Gambling-related consumer credit use and debt problems: A brief review

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Abstract

People experiencing problems with gambling may use consumer credit to cover expenses and/or continue gambling. This may contribute to debt problems and psychological distress, both of which may have pre-existed (and potentially motivated) their gambling. This review found little empirical investigation of patterns of consumer credit use by gamblers, despite borrowing money being a diagnostic criterion for gambling disorder and financial harms being one of the most commonly reported problems. Research suggests that consumer credit use and debt problems increase with problem gambling severity. Gambling-related debt problems increase the likelihood of experiencing poor psychosocial functioning, including psychological distress, substance use, adverse family impacts, crime, and suicidality. Communities and governments are calling for more socially responsible conduct by financial institutions, which increasingly recognise the potentially harmful impacts of credit provision on the well-being of customers experiencing gambling problems. Policies and interventions are needed relating to consumer credit, debt, and gambling to enhance customers' financial and psychosocial well-being.

Keywords: gambling; consumer credit; debt; psychological distress; mental health

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Highlights:

- Consumer credit use and debt problems are risk factors for gambling problems
- Poor mental health is more likely in the presence of both gambling and debt problems
- Recognition of gambling-related harms by financial institutions is increasing

A range of potentially harmful financial products are currently available in the marketplace and their impacts on populations, including those at risk of financial hardship, are the focus of increasing social concern, particularly in Australia and the United Kingdom [1–4]. People experiencing gambling problems are one such vulnerable population. In Australia, a 2019 royal commission into misconduct in the banking sector found instances of lenders, including large financial institutions who promote customer-oriented values, offering high-limit credit products to customers who had disclosed gambling problems [5]. A separate inquiry investigated the practices of non-traditional lenders, such as payday lenders, consumer lease providers, and 'buy now, pay later' services, and their impacts on vulnerable consumers [4]. Numerous cases were heard of lenders, sometimes knowingly, providing credit to consumers experiencing problems with gambling and over-indebtedness [6–10]. This inquiry noted that some non-traditional lenders appear to exploit loopholes in consumer credit legislation meaning that they are not subject to the same consumer protection and responsible lending obligations as traditional financial institutions [4]. Internationally, use of non-traditional lenders is increasing in several jurisdictions, especially with increased accessibility online [11–14]. Without safeguards such as comprehensive credit checks in place, some borrowers may inevitably accumulate more debt than can be feasibly serviced. This poses a particular risk for those experiencing gambling problems who, potentially having lost much of their savings through gambling, may turn to consumer credit products to access funds to cover expenses and/or continue gambling.

Financial harms, including lost savings, debt problems, and bankruptcy, are among the most common harms reported by those affected by gambling problems [15,16], and are argued to be the most fundamental consequence of gambling problems [17]. Debt problems are a more severe subtype of financial harm, and are posited to be the primary indicator of functional impairment in gambling disorder, the clinical variant of problem gambling [18]. Borrowing money to relieve gambling-related financial problems is one of nine diagnostic criteria for gambling disorder [19]. Given that regulated gambling activities always involve a significant 'house edge', persistent gamblers will invariably lose money over time. Mounting losses may motivate continued gambling in an attempt to 'get even', often driven by irrational and erroneous cognitions (e.g., 'strategies', personal luck) [20,21]. This sustained pattern may lead into problem gambling. Access to credit can accelerate this process, catalysing a cycle of intensified gambling involvement and repeated borrowing as the individual progressively uses up her/his financial resources and becomes increasingly distressed by the subsequent debt [20]. As the problem worsens, the individual's financial situation may appear to be contingent on winning, as well as potentially her/his relationships, employment, housing, and so on.

Consequently, harms in non-financial domains (e.g., psychosocial functioning), which are a core component of gambling problems and gambling disorder, may arise secondary to gambling-related financial problems. Conversely, psychological vulnerabilities (e.g., depression, anxiety) or financial problems that pre-existed (and potentially motivated) an individual's gambling (e.g., as a coping mechanism) may conceivably be exacerbated by

problem gambling and related debt problems [17,20–23]. Problem gambling is associated with high rates of comorbid mental health problems [24–26]. Moreover, personal unsecured debt correlates strongly with mental health problems [27–32]. The temporal sequences underlying this relationship are similarly unclear and plausibly reciprocal in nature [31–33]. Underlying mechanisms, including individual psychological factors such as impulsivity and reward seeking, may drive both gambling and consumer spending, further exacerbating problems. Given these interrelationships, which are summarised in Figure 1, individuals who use consumer credit products either to fund their gambling activity, or as a result of the extent of their gambling expenditure, appear to be at elevated risk for experiencing mental health problems. Easy access to consumer credit may therefore represent a key modifiable risk factor for the development of problem gambling, and in turn, the development and/or exacerbation of a range of psychosocial problems.

