Title
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Permalink
https://escholarship.org/uc/item/6zm1n886

Journal
UC Riverside Undergraduate Research Journal, 15(1)

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Publication Date
2021

DOI
10.5070/RJ515355180

Copyright Information

Peer reviewed

Psychological Experiences with Gambling

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Abstract

According to the 2021 Worldwide Gambling Statistics website, more than a quarter of the population gambles, which means literally billions of people gamble at least once a year (Casino.org, 2021). However, despite the vast number of people gambling per year, there is a lack of research on how emotion regulation affects their perceptions and experiences of gambling. Thus, the aim of this study was to better understand the role of emotion regulation deficits in gambling. A survey was conducted to assess the relationship between frequency and type of gambling behavior and emotion regulation difficulties. The participants were gathered from the UCR Psychology Subject Pool ($N = 195$; after attention checks, $N = 162$). These participants were directed to a survey that assessed personal experiences and beliefs about gambling and their emotion regulation strategies and difficulties. Results from correlational analyses indicated that people who tend to use cognitive reappraisal (thinking differently to change their emotions), but not expressive suppression (hiding their emotions), gambled in a more controlled way. Suppression tendencies did not predict any gambling experience or belief. In addition, people who generally had greater difficulty regulating their emotions reported gambling *less* frequently and gambling in a more enjoyable and focused but also stressful way. The findings suggest that cognitive reappraisal may provide a benefit for individuals who gamble in moderation. Furthermore, those who struggle with regulating their emotions may experience gambling in different ways compared to those who struggle less with emotion regulation.

KEYWORDS: Gambling, difficulties in emotion regulation, frequency, recency, behaviors

Introduction

According to the 2021 Worldwide Gambling Statistics website, more than a quarter of the population gambles, which means literally billions of people gamble at least once a year (Casino.org, 2021). However, despite the vast number of people gambling per year, there is a lack of research on how emotion regulation affects their perceptions and experiences of gambling. Therefore, the aim of this survey-based correlational study was to better understand the role of emotion regulation tendencies and deficits in gambling.

Although gambling is a common behavior, it can have numerous negative consequences such as financial troubles, lack of self-care, and relationship problems (Yang et al., 2015). Unfortunately, these negative consequences are often overlooked by individuals due to their overwhelming focus on winning, no matter the cost (Yang et al., 2015). One reason some people engage in problematic gambling behavior is that they may have deficits in emotion regulation abilities (Rogier & Velotti, 2018; Williams et al., 2011). For instance, gambling behavior is associated with poor self-control, and gamblers tend to use detrimental coping strategies such as escaping and avoiding reality (Williams et al., 2011). Gambling can even cause individuals to develop depression and anxiety, which may be exacerbated by poor emotion regulation skills (Barrault et al., 2019).

We focused on the two most widely researched emotion regulation strategies in our study (e.g., John & Gross, 2004): cognitive reappraisal and expressive suppression. Cognitive reappraisal entails thinking differently about a situation in an effort to minimize negative emotions or intensify positive emotions (Miu & Crisan, 2011). Expressive suppression involves hiding facial expressions or other signals of one's emotional state from others (Miu & Crisan, 2011). Reappraisal tends to be associated with positive life outcomes, whereas suppression tends

to be associated with negative life outcomes (e.g., John & Gross, 2004). In our study, we investigate how these emotion regulation tendencies might be associated with gambling. We also explore the role of difficulties in regulating emotions (e.g., a lack of clarity or awareness regarding one's emotions; Gratz & Roemer, 2004) in gambling behavior and experiences.

The present investigation examined individuals' experiences with and perceptions of gambling to better understanding the role of emotion regulation strategies in gambling. We focus our investigation on young adults, given that emerging independence at this stage of life presents new opportunities to engage in gambling. Our research was driven by the following question: Are emotion regulation tendencies (i.e., cognitive reappraisal and expressive suppression) and difficulties in emotion regulation associated with gambling frequency or experiences during gambling?

