

The Relationship Between Problem Gambling and Psychological Wellbeing Among Male University Students in the Upper Eastern Region, Kenya

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Publication Date: 2026/08/08

Abstract: Problem gambling has emerged as a significant public health concern among university students worldwide, with growing evidence linking gambling-related harm to poorer psychological functioning. This article draws on a wider correlational study to examine specifically the relationship between problem gambling and psychological well-being (PWB) among male undergraduate students in universities in the Upper Eastern Region of Kenya, comprising Meru, Tharaka Nithi, and Embu Counties. Anchored on flow theory and cognitive behavioural therapy, the study sampled 384 male students using Yamane's formula and stratified random sampling across five universities, with 298 questionnaires returned (77.6% response rate). Problem gambling was measured using an adapted Problem Gambling Severity Index, while PWB was assessed using an 18-item scale spanning Ryff's six dimensions of well-being. Pearson correlation analysis was applied to test the study's hypothesis at the 0.05 significance level. Findings revealed a strong, negative, and statistically significant relationship between problem gambling and PWB ($r = -0.651$, $p = .000$, $n = 237$), leading to rejection of the null hypothesis. The results indicate that higher levels of problem gambling severity are associated with markedly poorer psychological functioning among affected students, a pattern consistent with flow theory's account of maladaptive "dark flow" and with cognitive behavioural explanations of distorted, gambling-sustaining thought patterns. The study recommends coordinated action by universities, mental health professionals, and government regulators to strengthen early screening, counselling access, and enforcement of gambling controls targeting student populations.

Keywords: Problem Gambling; Psychological Well-Being; Male University Students; Upper Eastern Region; Kenya; Flow Theory; Cognitive Behavioural Therapy.

How to Cite: Ruth Muthoni Muturi (2026) The Relationship Between Problem Gambling and Psychological Wellbeing Among Male University Students in the Upper Eastern Region, Kenya. *International Journal of Innovative Science and Research Technology*, 11(8), 97-100. <https://doi.org/10.38124/ijisrt/26aug137>

I. INTRODUCTION

The transition through higher education marks a pivotal period in a young person's life, bridging adolescence and adulthood and bringing with it new levels of independence and unsupervised leisure time. Within this expanded autonomy, university students increasingly engage in gambling activities that, aided by the rapid growth and easy online accessibility of the betting industry, can escalate quickly into problem gambling. Scholars have progressively framed gambling as a public health concern linked to physical and sexual victimisation, substance misuse, and psychological ill-health.

Psychological well-being (PWB) is especially fragile during the university years. Following Ryff and Keyes' framework, PWB comprises six dimensions: positive relations with others, personal growth, autonomy, self-acceptance, environmental mastery, and purpose in life. Academic workload, evolving peer cultures, and separation from family strain even resilient students, and international evidence documents widespread psychological distress on campuses. Within this context, a growing body of research has linked problem gambling to diminished well-being, though findings across regions and cultures remain inconsistent: some studies report strong associations between gambling severity and conditions such as anxiety, compulsive behaviour, and post-traumatic stress, while others, particularly in different cultural settings, report no significant relationship at all.

In Kenya, gambling among university students appears especially concentrated among male students, yet existing local studies have tended to document prevalence rates or isolated psychosocial predictors of gambling without directly testing its association with the multi-dimensional construct of PWB. This gap is particularly pronounced in the Upper Eastern Region of Kenya (Meru, Tharaka Nithi, and Embu Counties), a rapidly growing university hub that has been largely overlooked in favour of studies conducted in major urban centres. Addressing this gap, the present article reports findings on the third objective of a broader study: to determine the relationship between problem gambling and psychological well-being of male students in the universities in the Upper Eastern Region, Kenya. The corresponding null hypothesis stated that problem gambling has no statistically significant association with the psychological well-being of male students in these universities.

II. LITERATURE REVIEW

➤ *Problem Gambling and Psychological Well-Being of University Students*

Evidence on the association between problem gambling and PWB remains mixed across contexts. In the United States, a large-scale study of university students found that problem gambling was significantly correlated with generalised compulsive sexual behaviour, anxiety, and post-traumatic stress disorder, though it did not examine well-being dimensions such as self-acceptance, personal growth, or purpose in life. By contrast, a one-year longitudinal study in China involving 283 university students reported no significant association between gambling disorder and PWB, a divergence attributed to contextual and methodological differences between settings.

Research within Africa has generally pointed toward harmful associations. A Ghanaian study of 403 students found that male students were disproportionately susceptible to gambling-linked psychological distress, with problem gamblers reporting the greatest distress of all groups; comparable findings have been reported in Nigeria, where problem gambling was linked to poorer mental wellbeing and academic performance. Kenyan studies have tended to examine psychosocial correlates of gambling, such as self-efficacy, peer pressure, and stress, rather than directly testing the gambling-PWB relationship, leaving the specific association particularly among male students outside major urban centres empirically underexplored.

Taken together, the literature suggests that contextual and methodological differences shape whether, and how strongly, problem gambling relates to psychological well-being, underscoring the need for a localized empirical test among male university students in the Upper Eastern Region of Kenya.

