

Self-Generated Motives for Not Gambling Among Young Adult Non-gamblers

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Abstract Motivational models have been shown to usefully describe reasons for engaging in addictive behaviors including gambling disorder. Although most scales designed to measure motives have been derived statistically, self-generated open-ended responses have also shown utility for identifying unique motives for gambling. While the motivational structure for gambling disorder has been extensively explored, there has been a paucity of research examining motives for choosing not to gamble. This is not the case for other addictive behaviors such as alcohol use where motives for abstaining from drinking have been well defined. The primary goal of this study was to qualitatively explore and identify motives for not gambling in a sample of young adult non-gamblers using open-ended responses. A sample (N = 196) of undergraduate current non-gamblers, defined as no gambling activity over the previous 12 months, completed a series of questionnaires on demographics, gambling behavior, and alcohol consumption. Furthermore, they were asked to provide their top three reasons for not gambling in rank order. The results revealed eight specific motives for why participants chose not to gamble: ‘financial reasons and risk aversion’; ‘disinterest and other priorities’; ‘personal and religious convictions’; ‘addiction concerns’; ‘influence of others’ values’; ‘awareness of the odds’; ‘lack of access, opportunity, or skill’; and ‘emotional distress’. Personal and religious convictions reasons were also related to lifetime non-drinking, suggesting that these motives are associated with decreased addictive behaviors in general. Ultimately, these results may help to inform the design of prevention strategies for gambling disorder.

Keywords Non-gambling · Motives · Gambling disorder · Young adults · Prevention

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Introduction

Gambling is a normative recreational activity in North America; however, for the estimated 0.5–5.5% of Americans who struggle with gambling disorder (GD) it is associated with substantial psychological, social, and financial harms (Lorains et al. 2011; Welte et al. 2014). While GD is common in the general population, prevalence estimates are especially concerning in young adults. For instance, recent epidemiological evidence suggests that gambling involvement peaks in young adulthood and rates of GD amongst university-aged adults are estimated at 3.4–4.7% with subthreshold GD reported as high as 9.3% (Shaffer and Hall 2001; Shaffer et al. 1999; Welte et al. 2011). Furthermore, GD is highly comorbid with problematic drinking and other substance use in this age group (Afifi et al. 2016; Grant et al. 2002; Kessler et al. 2008). Clearly, GD in young adults is a serious societal concern and identifying factors which contribute to gambling problems in this age group is crucial for prevention efforts.

Various underlying mechanisms have been proposed to contribute to the development and maintenance of GD. Among these, the influence of motives or reasons for gambling on GD has been the subject of increasing focus in the literature. Several recent motivational models of GD have been proposed including: the three-factor (i.e., ‘enhancement’, ‘social’, ‘coping’) Gambling Motives Questionnaire (GMQ; Stewart and Zack 2008); the revised four-factor (i.e., GMQ plus ‘financial’ motives) Gambling Motives Questionnaire Financial (GMQ-F; Dechant 2014); the four-factor (i.e., ‘excitement’, ‘escape’, ‘esteem’, ‘excess’) Rockloff and Dyer (2006) model; and five-factor models developed by Lee et al. (2007) (i.e., ‘excitement’, ‘socialization’, ‘avoidance’, ‘monetary’, ‘amusement’); Binde (2013) (i.e., ‘dream of hitting the jackpot’, ‘social rewards’, ‘intellectual challenge’, ‘mood change’, ‘chance of winning’); and Francis et al. (2015) (‘win money’, ‘fun & excitement’, ‘regulate unpleasant emotions’, ‘social’, ‘challenge’). Each of these models has received empirical support for their individual utility in explaining the development of GD (Francis et al. 2015; Milosevic and Ledgerwood 2010; Schellenberg et al. 2016). In particular, the regulation of positive and negative emotions, identified as a core component of motivation in most of these models, appears to be more predictive of GD than financial motives (Flack and Morris 2014). Moreover, recent studies have also focused on further validating these models in young adults. For instance, using exploratory factor analyses in a sample of 18–25 year olds, Lambe et al. (2015) found an adequate fit for the three GMQ motives, with enhancement motives being especially predictive of GD. Lastly, enhancement motives have also been found to have a moderating role between positive mood and time spent gambling as well as drinking during gambling among young adults (Goldstein et al. 2014). It appears that while the overall pattern of gambling motives in young adults may be similar to that of other adults, enhancement-focused motives may be particularly salient in this group.