Grounded in the research literature on emotion regulation (e.g., Williams et al., 2011, Rogier & Velotti, 2018) and considering the roles of cognitive reappraisal, expressive suppression, and difficulties in emotion regulation in gambling activities (e.g., Miu & Crisan, 2011), we hypothesized that individuals higher in cognitive reappraisal tendencies (thus allowing them to reappraise losses and persist in gambling), expressive suppression tendencies (thus allowing them to hide and minimize their emotions about gambling losses), and difficulties regulating their emotions (thus creating a volatile emotional experience while gambling) would report more gambling behavior and riskier perceptions of gambling (i.e., perceptions that might lead to poor decision making, such as feeling out of control or highly stressed). This research has the potential to reveal risk factors for gambling problems, which could inform interventions to reduce negative consequences associated with gambling (as we discuss in later sections).

Method

Participants

The sample consisted of 195 participants (after removing participants who failed attention checks, *N* = 162) recruited from the Psychology Subject Pool at the University of California, Riverside. All materials and deidentified data are available on the Open Science Framework (*https://osf.io/4d3rh/*). This study was reviewed and approved by the authors' Institutional Review Board.

Measures

Gambling Frequency

Frequency of gambling was measured with a single item ("How often do you gamble?"; 1 = *Never*, 5 = *Very Often*; *M* = 1.44, *SD* = 0.82). Although the mean on this measure is quite low, nearly a third of our participants indicated gambling more often than "never." Given that one goal of our investigation was to compare gamblers to non-gamblers, we were satisfied with this distribution of gambling behavior.

Gambling Recency

Recency of gambling was measured with a single item ("When was the last time you gambled (# of weeks ago)?"; 1 = *Less than a week ago*, 6 = *Never*; *M* = 3.50, *SD* = 1.57).

Gambling Frequency Within the Last Year

Frequency of gambling within the last year was measured with a single item ("How often have you gambled in the past 12 months?"; 1 = *Every day or nearly every day*, 7 = *Never*; *M* = 6.32, *SD* = 1.14).

Gambling Experiences

Personal experiences and perceptions of gambling were measured with a 20-item questionnaire designed for use in this study (e.g., "I feel energized when I watch other people

gamble," "I feel that I am aware of my emotions while deciding whether to gamble"; 1 = *Strongly Agree*, 7 = *Strongly Disagree*; $M = 4.35$, $SD = 0.78$). Because these items were new to this study, we first sought to create subscales within our novel gambling experience items via exploratory factor analysis (a statistical technique that reveals how scale items group together, based on participants' responses). This analysis suggested that four factors (groups of items) were appropriate. After inspecting the items that loaded most strongly onto each factor, we labeled the factors as follows: gambling enjoyment (7 items; e.g., "When I am winning, I engage more in gambling behaviors," "I gamble to have a good time with friends and/or family; $M = 3.48$, $SD = 1.49$, Cronbach's $\alpha = .78$), gambling focus (4 items, e.g., "I tend to lose track of time when gambling," "Gambling is an activity best done alone"; $M = 2.52$, $SD = 1.09$, Cronbach's $\alpha = .74$), controlled gambling (5 items, e.g., "When I am losing while gambling, I can change my negative experience into a positive experience," "I keep calm and collected when gambling"; $M = 4.66$, $SD = .88$, Cronbach's $\alpha = .60$), and stressful gambling (4 items, e.g., "I feel that I am aware of my emotions while deciding whether to gamble," "I prefer to watch other people gamble rather than engaging in gambling myself"; $M = 4.85$, $SD = 1.07$, Cronbach's $\alpha = .48$).

Emotion Regulation Questionnaire

Emotion regulation tendencies were measured with the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003), a 10-item scale designed to measure emotion regulation tendencies in two ways: (1) cognitive reappraisal (e.g., "When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about," "When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking about"; 1 = *Strongly Agree,* 7 = *Strongly Disagree*; $M = 4.99$, $SD = 1.00$, $\alpha = .81$), and (2) expressive suppression (e.g., "I control my emotions by not expressing them," "I keep my emotions to

myself"; 1 = *Strongly Agree,* 7 = *Strongly Disagree*; $M = 4.26$, $SD = 1.09$, $\alpha = .74$) . The measure does not indicate a particular period of time or context to consider, focusing instead on participants' perceptions of their emotion regulation in general.

