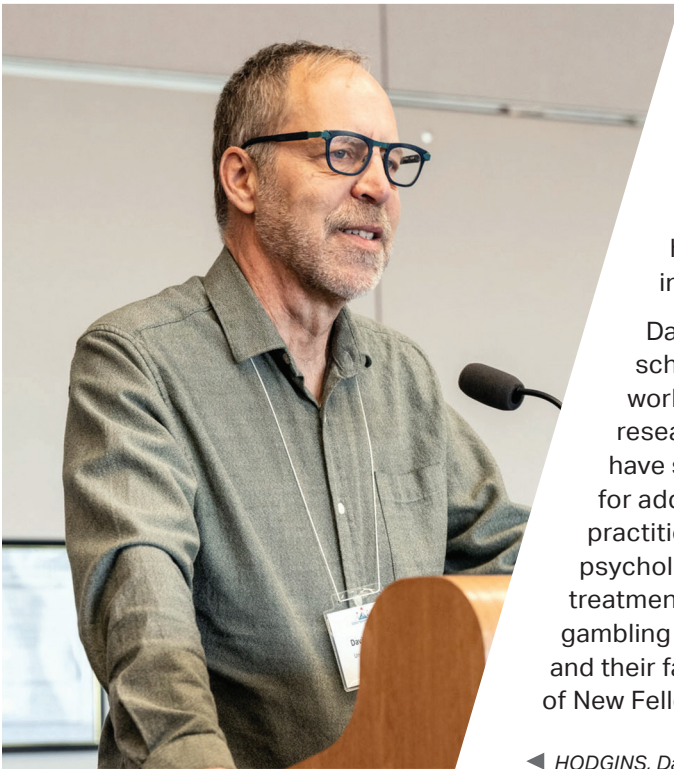
User engagement refers to both the objective usage of a treatment program (e.g., number of modules completed, number of logins) as well as the subjective evaluation of it (e.g., user ratings of the usefulness, trustworthiness, appeal, degree that it sustains their interest and attention, etc.). As I mentioned, our trial found that nearly half of gamblers never returned to the workbook after they first logged in. As it turns out, this problem is not unique to gambling, but rather spans all addictions. It's a big problem too, since people need to engage in treatments for them to work. The million-dollar question for researchers is, if self-help programs are so highly demanded, then why aren't more people actually using them when they sign up?

What other areas of gambling-related research are you interested in exploring?

I've become very interested in modelling complex dynamics at much smaller time scales than can typically be done with standard randomized controlled trials. As I noted, people experienced the most change in our trial before the first follow-up survey was given. We also know that emotions, gambling triggers, urges, motivation, and other psychological variables fluctuate day-to-day, hour-to-hour, and sometimes minute-to-minute – and there are differences among people in those fluctuations! Perhaps we would have found group differences in our trial if we were able to zoom in and model those idiosyncratic, nonlinear, and complex dynamics at a smaller time scale. This is where I think those new approaches to data collection and statistical modelling will be tremendously informative over the coming years, and I'm excited to be a part of that.

I'm happy to talk further or answer questions if anyone is interested. I'm open to potential collaborations as well. Please feel free to reach out via email brad.brazeau@ucalgary.ca or, better yet, talk to me at the next AGRI conference!

Dr. David Hodgins Named as Fellow of Royal Society of Canada



The Royal Society of Canada (RSC) announced its new Fellows for 2023 and Institute Research Coordinator Dr. David Hodgins was among those to receive the prestigious honour. Fellows of the RSC are peer-elected scholars who have made remarkable contributions in the arts, the humanities and the sciences, as well as in Canadian public life.

David Hodgins is one of the world's most eminent scholars of addiction studies whose influential work advances scientific inquiry and practice. His research and leadership in international initiatives have set directions in science and interventions for addictions, profoundly changing how scholars, practitioners, and policymakers understand the psychology of gambling. Hodgins' widely adopted treatment and relapse prevention interventions for gambling problems have helped thousands of individuals and their families worldwide. [Source: RSC Announcement of New Fellows].