Motivational models for gambling have typically been compiled statistically using scores derived from author-compiled items using exploratory factor analyses. An alternative approach for identifying motives is to compile primary self-generated reasons for gambling verbatim using an open-ended format. These responses can then be coded based on conceptual similarity and frequency. In their seminal study on this topic, Neighbors et al. (2002) utilized an open-ended approach to identify reasons for gambling among a sample of college student gamblers. Specifically, participants were asked to provide up to five reasons for why they gamble in rank order, and results were presented in terms of both primary (i.e., #1-ranked) and overall (i.e., all responses) motives. Using this approach, 16

distinct motive categories were identified. Of these, the most commonly reported reasons were financial, which made up nearly 43% of primary and over 22% of the total number of motives provided. Furthermore, other identified motives included: winning, competition, skill, challenge, and luck—several of which are not directly assessed by the 3, 4, or 5-factor models previously described. The findings by Neighbors and colleagues have been echoed in other research employing a similar open-ended approach with potentially gambling-specific motives such as financial reasons and gambling to support a charity commonly reported by participants (McGrath et al. 2010). In the long run, this qualitative approach for collecting motives may serve to benefit the development and refinement of quantitative models.

In their efforts to isolate possible underlying mechanisms involved in GD, researchers have mostly focused on recruiting clinical samples of GDs, community-recruited GDs, or identifying GDs from student populations. However, a potential limitation of this approach resides in the fact that these individuals have already developed a gambling problem. Indeed, it has been argued that studying individuals who *do not engage* in addictive behaviours such as gambling may provide the benefit of identifying protective factors against GD (Lalande et al. 2013). Unfortunately, the limited research that has compared non-gamblers to gamblers has primarily focused demographic factors such as age and gender, with most studies finding that non-gamblers are more likely to be older and female (Desai et al. 2004; Volberg et al. 1997; Welte et al. 2006). Exploration of the associations between non-gambling and other factors, such as religiosity and educational attainment, have yielded inconsistent results. For example, Lam (2006) found that non-gamblers were significantly more likely to report participation in religious services than gamblers. However, self-reported importance of religious faith was not predictive of participants' gambling frequency. In addition to greater religious participation, non-gamblers reported a significantly lower level of educational attainment than did gamblers. In a recent study, Lalande et al. (2013) investigated differences between gamblers and non-gamblers on a number of sociodemographic variables. They found that non-gamblers were less likely to have reported attending church over the previous year; further, non-gamblers also reported higher levels of education. The authors suggested that one potential reason why these results contradicted those of Lam (2006) was due to differences in the operationalized definition of “non-gamblers:” While Lam’s non-gambling group consisted of individuals who had reported no gambling involvement in their *lifetime*, Lalande and colleagues defined non-gamblers as individuals who reported no gambling activity over the previous 12 months. Despite these differences, the enhanced focus on non-gamblers in addition to gamblers has provided unique information on factors which may ultimately be protective against GD.

To date, no known published study has examined primary reasons for why non-gamblers choose to refrain from gambling. Identification of motives for *not gambling* may allow for not only a greater understanding of non-gamblers, but may also inform possible protective factors against GD. Furthermore, motives for abstaining from an addictive behaviour have received greater attention in the substance use literature, most notably with alcohol. For instance, almost 30 years ago, Greenfield et al. (1989) devised the 22-item Reasons for Limiting Drinking (RLD) scale which measures four distinct motives: ‘self-control’ captured internalized beliefs about excessive alcohol consumption; ‘upbringing’ tapped into respect for authority and the influence of others; ‘self-reform’ described compliance with external pressures to limit one’s alcohol use; and ‘performance’ described as beliefs and fears that alcohol use would compromise one’s studies or sports performance. However, the authors excluded *pure abstainers* from their analyses, arguing that

reasons for not drinking among this group may fundamentally differ from those provided by individuals who simply limit their consumption. Building upon this work, Slicker (1997) compared a sample of university-aged drinkers versus abstainers on the main reason they choose to *not drink* on specific occasions. Non-drinkers were less likely than drinkers to cite reasons related to a desire to maintain self-control, a desire to maintain alertness, and were more likely than drinkers to endorse health-related reasons. Importantly, abstainers were over six times more likely to report religious and moral reasons for not drinking. Stritzke and Butt (2001) developed the Motives for Abstaining from Alcohol Questionnaire (MAAQ) to measure reasons for abstaining or limiting alcohol consumption using an adolescent sample. Within this model, exploratory factor analysis identified four key factors: fear of negative consequences, dispositional risk, family constraints, religious constraints, and indifference toward drinking. When non-drinkers and drinkers were compared on the MAAQ, the scores for non-drinkers were significantly higher on each factor with the exception of dispositional risk (i.e., medical conditions or concerns over family history of problematic drinking). Several similar reasons including personal values, religion, concern over image as a drinker, and worries over alcohol's influence on behavior were also found to be important among non-drinking college students (Huang et al. 2011). In their aggregate, the results of these studies indicate that non-drinkers often abstain for reasons related to personal values, religion, and negative feelings/indifference toward alcohol consumption. Given the high degree of co-morbidity between alcohol use and gambling, as well as the tradition of adapting motivational models from the alcohol literature [e.g., the Drinking Motives Questionnaire; Cooper et al. (1995)] for gambling [e.g., the GMQ; Stewart and Zack (2008)], it is feasible that a similar pattern of motives for abstaining from gambling may also emerge among non-gamblers.