Difficulties in Emotion Regulation

Difficulties in emotion regulation were measured with the Difficulties in Emotion Regulation Scale (DERS-18; Victor & Klonsky, 2016), an 18-item questionnaire that measures various difficulties in regulating emotions (e.g., "I pay attention to how I feel," "I have difficulty making sense out of my feelings"; 1 = *Almost Always (91 - 100%)*, 5 = *Almost Never (0 – 10%)*; $M = 2.51$, $SD = .74$, $\alpha = .90$).

Procedure

Participants were recruited through the Psychology Subject Pool at UCR within a two-month period. The participants completed the study via an online survey. The link to the survey was provided in the subject pool sign-up system. After reading and approving the consent form, participants completed the online survey. After completing the survey, the participants were asked to email the lead researcher a code (GAMBLE2020), which was used to confirm participation and compensate the participants for their time (with research credit).

Results

Associations between Emotion Regulation and Gambling

To test our hypotheses, we conducted Pearson's bivariate correlation analyses between emotion regulation (reappraisal, suppression, and difficulties in emotion regulation) and gambling behaviors and experiences. Table 1 presents the results of these analyses, which are summarized below.

Table 1. *Bivariate Correlations between Emotion Regulation and Gambling*

	Reappraisal tendencies	Suppression tendencies	Difficulties in emotion regulation
Gambling frequency	.02	<.01	-.14[*]
Gambling recency	-.02	-.16	-.02
Frequency in the past year	-.02	<.01	-.15[*]
Gambling enjoyment	.15	.16	.30[**]
Gambling focus	.19	.15	.21[+]
Controlled gambling	.33[*]	.16	-.08
Stressful gambling	.03	.12	.16[*]

Note: [**]*p* < .01, [*]*p* < .05, [+]*p* < .10.

Reappraisal Tendencies

Contrary to our hypothesis, reappraisal tendencies were not significantly correlated with the frequency or recency of gambling behavior. Moreover, reappraisal tendencies predicted controlled gambling, such that participants who had a greater tendency to use reappraisal reported experiencing gambling in a more controlled way. Reappraisal was not significantly correlated with any other gambling experience subscale.

Suppression Tendencies

Contrary to our hypothesis, suppression tendencies were not significantly correlated with the frequency or recency of gambling behaviors. Suppression was not significantly correlated with any gambling experience subscale.

Difficulties in Emotion Regulation

Contrary to our hypothesis, difficulties in emotion regulation were negatively correlated with the frequency of gambling behaviors, such that participants with greater difficulty regulating their emotions reported gambling *less* frequently within the past 12 months. Consistent with our hypothesis, difficulties in emotion regulation predicted gambling enjoyment and stressful gambling, such that participants who had more difficulties in emotion regulation

reported experiencing gambling in a more enjoyable but also more stressful way (i.e., a riskier set of perceptions). Difficulties in emotion regulation were not significantly correlated with any other gambling experience subscale.

Discussion

The purpose of this study was to gain a better understanding of how emotion regulation tendencies and difficulties might be associated with individuals' gambling behaviors and experiences. As discussed in detail below, the findings only partially supported our hypotheses.

We first hypothesized that individuals with greater cognitive reappraisal tendencies would report more gambling behavior and riskier perceptions of gambling. Our findings contradict this hypothesis, such that individuals who reported greater tendencies to use cognitive reappraisal to regulate their emotions reported more controlled gambling experiences, not riskier experiences (and not more gambling behavior). Although our hypothesis was grounded in previous research, our measure of gambling experiences was new to this study. Further research is needed to better understand how the types of gambling experiences we assessed align (or do not align) with gambling measures included in previous research.

