



Short Communication

A call for qualitative and mixed-methods research on gambling and cannabis

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ABSTRACT

Gambling disorder and cannabis use disorder are both considered major public health issues. Despite the well-documented frequency of substance use disorders among people with gambling disorder, little is known about the experiences of those who both engage with gambling and cannabis. A scoping review was undertaken to investigate studies focusing on the experiences of people who gamble and use cannabis. Unexpectedly, no qualitative or mixed-methods studies that included an in-depth qualitative component to study the lived experiences of this population were found. This absence highlights the critical need to diversify research methods and fill the gap in knowledge of the lived experiences of people who both gamble and consume cannabis.

1. Introduction

Gambling disorder is considered major public health issues around the world (Hall & Lynskey, 2016; Potenza et al., 2019). The existing literature indicates that 75 % of treatment seeking people with gambling disorder have psychiatric comorbidities (Dowling et al., 2015). A very common comorbid disorder associated with gambling disorder is substance use disorder, which includes alcohol, nicotine, and drugs (Desai & Potenza, 2008; Dowling et al., 2015; Franco, Maciejewski, & Potenza, 2011; Lorains, Cowlshaw, & Thomas, 2011; Merkouris et al., 2021; Okunna). According to Lorains et al. (Lorains et al., 2011), the prevalence of substance use disorder among individuals with problem and gambling disorder is 57.5 %.

Indeed, substance use disorder is a common comorbid disorder related to gambling issues (Desai & Potenza, 2008; Franco et al., 2011; Griffiths, Wardle, Orford, Sproston, & Erens, 2011; Leino, Torsheim, Griffiths, & Pallesen, 2021; Liu, Maciejewski, & Potenza, 2009; Manning & Dowling, 2017; Merkouris et al., 2021; Okunna; Parhami, Mojtabai, Rosenthal, Afifi, & Fong, 2014; Pietrzak, Morasco, Blanco, Grant, & Petry, 2007). Research on the profiles of individuals with substance use

disorders provides some insight into the common proximity of substance abuse and gambling disorders (Pietrzak et al., 2007). Dash et al. (Dash et al., 2019) highlighted associations of Big Five personality traits with alcohol, nicotine, cannabis use disorder, and gambling disorder, as well as common comorbidities between these disorders.

Both gambling disorder and cannabis use disorder have been related to deleterious effects on individuals, their loved ones, and communities (Hall & Lynskey, 2016; Hall et al., 2019; Morasco, Eigen, & Petry, 2006). Although gambling habits are most often recreational, the consequences of a gambling disorder can have devastating impacts on relationships, financial stability, and health, as well as a direct impact on families, loved ones, and the broader community in general (Håkansson, Fernández-Aranda, Menchón, Potenza, & Jiménez-Murcia, 2020; Morasco et al., 2006; Petry, Ginley, & Rash, 2017; Williams, Leonard, Belanger, & Christensen, 2018). Cannabis use disorder also poses increased risks, such as risks to public safety and health. For example, it has been related to impaired driving (Hall & Lynskey, 2016; Hall et al., 2019), mental health disorders, impaired respiratory functions, and cardiovascular diseases (Hall & Degenhardt, 2009; Walsh et al., 2017).

When compared to people who don't gamble, those who gamble

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report more alcohol-related problems, even if their gambling practices do not lead to experiencing negative consequences (Parhami et al., 2014). Past studies that focused on concurrent use (i.e., the pattern of gambling and substance use during a specific period but not at the same time) have observed a high prevalence of substance use disorders, particularly alcohol use (Ford & Håkansson, 2020), among those who are affected by the negative consequences of their gambling practices (Lorains et al., 2011). The use of substances such as marijuana and cocaine has also been associated with gambling, both in the context of those who report gambling-related problems and those who do not (Liu et al., 2009; Potenza et al., 2019). This knowledge is of critical significance in our understanding of these behaviors. Moreover, substance use and gambling have been hypothesized in previous research to form a circular dynamic where gambling habits lead to anxiety and/or depression, and substances are then consumed to cope with these difficult emotions but might also trigger stronger compulsions to gamble more (Okunna). In this context, it is paramount to lead in-depth studies to draw a better understanding of the contexts, experiences, and relationships within the dynamics of substance use and gambling.