The aim of the present study was to identify potential motives for abstaining from gambling in young adult non-gamblers. Using a methodology similar to that of Neighbors et al. (2002), participants took part in group testing sessions in which they were asked to provide their primary reasons for not gambling using an open-ended response format questionnaire. These responses were subsequently coded based on conceptual similarity into meaningful categories. These categories were then compared on endorsement of another commonly seen addictive behavior in this population, namely alcohol consumption. As this research was exploratory in nature, specific hypotheses regarding the prevalence and structure of motives categories were not proposed. However, it was anticipated that a number of the motives for abstaining from drinking alcohol would also be relevant for refraining from gambling (e.g., personal/family values, religious convictions, indifference toward gambling). Moreover, it was expected that some motives may be unique to gambling, such as those related to money. It was also predicted that, in line with both the literature suggesting qualitative differences between total abstainers and drinkers, as well as between individuals reporting no lifetime gambling activity and those reporting no recent gambling activity, there would be differences in motives endorsed by lifetime versus current non-gamblers. Finally, it was predicted that some motives may be less gambling-specific, and thus potentially be “more protective” than others; that is, some motives may be associated not only with a greater likelihood of no lifetime gambling activity but also with a greater likelihood of reporting no lifetime alcohol consumption.

Method

Participants

Participants consisted of 196 (168 females, 28 males, $M_{\text{age}} = 21.2$ years, $SD = 3.7$ years) undergraduate students enrolled in psychology classes at a mid-size Canadian university. The age of majority in Alberta is 18; however, it was decided that only individuals 19 and older would be included to ensure that the decision to not gamble in the past year was unrelated to age restrictions that limit gambling opportunities (e.g., individuals under the age of 18 not being permitted in casinos). Only individuals reporting no engagement in any gambling activities over the previous 12 months were eligible to participate. Almost half (48.0%) of participants identified as Caucasian, 17.3% identified as South Asian, 13.3% identified as Chinese, and the remaining participants reported belonging to other ethnic groups. Of the 195 participants who reported their religious affiliation, 29.7% reported no religion and made up the largest proportion, followed by 16.9% of participants reporting other Christian religious denominations (Anglican, Presbyterian, etc.) and 14.9% of participants each reporting Catholic and Muslim affiliation. The remaining 23.6% reported belonging to other religions. Finally, 128 (65.3%) non-gamblers could be classified as ‘current’ non-gamblers, that is, they had reported participation in some form of gambling activity in their lifetime but not in the previous 12 months. The remaining 68 (34.7%) were ‘lifetime’ non-gamblers, reporting no gambling involvement at all in their lifetime.

Procedure

Participants completed an online survey hosted by Qualtrics in a mass testing format. The survey was included as part of a larger study and consisted of a series of items assessing demographics, gambling history, personality, gambling-related attitudes and cognitions, motivations for not gambling, substance use, and general psychological distress.

Motives for Not Gambling

In order to assess motivations for not gambling, a modified version of the question developed by Neighbors et al. (2002) was used. Specifically, participants were asked to “think about what motivates you to NOT gamble and briefly list the top three reasons in rank order (e.g., #1 = the most important reason, #2 = the second-most important reason; #3 = the third-most important reason).”

Lifetime Gambling

Participants were provided a checklist of 15 gambling activities (charity raffle or fundraising tickets; instant win or scratch tickets; slot machines at a casino; poker for money in a bar, lounge, or other public facility; poker for money at home with friends or family; money on other card games, board games, or games of skill; sports lotteries or betting on sports pools; poker for money; betting on race horses; internet gambling; arcade/video gaming; other activities) and asked to check off any activities they had ever participated in (i.e., gambling that took place before the previous 12 months). Individuals who had not participated in any of the provided activities selected “I have not bet or spent money on any gambling activity” and were thus classified as *lifetime non-gamblers*.