[INSERT FIGURE 1 ABOUT HERE]

Despite the critical role that consumer credit may play in facilitating gambling beyond affordable levels, little empirical research has investigated the prevalence and patterns of gambling-related consumer credit use and its interactions with gambling-related harms [34]. This review provides a brief overview of recent research findings regarding gambling-related consumer credit use and debt problems, and their psychosocial correlates. Consumer credit generally refers to short-term, high-interest credit products intended to fund consumption, as opposed to longer-term loans (e.g., mortgages, student loans). Debt problems involve difficulties in meeting payment obligations (e.g., arrears, default, bankruptcy), as opposed to normative debt (i.e., debts that are managed and repaid on time without difficulty) [35]. Gambling-related debt generally refers to debt accumulated largely as a consequence of gambling expenditure, whether directly (e.g., using a credit card for gambling-related transactions) or indirectly (e.g., debt accumulated to cover expenses due to money lost gambling) [36]. The following sections contain the findings of our review, which included 86 peer-reviewed articles published since 2010. Details of the search protocol and flow diagram are contained in the Appendix.

Prevalence and risk factors for gambling-related consumer credit use and debt problems

Not all gamblers experience debt problems; rather, they are most common among those who report gambling-related harms [37]. Pooled data from the UK Expenditure and Food Surveys (2001–2007) shows a positive association between consumer credit use and gambling expenditure across household income levels, such that those with consumer credit repayments had a 4–5% increased probability of spending money on gambling [38]. Moreover, higher credit repayments correlated positively with higher gambling expenditure. The 2007 UK Adult Psychiatric Morbidity Survey (APMS) showed positive associations for consumer credit use and debt problems with problem gambling severity [39]. Twice as many at-risk gamblers (i.e., those who gamble and experience at least some degree of harm) borrowed money in the past year from pawnbrokers, money lenders, or family/friends to cover day-to-day expenses as compared to non-problem gamblers (i.e., those who gamble but do not experience harms) (16.4% vs. 8.0%), with higher rates among those who experience severe gambling problems (problem gamblers, 19.2%). Debt problems similarly increased across those with increasing levels of gambling harms (non-problem 7.0%, at-risk 12.7%, problem gamblers 33.1%). After adjusting for socioeconomic variables, at-risk gamblers

were twice as likely to borrow money relative to non-problem gamblers, and problem gamblers were nearly four times as likely to have experienced debt problems.

Similarly, a US prevalence survey found lower rates of debt problems affecting 14.8% of problem gamblers compared to 28.1% of disordered (i.e., clinically-diagnosed) gamblers, potentially due to a narrower operationalisation of debt problems (fewer categories of debts were listed than in the APMS) [40]. Studies assessing gambling-related bankruptcy among problem and disordered gamblers generally report rates between 5–22% [41–45]. Gambling-related bankruptcy has been positively associated with having a family history of addiction, earlier onset of problem gambling, faster problem development, and experiencing more gambling-related problems overall [42]. This pattern of relationships may reflect gambling being used as a coping mechanism (e.g., to regulate negative emotions). Use of credit cards as a payment method for gambling transactions has been found to correlate positively with problem gambling severity [46]; however, what proportion of individuals' overall gambling expenditure this relates to is unknown. The prevalence of at-risk gambling was significantly higher among consumer credit counselling clients (9.0%) compared to the general population (1.8%) in a US sample [47]. Overall, this evidence broadly indicates that consumer credit use and debt problems are risk factors for increased problem gambling severity, largely independent of socioeconomic factors.