Although previous studies have focused on specific substances consumed by people who gamble, including alcohol use, nicotine addiction, cocaine, and heroin (Bruneau et al., 2016; Cowlishaw & Hakes, 2015; Dash et al., 2019; Grant, Levine, Kim, & Potenza, 2005; Griffiths et al., 2011; Lorains et al., 2011; McGrath, Barrett, Stewart, & Schmid, 2012), we still know very little about the life contexts and experiences of those who engage in gambling and use cannabis (Punia, DeVillaer, MacKillop, & Balodis, 2021). It is estimated that 30 % of individuals with cannabis use disorder also have gambling disorder (Barnes, Welte, Tidwell, & Hoffman, 2015; Winters & Whelan, 2020). Furthermore, gambling while impaired by cannabis use appears to lead to risky gambling practices (i.e., spending more money and playing longer) (Winters & Whelan, 2020). Punia et al. (Punia et al., 2021) also found high levels of co-occurrence between gambling and cannabis use and highlighted that a higher severity of gambling disorder predicted greater cannabis consumption. Although some data are available on gambling and cannabis, there is still a significant lack of empirical knowledge on a possible circular dynamic and how this plays out in the day-to-day lives of those who gamble and consume cannabis. The current knowledge on this topic remains sparse, and it is difficult to make sense of studies considered in isolation. Despite the presence of scattered data from cross-sectional studies, this lack of information undoubtedly limits our understanding of the relationship between cannabis and gambling and of the experiences of those affected. In this context, our scoping review aimed to investigate studies focusing on the in-depth experiences of people who gamble and use cannabis.

2. Materials and methods

This commentary is based on a scoping review we conducted in 2022. The scoping review was based on the methodological framework established by Arksey and O'Malley (Arksey & O'Malley, 2005) and refined by Levac et al. (Levac, Colquhoun, & O'Brien, 2010), and followed the PRISMA guidelines (Tricco et al., 2018). Scoping reviews are used in emergent research areas and aim to provide an overview of the current state of the literature on a specific topic (Levac et al., 2010; Pham et al., 2014). They also have the objective of systematically monitoring existing data, synthesizing key concepts, and detecting any potential gaps in knowledge. As such, a scoping review is the best first step to see clearer, being a "form of knowledge synthesis that addresses an exploratory research question aimed at mapping key concepts, types of evidence, and gaps in research related to a defined area or field by systematically searching, selecting and synthesizing existing knowledge" (Colquhoun et al., 2014; Peters et al., 2015).

The main question that guided this scoping review was as follows: "What is the current knowledge on the in-depth experiences of people who both gamble and consume cannabis, and the relationship between

these two addictive practices?"

2.1. Data sources and literature research

An electronic literature search was performed, from inception to December 16, 2022, through EBSCOhost Research Databases in six databases, using the EBSCO-host engine: Academic Search Complete, AMED - The Allied and Complementary Medicine Database, APA PsycExtra, CINAHL Plus with Full Text, MEDLINE with Full Text, and SocINDEX with Full Text.

The comprehensive electronic search strategy used was developed in collaboration with an information expert, using keywords relating to both gambling (gambl* OR betting OR "electronic gaming machine" OR lotto OR casino OR poker OR blackjack OR lotter* OR "slot machine") and cannabis (cannabis OR marijuana OR THC OR pot OR weed OR CBD OR tetrahydrocannabinol OR cannabidiol). No other restricting search criteria were applied (See Fig. 1).