Participants who endorsed any lifetime gambling activity were categorized as *current non-gamblers*.

Coding and Categorization

Responses were analyzed qualitatively. Once all responses were collected, a preliminary examination of responses was conducted and 20 initial categories were identified by the principal investigator and an undergraduate honours student. These 20 categories were then presented to a group of gambling researchers (e.g., undergraduate students, graduate students, and a senior faculty member in psychology) for further refinement. It was agreed upon that, due to both the low frequency of some responses as well as substantial overlap between categories, some categories would benefit from being further collapsed. For example, many participants provided reasons related to the risk of losing one's money; previously, "risk" and "loss of money" were coded separately, and it was decided that financial reasons should be combined with risk aversion. Ultimately, nine categories of motives were agreed upon and a coding scheme was developed. Two trained research assistants then independently coded responses into these categories and any discrepancies were discussed with the principal investigator who served as the arbiter. Of 588 total motives provided by participants, 574 (97.6%) were deemed to be categorizable. Prior to reconciliation of coding discrepancies, interrater reliability was calculated for primary motives with high agreement found between the independent raters (Cohen's kappa = .92).

Results

Motives for Not Gambling

Eight unique motives categories were identified with an additional category labeled as 'other' for responses that could not be categorized. A more detailed description of these groups along with examples of individual responses is provided in Table 1. Frequencies for both primary and overall motives provided by participants are shown in Table 2. Each category is listed below in order from the most to least prevalent among the reasons provided:

- (1) *Financial reasons and risk aversion (FRA)* (33.1%). The most common reasons provided by non-gamblers were related to money. More specifically, participants stated the perception of gambling as a waste of money, a lack of money to spend on gambling activities, a desire to earn money rather than attempt to win it, and an aversion to the risk of losing money.
- (2) *Disinterest and other priorities (DOP)* (21.1%). Many non-gamblers stated that they did not gamble due to a lack of interest in gambling as an activity. In particular, gambling was perceived as a waste of one's time, and many individuals stated that they had more important things to do with their time. Moreover, participants also indicated that they did not perceive gambling as an enjoyable activity.
- (3) *Personal and religious convictions (PRC)* (12.2%). A number of participants linked their decision not to gamble to personal and religious beliefs, as well as to strong opinions against gambling. For example, while many individuals explicitly stated

Table 1 List of motives categories and examples

Motive category	Examples
Financial reasons and risk aversion (FRA)	<ul style="list-style-type: none"> • “I do not want to waste money” • “Money is very important to me and I don’t want to risk losing it” • “I have to save money for daily expenses”
Disinterest and other priorities (DOP)	<ul style="list-style-type: none"> • “Enjoying other things to do with my time” • “Gambling is a waste of time” • “Lack of interest”
Personal and religious convictions (PRC)	<ul style="list-style-type: none"> • “It’s very stupid” • “Personal morals” • “Gambling contradicts my religious beliefs”
Awareness of the odds (AWO)	<ul style="list-style-type: none"> • “Low chance of getting anything out of it” • “The odds are stacked against you so there’s no point” • “Completely a game of chance”
Influence of others’ values (IOV)	<ul style="list-style-type: none"> • “My family” • “Social disapproval” • “I don’t have any friends who gamble”
Addiction concerns (AC)	<ul style="list-style-type: none"> • “I might get hooked on it” • “I feel like I could easily have a problem with gambling, so I would rather not try it” • “My dad struggled with gambling and it ruined our family”
Lack of access, opportunity, or skill (LAOS)	<ul style="list-style-type: none"> • “Lack of opportunities to gamble” • “I don’t know how to play gambling games” • “I don’t come across gambling situations in my everyday life”
Emotional distress (ED)	<ul style="list-style-type: none"> • “I would just feel guilty after losing the money” • “Too stressful” • “Too much anxiety”
Other (O)	<ul style="list-style-type: none"> • “My future life” • “Future career” • “I like food”

religious or moral reasons for why they do not gamble, others simply held the position of gambling as a “stupid” activity.