Several studies have examined gambling-related debt and, to a lesser extent, consumer credit use as covariates, without assessing these relationships in detail. Differences between individuals who gamble online and those who gamble in land-based venues are important to consider, given increased use of credit cards for online gambling transactions [48]. Online gamblers are more likely to report gambling-related debt problems than landbased gamblers [49–51]. This effect is strengthened for those who engage in both online and land-based gambling, who are more likely than land-based-only gamblers to report a gambling-related debt by 11 percentage points [49]. These differences may be partly explained by the wide range of payment methods available for online gambling transactions, such as credit/debit cards and e-wallets (e.g., PayPal), compared to in-venue gambling which is predominantly cash-based and where credit use is often prohibited. Moreover, online gambling is associated with greater overall gambling involvement, which may be contribute to greater debt problems [52]. Ledgerwood et al. [44] found that female help-seeking problem gamblers were more likely to report using consumer credit products than men. Females were more likely to have had difficulty paying bills, have gambling-related debt, and have experienced a gambling-related bankruptcy. The reasons for these gender differences are unclear, but could relate to lower economic independence, higher prevalence of anxiety and depression, and/or gambling being more commonly used as a coping mechanism among women [53–55]. Problem gamblers who self-identify as (semi-)professional gamblers have been found to be more likely than problem amateur/recreational gamblers to have gamblingrelated debt problems [45]. Some problem gamblers may inaccurately self-identify as professional gamblers to avoid the stigma associated with problem gambling, potentially strengthening cognitive distortions that can lead into debt spirals. Illusions of control, for example, are strongly associated with gambling problems, and may drive persisted gambling despite accumulating losses by causing gamblers to overestimate their control over the outcome of a game and the potential success of strategies used [56]. Given substantial heterogeneity in gambling sub-populations, more detailed investigation is needed to understand the experiences of specific sub-groups in relation to gambling-related consumer credit use and debt problems.

Psychosocial correlates of gambling-related debt problems

Experiencing a common mental disorder (e.g., generalised anxiety disorder, depression) is nearly seven times more likely for problem gamblers with debt problems than for non-problem gamblers with no debt problems (unindebted non-PGs), after adjusting for socioeconomic variables [32]. In contrast, problem gamblers with no debt problems are about four times as likely as unindebted non-PGs, whereas non-problem gamblers with debt problems are about three times as likely as unindebted non-PGs. Problem gambling and debt problems therefore appear to make at least partly unique contributions to poor mental health outcomes, which are made more likely in the presence of both [32].

Psychological distress. Quantitative and qualitative research have linked both consumer credit use and debt problems with problem gambling-related psychological distress [57–60]. Rates of depression are higher among disordered gamblers who declare bankruptcy secondary to gambling compared to those without a history of bankruptcy [42]. These relationships may occur as a consequence of gambling to escape symptoms of distress or hopelessness, which may also impair financial decision-making. Alternatively, distress may develop secondary to problem gambling, for example, due to worsening financial problems. Evidence regarding the temporal relationships between distress and financial problems is mixed, and only limited longitudinal research has been conducted [27,61].

Substance use. Gambling-related debt problems are associated with substance use problems, particularly alcohol abuse and daily tobacco use [42,62,63]. These behaviours may similarly represent a coping mechanism, or comorbid addictions may independently contribute to financial problems.

Adverse family impacts. Family members commonly experience a wide range of negative impacts as a result of gambling-related debt problems [64]. Their long-term financial well-being and standard of living may be substantially reduced as a consequence of providing financial support to the indebted gambler [58,65,66]. Psychological distress and family conflict are prevalent, potentially due to the gambler concealing problems, which may undermine trust and reciprocity; however, these problems may also occur independent of gambling-related debt problems [36,58,66–69]. One study reported intimate partner violence perpetration to be associated with higher gambling-related debts [70].

Crime. Gambling-related debt problems are a risk factor for involvement in illegal activity (e.g., fraud, theft, embezzlement), potentially motivated by desperate financial situations caused by problem gambling [71–75]. Vulnerabilities to impulsivity occur in a subset of disordered gamblers [21,76], and appear to contribute to risk of gambling-related debt problems and involvement in criminal activity [73]. One US study of 88 help-seeking problem gamblers found that 57.3% reported a lifetime history of gambling-related illegal activity motivated as a consequence of gambling, to pay off gambling debts, or to fund continued gambling [71].