Also contrary to our hypothesis, our findings indicated that suppression tendencies did not correlate with any of the gambling measures. It may be that suppressing emotional *expression* is not pertinent to gambling, but attempting to suppress the *experience* of emotions (not measured in this study) does predict gambling experiences. Consistent with this possibility, findings from past research studies suggest that cognitive reappraisal, but not expressive suppression, altered the way people experienced their emotions while gambling (Barrault et al., 2017; Miu & Crisan, 2011).

In addition, we hypothesized that individuals with greater difficulties regulating their

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emotions would report gambling more frequently and report risker perceptions of gambling. We found mixed support for this hypothesis. Opposite to our prediction, difficulties in emotion regulation were associated with how frequently people had gambled within the last 12 months, but such that people with more difficulties gambled less not more. It is worth noting that a portion of our sample population reported not engaging in any gambling activities. Therefore, future research should look at a sample population that may not gamble but witnessed gambling with families and friends to assess their emotion regulation strategies.

However, as anticipated, difficulties in emotion regulation were associated with both more enjoyment and more stressed gambling behaviors (i.e., more intense emotional experiences while gambling, both positive and negative) These findings were consistent with literature that found that some severe gamblers experienced higher levels of stress-related outcomes and used gambling as an attempt to reduce their difficulties in regulating their emotions (Bergevin et al., 2006).

Overall, the results of our study departed from what prior research studies suggested we would find (e.g., Miu & Crisan, 2011, Rogier & Velotti, 2018, Williams et al., 2011). Since our gambling measures were novel to this study, our study took a unique approach to understanding gambling experiences and thus may have captured aspects of gambling that are affected differently by emotion regulation difficulties and tendencies compared to measures in past studies. Therefore, our results open new opportunities to understand the role of emotion regulation in gambling, suggesting for example that difficulties in emotion regulation and tendencies toward reappraisal and suppression are not as risky as previously thought. Furthermore, by understanding more about the role of cognitive reappraisal, individuals can use this emotion regulation strategy as a positive coping mechanism when engaging in risky

gambling behaviors. For instance, when individuals are in a gambling setting (e.g., casinos), they can practice cognitive reappraisal by reframing losses as "simply the cost of an enjoyable day gambling" rather than something that needs to be remedies through further gambling.

Although the present investigation had several strengths, we also recognize several limitations. First, our investigation had a limited sample population, consisting of students from the UCR Psychology Subject Pool. Due to this limited sample population, our findings were limited in their generalizability, although our sample was quite diverse in terms of race, ethnicity, and socioeconomic status. Future research should gather a larger sample population to increase generalizability. Furthermore, our study relied on self-report measures of gambling experiences and behavior, and it was cross-sectional and correlational. These self-reported measures are subjective by nature since these measures reflect the participants' personal perspectives, and the correlational nature of our data prevents causal inferences regarding the associations we observed. Follow-up studies should assess gambling behaviors in an experimental design and with objective measures of behavior (e.g., observations of persistence following loss in a gambling game in the lab) to better study these psychological experiences.

Another limitation was that participants could have misunderstood the definition of gambling. We included items that asked participants gambling types (e.g., horse betting, slot machines); however, we also had participants freely answer other gambling types by selecting an open response option ("other"). Future investigations should specify various gambling activities to better assess these activities. Finally, the study did not assess those who identified as problem or non-problem gamblers. Barrault et al. (2019) assessed problem and non-problem gamblers, where those who identified as problem gamblers displayed different gambling motives (e.g., gambling to win) and increased psychiatric symptoms (e.g., anxiety). Additional research should

study more about the relationship between problem and non-problem gamblers alongside difficulties in regulating emotions when engaging in gambling behaviors.

Nonetheless, our study provides insight into the role of emotion regulation tendencies and deficiencies when engaging in gambling. Most notably, our findings suggest that people with emotion regulation difficulties may actually be less at risk for problem gambling, and people who readily engage in cognitive reappraisal to regulate their emotions may also be less at risk for problem gambling due to their tendency to gambling in a controlled way. These findings could contribute to the development of interventions to teach cognitive reappraisal strategies (e.g., see Denny & Ochsner, 2014, for a review of effects of cognitive reappraisal training), thus potentially lowering their risk for problematic gambling behavior.

Acknowledgements

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