- (4) *Addiction concerns (AC)* (9.6%). Though not often mentioned among primary motives, concerns about potentially losing control of one’s gambling behaviour were much more common as #2- and #3-ranked reasons for not gambling. Specifically, participants stated either personal experience with problematic gambling (e.g., a family member) or a general awareness that recreational gambling could lead to a later problem with gambling. In addition, some participants stated a perceived dispositional risk, such as personality traits that may make it more likely that they would develop a problem if they were to gamble.
- (5) *Influence of others’ values (IOV)* (9.1%). Some participants stated social influences as important factors in their decision not to gamble. Responses included both a desire to avoid disappointing important others, such as family members, as well as

Table 2 Frequency of motives provided in terms of primary and overall motives

Motive category	Frequency	
	Primary (%) N = 195	Overall (%) N = 574
Financial reasons and risk aversion (FRA)	86 (44.1)	190 (33.1)
Disinterest and other priorities (DOP)	41 (21.0)	121 (21.1)
Personal and religious convictions (PRC)	25 (12.8)	70 (12.2)
Awareness of the odds (AWO)	18 (9.2)	51 (8.9)
Influence of others' values (IOV)	12 (6.2)	52 (9.1)
Addiction concerns (AC)	10 (5.1)	55 (9.6)
Lack of access, opportunity, or skill (LAOS)	1 (0.5)	15 (2.6)
Emotional distress (ED)	1 (0.5)	10 (1.7)
Other (O)	1 (0.5)	10 (1.7)

conformity reasons—a number of individuals who reported IOV motives stated that they did not associate with friends who gambled.

- (6) *Awareness of the odds (AWO)* (8.9%). In this category, most participants stated that they did not gamble because the odds of winning were not in their favour. This category included reasons related to the perception of games being “rigged,” low chances of winning, games being based on chance, and having bad luck.
- (7) *Lack of access, opportunity, or skill (LAOS)* (2.6%). Relatively few participants stated reasons related to a lack of access, opportunity, or skill. In particular, some participants stated that they did not visit establishments where gambling takes place, while others expressed uncertainty around how to play certain games.
- (8) *Emotional distress (ED)* (1.7%). Some responses provided by participants indicated experiences or expectations of gambling as resulting in negative emotions, such as stress, anxiety, and guilt.
- (9) *Other (OTH)* (1.7%). Some responses were unable to be placed into any of the above eight categories due to ambiguity or a lack of conceptual similarity to other motives.

Motives for Not Gambling in Lifetime versus Current Non-gamblers

Next, the distribution of motives in ‘lifetime’ versus ‘current’ non-gamblers was compared. Chi square tests were performed between the groups for both overall and primary motives. As seen in Fig. 1, significant differences were found between lifetime and current non-gamblers for the overall motives provided, $\chi^2(6, N = 574) = 13.88, p = .03$. Follow-up Chi square analyses examining the relationship between overall motives and lifetime gambling indicated significant differences only in terms of PRC motives, $\chi^2(1, N = 574) = 11.64, p = .001$, with 18.6% of lifetime non-gamblers endorsing these motives as compared to just 8.8% of current non-gamblers. In addition, a Chi square analysis examining the relationship between primary motives and lifetime gambling revealed significant differences between lifetime and current non-gamblers, $\chi^2(6,$

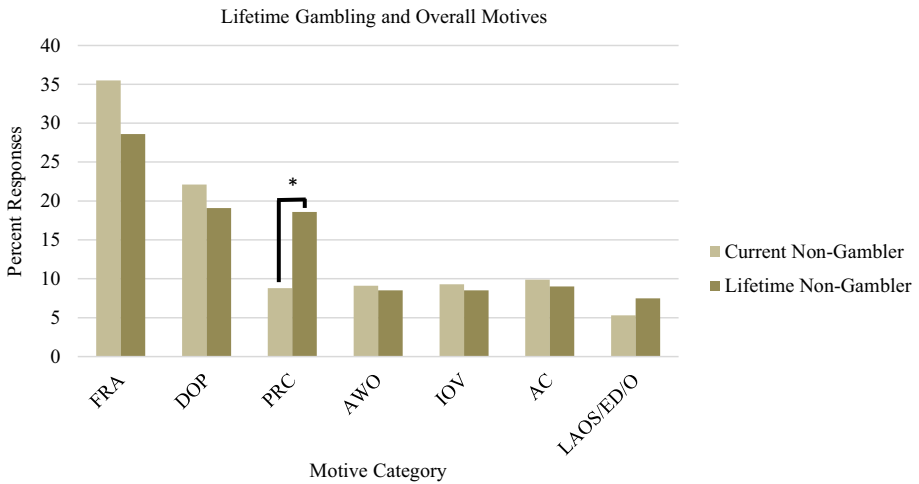


Fig. 1 Proportion of motives endorsed by current non-gamblers and lifetime non-gamblers. A Chi square analysis revealed significant differences between current non-gamblers and lifetime non-gamblers on PRC motives, $\chi^2 (1, N = 574) = 11.64, p = .001$. *Note:* Due to small cell numbers, LAOS, ED, and O motives were collapsed across analyses. * $p = .001$

$N = 195) = 17.21, p = .009$. Follow-up Chi square analyses revealed that 25.4% of lifetime non-gamblers provided ‘personal and religious conviction’ reasons as their primary motive for not gambling whereas only 6.3% of current non-gamblers did, $\chi^2 (1, N = 195) = 14.39, p < .001$. Results are shown in Fig. 2.