Suicidality. Multiple studies have reported associations between gambling-related debt problems and suicidal ideation, attempts, and completion among problem and disordered gamblers [60,77–82]. Borrowing from loan sharks (i.e., illegal lenders who offer unsecured loans at very high interest rates) who may threaten violence was found to be a risk factor for suicide completion among Hong Kong disordered gamblers with debt problems [60].

Help-seeking and recovery. Financial problems, including debt, are consistently reported as a primary motivator for gambling-related help-seeking [67,83–87]. However, beyond initiation, some evidence suggests that debt problems may predict poor compliance with prevention strategies and treatment programs given that they may motivate continued gambling in an attempt to recoup monies owed [36,86,88]. Clients experiencing debt problems may therefore require integrated financial counselling and/or legal services for problem gambling counselling to be effective [47,67,89].

Conceptual and methodological limitations (and potential solutions)

This area has received limited research attention and been hampered by conceptual and methodological issues. Firstly, financial and psychological problems are both potential motivators and consequences of gambling activity, creating difficulties in establishing the net impact of gambling on these problems [32]. As such, the body of mostly cross-sectional research conducted to date is insufficient to understand the risk factors and causal pathways. Secondly, measurement of debt problems has typically been non-specific, based on selfreport, and involved a variety of operationalisations (e.g., declaration of bankruptcy, selfreported aggregate debt value, being able to 'make ends meet'). Aside from inaccuracies in self-report, many previous studies have failed to clearly differentiate debt problems from normative debt, and consumer debt from long-term secured loans (e.g., mortgages), potentially resulting in over-inflated estimates. Assessing specific sources of loans and including examples in questionnaire items may improve self-report accuracy [90]. The broader literature suggests that subjective attitudes towards debt (e.g., worry or stress about indebtedness) may mediate the relationship between debt and mental health, and may therefore be better proxies than absolute financial measures (e.g., estimated aggregate debt value) for studying these relationships [27,91]. Number of debts and relative financial measures of debt (e.g., debt-to-income ratio) may also be relevant indicators [32,92,93]. Thirdly, given the fundamental economic principle of fungibility (i.e., units of money are interchangeable), financial measures of debt must focus on an individual's aggregate debt, not only debts accumulated directly through gambling expenditure [94]. Logically, having exhausted her/his savings due to excessive gambling, an individual may accumulate debt to cover expenses regardless of whether or not they are directly gambling-related. Finally, debt problems are often conflated with financial hardship, an overlapping but distinct construct that relates to a lack of financial resources to pay for day-to-day necessities [95]. Financial hardship is typically associated with low income, but debt problems occur relatively independent of income level [30,37,95]. A specific focus on patterns of consumer credit use that lead into debt problems is therefore warranted given that this is a potentially modifiable risk factor for problem gambling and secondary mental health problems.

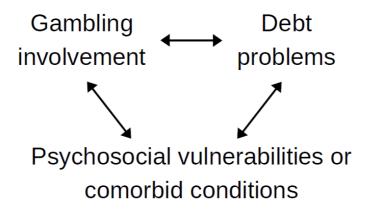
Technological advancements and increasing multidisciplinary collaboration between academia and industry may present opportunities to overcome some of these limitations. Specifically, financial institutions are increasingly recognising the potentially harmful impacts of credit provision on the well-being of customers experiencing gambling problems [34]. Some banks have introduced harm-minimisation initiatives, such as blocking mechanisms for card-based gambling transactions; however, the effectiveness of these strategies needs to be evaluated. Given financial institutions have an overview of customers' income, expenditure, and debts, prospective longitudinal cohort studies could be designed to examine the temporal relations between gambling expenditure, consumer credit use, debt problems, and psychosocial factors. Gathering financial data from bank records would provide objective measures of indebtedness (e.g., debt-to-income ratio), thereby avoiding

inaccuracies associated with self-report. Mapping the pathways into gambling and debt problems will elucidate the key indicators and timepoints for preventative interventions. Financial institutions should recognise that excessive gambling may contribute to debt problems, and therefore consider the extent of a customer's gambling expenditure before offering additional lines of credit [34]. Financial institutions could train frontline staff to provide referrals to specialised gambling and financial counselling services as appropriate, for example, in credit applications where intensive gambling and indicators of debt problems (e.g., missed payments) are identified as co-occurring. Given the relationship between debt and gambling problems, financial counsellors should screen for gambling problems and have established referral pathways. Concurrent provision of gambling and financial counselling may reduce stress by supporting individuals to address their debt problems, which may enable them to benefit more from gambling counselling. Figure 2 outlines the key recommendations of our review.