2.2. Study selection and data extraction

A total of 844 results were obtained and then screened manually by one research team member. The inclusion criteria were: (1) to be available in English, (2) to have as primary themes both gambling practices and cannabis consumption, (3) to be of qualitative or mixed methodology, with a distinct section pertaining to qualitative analysis, and (4) to be published in a peer-reviewed journal. Of the 844 articles found, 522 remained after duplicates were removed. Following the title and abstract review, 12 articles were retained for further investigation. The research team discussed the articles, and any divergences in their inclusion or exclusion were resolved by discussion until a consensus was reached between team members. Following this evaluation and full-text review, no articles were retained. The references within the articles were also screened to find studies that fit the inclusion criteria. A Google Scholar search was conducted at the end of the process to identify additional articles, if any were to be found. No additional articles were added as a result of this search.

3. Results

Although we found studies on the topics of both gambling and cannabis (such as, but not exclusively: Winters & Whelan, 2020; Hammond et al., 2014; Hammond et al., 2019; McPhail et al., 2020; McGrath, Williams, Rothery, Belanger, & Christensen, 2023; Hammond et al., 2020), none were qualitative or mixed methods, which would have offered us a portrait of the current knowledge on the contexts or lived experiences of people who both gamble and consume cannabis, or on the relationship and dynamics between these two addictive practices.

4. Discussion

The absence of qualitative studies on gambling and cannabis represents a major gap in current scientific knowledge. Qualitative and mixed-method studies exploring participants' experiences, discourses, conduct, and perceptions are lacking. These elements should provide unique and essential insights for a deeper comprehension of a relatively common phenomenon (Creswell & Creswell, 2018). Mixed methods combine the use of quantitative and qualitative methods (Creswell & Creswell, 2018). Mixed methods are frequently used in work on complex problems such as mental disorders and addictions (Gioia & Brekke, 2009; Halpin, Terry, & Curzio, 2017; Desplenter, Laekeman, Group, & Simoens, 2011). Qualitative methods gives perspectives to the *who*; *what* and *where* of phenomena (Sandelowski, 2000, 2010) a good understanding of complex issues such as problem gambling and cannabis use. Both qualitative and mixed methods could offer a richer and more complex lens through which to study people who gamble and use cannabis, an approach that cannot be substituted by quantitative

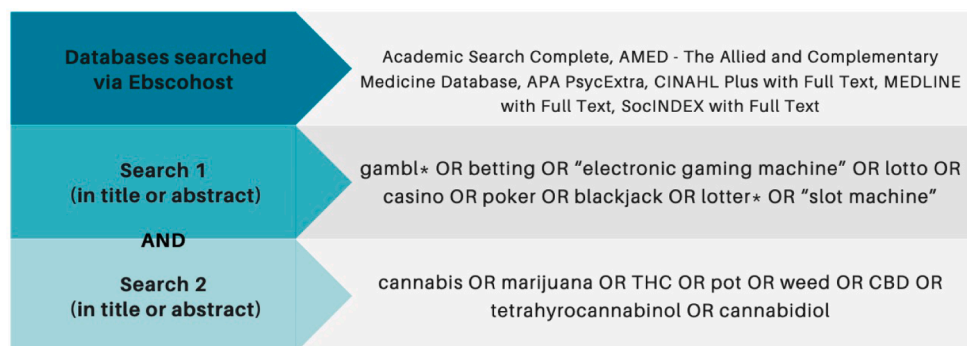


Fig. 1. Keyword string of the search strategy.

studies.

Based on the results of this scoping review, it appears that the scientific community lacks an understanding of elements such as the experiences and backgrounds of people living with a gambling disorder and who use cannabis, the impacts of their cannabis use on their gambling practices (and vice versa), and the functions and dynamics that cannabis and gambling activities play in their lives. From this perspective, several research questions could explore the experience of people who use cannabis and gamble. How does cannabis use and gambling practices intersect on a daily basis? What is the experience and background of people who use cannabis and engage in gambling? Why do people who use cannabis engage in gambling (and vice versa)?