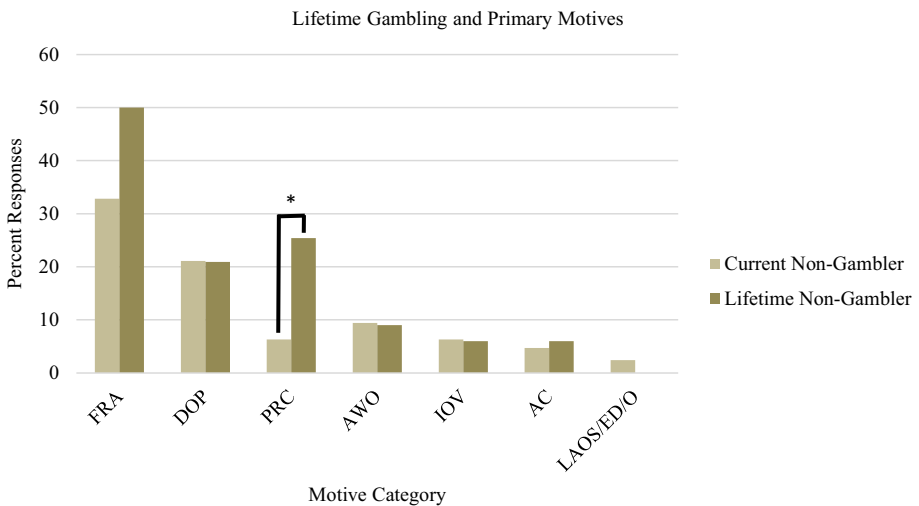


Fig. 2 Primary motives for not gambling provided by current non-gamblers and lifetime non-gamblers. Chi square analyses revealed significant differences with regard to endorsement of PRC motives, $\chi^2 (1, N = 195) = 14.39, p < .001$. *Note:* Due to small cell numbers, LAOS, ED, and O motives were collapsed across analyses. * $p < .001$

Motives for Not Gambling in Drinkers versus Lifetime Non-drinkers

Next, motive categories were compared on alcohol consumption. It is conceivable that some motives may be associated with lower participation in all addictive behaviour (e.g., personal and religious convictions) whereas others may be gambling specific (e.g., awareness of the odds). Of the entire sample, 155 (79.1%) participants had consumed alcohol at some point in their lifetime, while 41 (20.9%) participants were lifetime non-drinkers, reporting never having consumed alcohol. First, a Chi square test revealed significant differences between drinkers and non-drinkers on overall motives, $\chi^2(6, N = 574) = 46.13, p < .001$. Specifically, follow-up Chi square analyses revealed significant differences between lifetime and never-drinkers for ‘personal and religious convictions’ motives, $\chi^2(1, N = 574) = 40.81, p < .0001$. Only 7.7% of drinkers mentioned these motives for not gambling while 29.2% of lifetime non-drinkers indicated ‘personal and religious convictions’ reasons.

In addition, the relationship between primary motives and drinking was also significant, $\chi^2(6, N = 195) = 36.88, p < .001$. Specifically, a Chi square analysis revealed a significant difference between drinkers and lifetime non-drinkers for ‘personal and religious convictions’ motives, $\chi^2(1, N = 195) = 33.26, p < .001$. Substantially more lifetime non-drinkers (40.0%) provided a ‘personal and religious convictions’ motive as their primary reason for not gambling compared to just 5.8% of drinkers (see Fig. 3.).