[INSERT FIGURE 2 ABOUT HERE]

Conclusion

Debt problems are conceptualised as both a potential precipitant and core consequence of problem gambling, yet relatively little research has sought to understand the specific types and patterns of borrowing that may exacerbate these problems. This review of recent research findings draws three important conclusions. Firstly, consumer credit use and debt problems are risk factors for increased problem gambling severity, largely independent of socioeconomic factors. Secondly, debt problems appear to make a unique contribution over and above that of gambling problems to poor psychosocial functioning. Consumer credit products therefore have the potential to exacerbate gambling-related psychosocial harms. Finally, research collaborations with financial institutions may be beneficial for understanding these interrelationships in order to refine consumer protection policies relating to the broad range of financial products available, and to develop and implement preventative interventions to improve consumer well-being.



(Psychological distress, substance use, adverse family impacts, crime, suicidality)

Figure 1. A summary of the relationships between gambling, debt problems, and their psychosocial correlates. Conceptually, pre-existing psychosocial vulnerabilities and/or debt problems may motivate gambling involvement. Conversely, debt problems and/or comorbid psychological conditions may develop or be exacerbated by excessive gambling. Psychosocial vulnerabilities may increase risk for development of debt problems, but experience of debt problems may also contribute to psychological distress and poorer mental health.

Recommendations for future research

- 1. Prevalence estimates of gambling-related consumer credit use and debt problems are largely limited to household surveys conducted in the UK and US. Research is needed in other jurisdictions.
- 2. The features of consumer credit products associated with greater risk to consumer well-being need to be identified to inform the design of alternative products that minimise this risk.
- 3. Measures of debt problems (e.g., absolute/relative financial measures, subjective attitudes towards debt) should be evaluated to establish the best method to assess impacts on psychosocial functioning.
- 4. Given money is fungible, studies should assess aggregate debt among gamblers rather than debt directly incurred through gambling transactions.
- 5. The effect of debt problems on mental health requires specific examination, as debt problems may mediate the relationship between low income (financial hardship) and mental health problems.
- 6. Prospective longitudinal studies using financial institutions' customer data may facilitate the mapping of interrelationships between gambling, debt, and mental health problems to inform policy and identify key time points for preventative interventions.

Recommendations for policy and practice

- 1. Governments need to consider the potential adverse impacts of consumer credit products on people experiencing gambling problems and address gaps in existing consumer credit legislation to ensure appropriate safeguards are implemented, including by non-traditional lenders.
- 2. Governments should consider prohibiting the use of credit cards for gambling transactions. At minimum, financial institutions and payment systems should provide blocking mechanisms for electronic (e.g., card-based) gambling transactions that can be easily activated by customers.
- 3. Financial institutions could develop and implement a range of preventative measures (e.g., option to set a monetary limit on gambling-related transactions) tailored to customers detected as spending money on gambling. Proactive strategies, such as customer care calls [96], may be beneficial for assisting those displaying risky gambling and/or borrowing patterns. The effectiveness of these strategies should be evaluated in collaboration with researchers.
- 4. Financial institutions should develop protocols for responding to disclosures made by customers experiencing gambling problems (e.g., to ensure such customers are not offered credit limit increases).
- 5. Financial counselling and debt-related legal aid services should incorporate brief screening for gambling problems into routine practice given that people with debt problems are at greater relative risk for experiencing gambling problems.
- 6. Gambling counsellors should incorporate brief screening for debt problems into routine practice and establish referral pathways to financial and legal support services, as debt problems may require attention in order to reduce distress and facilitate recovery from gambling problems.

Figure 2. Key recommendations of the review.

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Declaration of interest:

Thomas Swanton owns shares in National Australia Bank Limited.