◀ HODGINS, David | Department of Psychology, University of Calgary

Research Resource Spotlight

The Greo Evidence Centre

The Greo Evidence Centre

is a free-to-use digital collection of 5,000+ research-related resources about gambling and problem gambling from around the world. Materials found in this searchable collection are relevant for policymakers, students, researchers, treatment and prevention service providers, industry professionals and anyone else with an interest in gambling research.

What specific types of materials does it contain?

The Evidence Centre houses three distinct types of materials:

1. **Research Snapshots** – These items are typically two-pages in length and provide a “plain language” summary of both peer-reviewed journal articles and research reports. They aim to highlight key information to enable readers to quickly digest what the research is about, what the researchers found, how it can be used, and its source of funding. All snapshots are written by trained plain language writers from York University's Knowledge Mobilization Unit. Snapshots are also sent to the original authors for approval prior to online publication.

The screenshot shows the Greo Evidence Centre interface. At the top is the Greo logo and a navigation menu with links: About Us, Services, Resources, Partners, and Contact. Below the navigation is a blue banner with the text "NEWS: The impact of the RG Check program on improvements at casinos". The main content area is titled "Evidence Centre" and includes a search bar with the text "agri". To the left of the search bar are filters for "Type" (Datasets (2), Specialized Resources (8)) and "Author" (Author name). Below the search bar, there is a section for "The AGRI National Project: Online Panel Study" with details about the author(s), publisher, and year published.

At present, there are 2,000+ snapshots available in the database and this number continues to grow at a rate of approximately 25 new snapshots per month. Digital object identifiers (DOIs) are provided for those interested in locating the articles as originally published.

2. **Datasets** – Datasets are collections of raw statistics and information generated by research studies and making them available to other investigators allows them to re-analyze the collected data. The Evidence Centre provides a convenient way for researchers to find details about the 28 available gambling-related datasets that Greo has itself "housed" on behalf of dataset creators in their data repository. Two AGRI-produced datasets housed by Greo are [The AGRI National Project: Online Panel Study](#) (2022) and the [Leisure, lifestyle & lifecycle project \(LLLP\): A longitudinal study of gambling in Alberta](#) (2015). In addition to these locally-housed datasets, the

Evidence Centre also contains links to an additional 93 gambling datasets hosted in other repositories across the world.

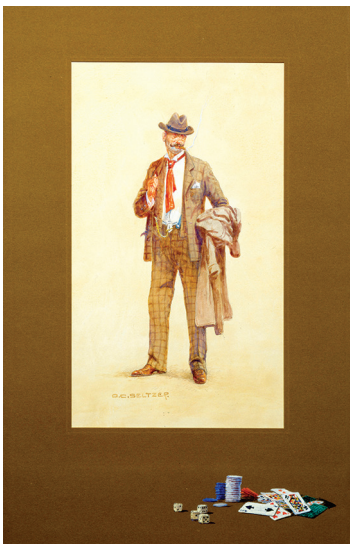
3. **Specialized Resources** – Every year a great deal of credible material related to gambling (e.g., white papers, government reports, brochures, webinars, etc.) is made available on the Internet. This "grey literature," which can be difficult to locate, is also included in the Evidence Centre database. Each month, Greo's resource specialists conduct an "environmental scan" to identify these specialized gambling resources and catalogue them into their growing online collection. As of writing, there were more than 1,900 items which have been assigned gambling-specific keywords and subject categories to facilitate search and retrieval.

Those interested in keeping track of new items as they are added to the Evidence Centre may [sign up for an email "alert"](#) on a monthly or quarterly basis.

The Faro Layout in the Mint Saloon, Great Falls, Montana / Olaf Carl Seltzer

The gambling game of faro was played in France as early as the 17th century and eventually became very popular on Mississippi riverboats and on the Western Frontier. The game survived late into the 20th century but its slow action combined with its low return for the casinos caused houses to drop faro in favor of games such as the increasingly popular blackjack.¹

Seltzer, Olaf. *The Faro Layout in the Mint Saloon, Great Falls, Montana*. 01.769. 1934. Tulsa: Gilcrease Museum.