Discussion

The primary goal of the present study was to identify key self-generated motives for not gambling among non-gamblers. Overall, the categorization of these responses revealed at least eight unique reasons for choosing not to gamble. Of these, participants most often

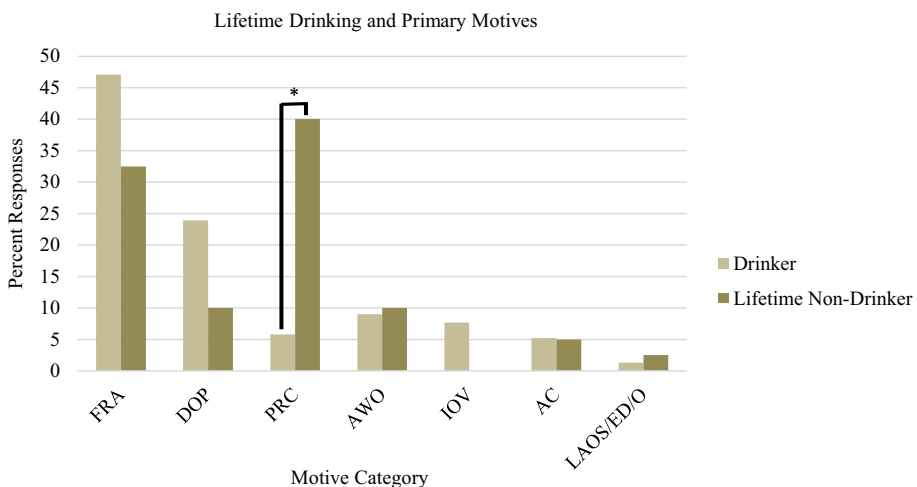


Fig. 3 Primary motives for not gambling provided by drinkers and non-drinkers. Chi square analysis revealed significant differences between lifetime drinkers and never-drinkers with regard to endorsement of PRC motives, $\chi^2(1, N = 195) = 33.26, p < .001$. Note: Due to small cell numbers, LAOS, ED, and O motives were collapsed across analyses. * $p < .001$

reported not gambling due to finances and risk aversion, disinterest in gambling, personal and religious convictions, and awareness of the slim odds of winning. Comparatively fewer individuals reported not gambling due to the influence of others, fear of developing a gambling problem, a lack of access, opportunity, or skill, or the emotional distress that gambling may cause them. A number of these motives are similar to those found among abstainers in the alcohol literature (e.g., disinterest and other priorities); however, the results of this study also suggest that a number of motives are gambling specific. For instance, ‘financial reasons and risk aversion’ were the most common motives provided by participants for why they did not gamble. Furthermore, participants who provided financially-related motives were equally likely to be a drinker or lifetime non-drinker, suggesting that their decision to avoid gambling does not generalize to other addictive behaviours. On the other hand, a clear pattern emerged for participants motivated by ‘personal and religious convictions’ who were significantly more likely to avoid gambling and alcohol. This may suggest that these motives are associated with a lower risk of developing either problematic gambling or drinking. Indeed, this notion has been supported in a longitudinal study on alcohol consumption which found that motives related to religion and friends were associated with abstaining from alcohol at all time-points; while a transition from abstinence to drinking was associated with a decrease in endorsement of these same motives (Epler et al. 2009). Overall, these results support our prediction that some motives would span addictive behaviours whereas others would be gambling-specific.

One interesting pattern which emerged from these results was the appearance that motives for not-gambling, in several cases, mirrored motives for gambling. For instance, in the widely adopted GMQ (Stewart and Zack 2008) and GMQ-F (Dechant 2014) models, gamblers are said to be motivated by ‘enhancement’, ‘social’, ‘coping’, or ‘financial’ reasons. ‘Enhancement’ motives for gambling describe gambling for fun, excitement, or to experience a “rush.” In the present study, a number of non-gamblers cited ‘disinterest and other priorities’ motives suggesting that they did not find gambling to be an exciting activity or simply stated a lack of interest. Similarly, ‘coping’ motives for gambling describe gambling to attenuate negative emotions, such as depression and anxiety. For non-gamblers in this study, ‘emotional distress’ motives for not gambling included responses related to negative feelings that participants had previously experienced or anticipated as a result of gambling. The GMQ ‘social’ motives for gambling include reasons related to a desire to fit in with one’s social group or as an important component of social activities. Conversely, non-gamblers in the current study who reported ‘influence of others’ values’ indicated that their friends or family did not gamble, or that gambling would result in others thinking negatively about them. Finally, ‘financial’ motives for gambling include reasons related to winning or earning money. In this study, many participants reported ‘financial reasons and risk aversion’ motives describing gambling as a waste of money or that they would prefer to earn their money by working. In addition to providing counterparts to the four GMQ-F factors, at least one motive for not gambling also appears to parallel one reason for gambling described by Neighbors et al. (2002). Specifically, while some college student gamblers reported gambling to develop their skills, to win, or because they felt lucky, non-gamblers in the present study reported that they did not gamble due to a lack of skill, the low odds of winning, or perceived bad luck. Overall, this pattern suggests vastly different perceptions of similar constructs between non-gamblers and gamblers and may provide further clues on some of the cognitive biases often experienced in GD.