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Dr. Gainsbury is currently a member (2019-20) of the National Council on Problem Gambling International Advisory Board (Singapore) and receives an honorarium for this role as well as travel expenses to attend an annual meeting. She is a member of the Steering Committee for Remote Gambling Research and the Independent Research Oversight Panel both run by GambleAware, which provide an honararium.

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All professional dealings have been conducted with the aim of understanding gambling, enhancing responsible gambling and harm minimisation policies and practices as well as treatment interventions. All research has had human research committee ethics approval. Funding bodies have had no opportunity to influence the collection, analysis or interpretation of data.

Appendix

Search strategy

A search of six major online bibliographic databases in psychology, public health, sociology, and social policy was conducted in April 2019 using the search terms shown in Table 1. Full-text peer-reviewed papers in English were included that had a specific focus on consumer debt among gambling populations. Both quantitative and qualitative research studies were included, as well as reviews, meta-analyses, letters, commentaries, and editorials. No date restriction was applied to the initial database searches, but abstracts were only screened for papers published from 2010 and onwards. A flow diagram of the search is shown in Figure 3 [97].

Table 1. Search terms used for database searches.

Database	Search terms	Records identified
PsycINFO via OvidSP (1806- present)	gambling AND debt	95
Scopus	(TITLE-ABS-KEY (gambl*) AND TITLE-ABS-KEY (debt OR indebt* OR overindebt* OR over-indebt* OR borrow* OR overborrow* OR over-borrow* OR credit* OR loan OR lend* OR arrears OR overdraft OR over-draft OR over-draw* OR owe* OR owing OR pawn* OR financ* OR default* OR insolven* OR bankrupt*))	1,779
Web of Science Core Collections	TOPIC: (gambl*) AND TOPIC: (debt OR indebt* OR overindebt* OR overindebt* OR borrow* OR overborrow* OR over-borrow* OR credit* OR loan OR lend* OR arrears OR overdraft OR over-draft OR over-draw* OR owe* OR owing OR pawn* OR financ* OR default* OR insolven* OR bankrupt*)	1,116
Medline via OvidSP (1946 - present)	gambling AND debt	54
Global Health via OvidSP (1910 - present)	gambling AND debt	2
Proquest Central	ab(gambl*) AND ab(debt OR indebt* OR overindebt* OR over-indebt* OR borrow* OR overborrow* OR over-borrow* OR credit* OR loan OR lend* OR arrears OR overdraft OR over-draft OR overdraw* OR over-draw* OR owe* OR owing OR pawn* OR financ* OR default* OR insolven* OR bankrupt*)	417

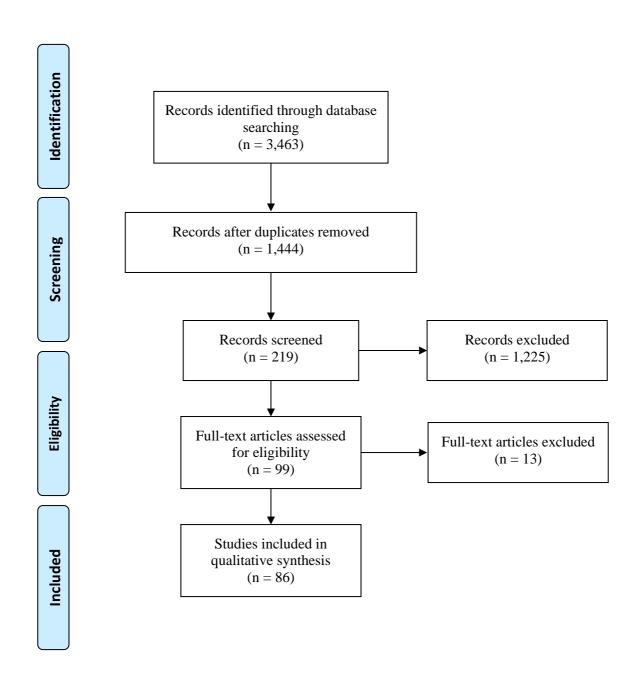


Figure 3. Flow diagram of literature search.

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This study examined specific types of gambling-related harm across seven domains using a novel two-step method derived from the alcohol literature, firstly, assessing the degree to which a particular harm is present, and secondly, assessing the degree to which it is related to gambling. Alongside psychological harms, financial harms, including debt, were the most common harms experienced by both recreational and problem gamblers.

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