Gambler / Olaf Carl Seltzer

Olaf Seltzer (1877-1957) was born in Denmark but moved to the United States in 1892 and settled in Great Falls, Montana, where he worked briefly as a ranch hand and was apprenticed as a machinist with the Great Northern Railroad. During this time he sketched First Nations people, wild game, and various frontier characters, usually in pen and ink or pencil. In 1897 he met Charles M. Russell and thereafter spent a great deal of time with the elder artist at his studio or traveling about the countryside on sketching trips.²

Seltzer, Olaf. *Gambler*. 0237.1244. 1928 - 1931. Tulsa: Gilcrease Museum.

¹ Thompson, W. N. (2015). *Gambling in America: An encyclopedia of history, issues, and society*. Bloomsbury Publishing.

² Hunt, D. C. (1998). Seltzer, Olaf Carl (1877-1957). In H. Lamar (Ed.), *The new encyclopedia of the American west*. Yale University Press.

Announcement of Graduate Scholarship Recipients 2023/24

The Institute is pleased to announce eleven Scholarship and Research Allowance Award Recipients for 2023/24:



- Almeida, Rafael**
Project: To luck and beyond: How sensitivity to context might help shape players' behaviours.
Program: Master's (Psychology, U. of Alberta)
Supervisor: Dr. Dana Hayward
- Bajaj, Deepika**
Project: Emotion regulation, eating pathology, and gambling in men.
Program: PhD (Psychology, U. of Calgary)
Supervisor: Dr. Kristin von Ranson
- Brazeau, Bradley**
Project: Maximizing user engagement with technology-mediated self-guided interventions for gambling problems.
Program: PhD (Clinical Psychology, U. of Calgary)
Supervisor: Dr. David Hodgins
- Ethier, Ashley**
Project: Substance use and gambling disorder have similar clinical features and commonly co-occur.
Program: PhD (Psychology, U. of Calgary)
Supervisor: Dr. David Hodgins
- Gooding, Nolan**
Project: Lower-risk gambling guidelines: Correlates of adherence and their prospective validity.
Program: PhD (Psychology, U. of Calgary)
Supervisor: Dr. David Hodgins
- Jantz, Bethany**
Project: Exploring the impact of social context and modality on social decision making: A comparative study.
Program: Master's (Kinesiology, Sport and Recreation, U. of Alberta)
Supervisor: Dr. Craig Chapman
- Jung, James**
Project: Effects of intimate partner violence on problem gambling among new parents during the pandemic.
Program: PhD (Clinical Psychology, U. of Calgary)
Supervisor: Dr. Lianne Tomfohr-Madsen
- Le May, Jonathan**
Project: The impact of probability and pace-of-play on the allure of gambling machine reward schedules.
Program: Master's (Neuroscience, U. of Lethbridge)
Supervisor: Dr. David Euston
- Leslie, Diandra**
Project: An examination of gambling behaviours among Canadian university students.
Program: PhD (Psychology, U. of Calgary)
Supervisor: Dr. Daniel McGrath
- Silang, Katherine**
Project: Pregnancy during the pandemic: Evaluating parenting-related distress.
Program: PhD (Psychology, U. of Calgary)
Supervisor: Dr. Lianne Tomfohr-Madsen
- Tuico, Kyle**
Project: Predictors of cryptocurrency ownership: Conspiratorial thinking and gambling fallacies.
Program: Master's (Psychology, U. of Calgary)
Supervisor: Dr. Daniel McGrath

MARK YOUR CALENDAR FOR THE 2024 AGRI CONFERENCE

April 11 - 13, 2024

The Banff Centre, Banff, Canada

Further Information about the conference, including the preliminary program, registration, and poster submissions, will be made available on the Institute website in November 2023.

www.abgamblinginstitute.ca

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