The study also made a distinction between participants who are ‘lifetime’ non-gamblers versus ‘current’ non-gamblers. A substantial proportion (35.0%) of the sample stated that they have never once gambled. For these individuals, ‘personal and religious convictions’ appear to strongly shape their attitudes toward gambling and possibly all addictive behaviours as evidenced by similarly low endorsement of alcohol use. Whereas for ‘current’ non-gamblers, these same personal values appear to be less relevant in the decision to not gamble. Moreover, given that these individuals have at least some involvement in gambling, it is feasible that these early gambling experiences may have directly contributed to their decision to cease gambling. For instance, some of these young people may have found gambling to be boring and thus became disinterested in further participation. Whereas others may have experienced emotional distress, became more concerned about gambling’s addiction potential, or experienced negative affect associated with losing money. In each case, identifying and further exploring these motivations may provide information on unique pathways to gambling abstention which could have clinical relevance in preventing GD.

The findings from this study should be weighed against potential limitations. First, despite efforts to reduce subjectivity by involving more than one coder to categorize responses, categorization of responses is by nature a subjective process. However, allowing participants to generate their own answers also provides greater assurances that responses were free from the constraints of a pre-generated list of forced choice options. Second, these results are largely limited to undergraduate samples. Some of the motives identified (e.g., lack of access, opportunity, or skill) may be influenced by general inexperience or lack of disposable income more so than a desire to avoid gambling. Moreover, results from this type of student sample cannot be assumed to generalize beyond relatively young, educated, economically advantaged, and primarily Caucasian individuals. For instance, demographic characteristics associated with greater risk of problematic gambling such as lower socioeconomic status, lower levels of education, and certain ethnic minority groups such as Aboriginal individuals (Williams et al. 2012) are generally absent in undergraduate samples relative to the general population (Gainsbury et al. 2014). As such, future studies incorporating a broader array of demographic characteristics are needed. Third, the sample used for this study was overwhelming female (85.8%). However, this may simply reflect the reality that more non-gamblers tend to be female (Desai et al. 2004; Volberg et al. 1997; Welte et al. 2006). Finally, the current study was limited in terms of its reliance on self-report and participant memory. Despite screening participants for past-year involvement in a number of gambling activities which included lottery, scratch, and raffle tickets, participants who referenced specific gambling activities in their responses tended to cite casino games. It is possible that participant responses may have been influenced by accessibility; that is, some motives may not have been related to gambling in general, but casino gambling in particular.

In terms of future research on motives in non-gamblers, there are a number of avenues which may prove to be fruitful. For example, the qualitative approach of the present study may aid in the development of items which could then be subjected to exploratory factor analyses with the goal of creating a scale to measure motives in non-gamblers. Scales developed to measure reasons for abstaining from alcohol have long been available to researchers in that field (e.g., Greenfield et al. 1989; Slicker 1997; Stritzke and Butt 2001). Another potential extension for this line of research would be to recruit other samples of non-gamblers in order to obtain a more representative picture of motivations for not gambling. For example, it may be especially pertinent to recruit older non-gamblers who have chosen to abstain from gambling for years or even decades. Given that the average

age in the present study was just 21 years old, it is possible that many of these young adults who have yet to participate in gambling will do so at a later age. Asking older non-gamblers to retrospectively provide reasons for the why chose not to gamble during their lifetime may uncover unique motives which are not expressed by younger adults. Furthermore, it may also be interesting to examine motivations behind abstention from gambling in recovering GDs, especially as research suggests that individuals are often motivated to begin gambling for one reason and to continue gambling for another (Clarke et al. 2007). Finally, similar to findings on abstaining from drinking (e.g., Epler et al. 2009), longitudinal research may be able to provide information about the extent to which some motives are predictive of different trajectories in the decision to gamble or abstain from gambling over time.

In conclusion, the goal of this study was to identify key self-generated motives for not gambling. It was found that, while some motives overlapped with those provided in past studies for not drinking, non-gamblers reported motivations which are potentially unique to gambling. It was also found that some of these motives mirrored common reasons provided for gambling. Finally, it was revealed that some motives were associated not only with a greater likelihood of being a never-gambler, but also a greater likelihood of being a never-drinker. The results of this study may ultimately have implications for future research on non-gamblers as well as the prevention of GD.

Compliance with Ethical Standards

Conflict of interest The authors have no conflicts of interest to declare.

Ethical approval Ethics approval for this research was granted by the institutional research ethics review board and all procedures were compliant with ethical standards outlined by the 1964 Helsinki declaration and its subsequent amendments.

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