Such a thorough understanding of context is important to shed light on cannabis consumption practices in relation to gambling, which is achievable through qualitative research designs. For a subject so little studied, future qualitative exploratory and inductive research methods would be highly relevant. As stated by Kardefelt-Winther et al. (Kardefelt-Winther et al., 2017), it is fundamental to lead rigorous qualitative, person-centered research when attempting to better understand phenomena and dynamics. The development of such extensive knowledge is essential for effective prevention and intervention strategies tailored to the specific needs of people who both gamble and use cannabis, or for those detrimentally affected by these practices. Further, this type of work is also essential to guide the development of a broader research agenda to advance knowledge as well as our understanding of such a phenomenon. Qualitative research on this topic is critical for providing a better appreciation of the interactions between cannabis and gambling. This would also support better-informed treatment and public policy aimed at preventing and reducing the harms associated with both problematic cannabis use and gambling practices.

Furthermore, research that integrates qualitative design brings the strength of exploring the voices and lived experiences of those most directly concerned with this topic. Indeed, "autobiographical stories can help to highlight who players are, and what their everyday lives as players are like when they are not being studied by experts" (Rak, 2021). This deep understanding, which is possible through storytelling, can shed light on the complex contexts, relationships, and dynamics that are weaved between cannabis and gambling. It can also lead to the exploration of the variations and nuances among individuals, for example, in their motivations, decisions, and emotions relating to gambling and cannabis (Casey, 2008).

In the current context of changes in gambling practices, including the steep increase in online gambling, as well as the expansion of cannabis legalization in many countries, research is indispensable to highlight the current realities, variations, and complexities pertaining to cannabis use and gambling practices (Casey, 2008; Morvannou et al., 2023; Rak, 2021).

5. Limitations

This review was subject to some limitations. First, we restricted our search to articles available in English, which could have excluded relevant research published in other languages. Second, this review focused on peer-reviewed articles that excluded gray literature. This may have resulted in the exclusion of relevant information, reports, and documents on this topic.

6. Conclusions

This commentary recaps how our search for qualitative knowledge on the experiences of gambling practices and cannabis consumption yielded no results and the consequent pressing need for qualitative or mixed-method research on this important public health topic. The relationship between gambling and cannabis has been stated as a possible source of concern in previous studies as well as a research priority to pursue further (Hammond et al., 2020, 2014, 2019; McGrath et al., 2023; McPhail et al., 2020; Okunna; Punia et al., 2021; Winters & Whelan, 2020). To do so, there is a clear need to improve the current knowledge of the lived experiences of people who both gamble and use cannabis. Such in-depth knowledge of their personal perspectives and contexts can have important impacts on increased understanding and awareness, better prevention of addictions, and more effective interventions. Such studies could also lead the way to more comprehensive and beneficial effects for families and communities close to those who gamble and consume cannabis.

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CRediT authorship contribution statement

Magaly Brodeur: Conceptualization, Methodology, Validation, Formal analysis, Writing – review & editing, Supervision, Project administration, Funding acquisition. **Sophie Audette-Chapdelaine:** Conceptualization, Methodology, Software, Validation, Formal analysis, Writing – original draft, Writing – review & editing, Project administration. **Nicolas Lavoie:** Conceptualization, Methodology, Software, Validation, Formal analysis, Writing – original draft, Writing – review & editing. **Cyril Devault-Tousignant:** Conceptualization, Methodology, Software, Validation, Formal analysis, Writing – original draft, Writing – review & editing. **Anne-Marie Auger:** Validation, Formal analysis, Writing – review & editing, Project administration. **Adèle Morvanou:** . **Andrée-Anne Légaré:** Writing – review & editing. **Eva Monson:** Writing – review & editing. **Didier Jutras-Aswad:** Writing – review & editing. **Catherine Hudon:** Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

All data is available from the corresponding author on reasonable request.

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Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.abrep.2023.100494>.

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