➤ *Theoretical Framework*

This study was anchored on flow theory and cognitive behavioural therapy (CBT). Flow theory conceptualises flow as a highly focused, intrinsically rewarding mental state that emerges when a challenge closely matches an individual's

ability. Applied to gambling, the theory suggests that intermittent rewards can draw individuals into repeated cycles of chasing wins, distracting them from stressors while gradually risking their financial stability and relationships. When flow experiences shift into problematic, compulsive gambling, they can transform into "dark flow," a state associated with negative outcomes including financial hardship, relational strain, and mental health difficulties such as depression and anxiety.

CBT, meanwhile, explains the relationships among thoughts, emotions, and behaviours, positing that dysfunctional core beliefs, rigid assumptions, and negative automatic thoughts sustain maladaptive behaviour patterns such as problem gambling. In this study, CBT provided a framework for understanding how distorted cognitions such as overestimating one's chances of winning can perpetuate gambling behaviour and, in turn, erode psychological well-being through diminished self-regulation and heightened emotional distress.

III. METHODOLOGY

The study employed a correlational research design, appropriate for examining the strength and direction of the relationship between problem gambling and PWB without manipulating either variable. The research was conducted in the universities of the Upper Eastern Region of Kenya (Meru, Tharaka Nithi, and Embu Counties), targeting all undergraduate male students enrolled across five universities: Tharaka University, Meru University of Science and Technology, Kenya Methodist University, University of Embu, and Chuka University. The target population was 9,655 male undergraduate students. Applying Yamane's (1967) formula at a 0.05 margin of error yielded a sample size of 384 male students, proportionately distributed across the five institutions using stratified random sampling.

Data were collected using an adapted, pre-tested questionnaire. Problem gambling was measured using a Problem Gambling Severity Index that classified respondents into no, mild, moderate, or severe gambling categories, while PWB was assessed through an 18-item scale measuring Ryff's six dimensions self-acceptance, personal growth and development, positive relationships, autonomy, personal mastery, and purpose and meaning in life on a five-point Likert scale. Content validity was established through expert review, and reliability was confirmed via test-retest piloting, yielding a reliability coefficient of 0.81. Ethical clearance was obtained from Kenyatta University's graduate school and the National Commission for Science, Technology and Innovation (NACOSTI), and informed consent was secured from all participants prior to data collection.

Of the 384 targeted respondents, 298 questionnaires were completed and returned, a response rate of 77.6%. Data were analysed using SPSS version 28. Descriptive statistics (frequencies, percentages, means, and standard deviations)

summarised the sample and variable distributions, while Pearson correlation analysis tested the relationship between problem gambling and PWB at the 0.05 significance level.

IV. RESULTS

Among the 298 respondents, 237 (79.5%) reported having engaged in gambling in the preceding 12 months. Within this gambling subgroup, severity classification showed that 19.0% exhibited no gambling problem, 29.5% mild, 38.8% moderate,

and 12.7% severe problem gambling indicating that gambling-related risk was concentrated in the mild-to-moderate range rather than confined to a small minority. On PWB, the majority of respondents who had gambled (74.7%) fell into the moderate well-being category, while 16.4% recorded high PWB and 8.9% recorded low PWB.

To test the study's central hypothesis, a Pearson correlation analysis was conducted between problem gambling severity and PWB scores. The results are presented in Table 1.

Table 1: Relationship Between Problem Gambling and Psychological Well-Being

		Psychological Well-Being
Problem Gambling	Pearson Correlation	-.651**
	Sig. (2-tailed)	.000
	N	237

** Correlation is significant at the 0.01 level (2-tailed).

The analysis revealed a strong, negative, and statistically significant relationship between problem gambling and PWB ($r = -0.651$, $p = .000$, $n = 237$) at the 0.05 significance level. Consequently, the null hypothesis that problem gambling has no statistically significant association with PWB among male students in these universities was rejected in favour of the alternative hypothesis. The magnitude and direction of the correlation indicate that as problem gambling severity increases, psychological well-being declines correspondingly, positioning gambling not as a marginal stressor but as a substantive factor closely linked to poorer psychological functioning among affected students.

V. DISCUSSION

The finding of a strong negative correlation between problem gambling and PWB ($r = -0.651$, $p = .000$) reinforces evidence from studies conducted in high-income settings, where problem gambling has been linked to elevated anxiety, compulsive behaviour, and trauma-related symptoms among university students. It diverges, however, from the null finding reported in a Chinese longitudinal study, suggesting that the strength of the gambling-PWB relationship is not universal but shaped by contextual, cultural, and methodological factors. The present result aligns more closely with findings from African university settings, where problem gambling has consistently been associated with heightened psychological distress among male students in particular.

Interpreted through flow theory, the negative association is consistent with the concept of "dark flow," whereby gambling that initially offers absorption and short-term relief from stress can, once it becomes problematic, generate a self-reinforcing cycle of loss-chasing, financial strain, and social disruption that cumulatively undermines wellbeing. From a cognitive behavioural perspective, the relationship reflects the role of

distorted cognitions such as overestimating the likelihood of winning or believing that a win will resolve underlying stressors in sustaining gambling behaviour, while negative automatic thoughts and eroded self-regulation compound emotional distress and further depress PWB.

Practically, the concentration of gambling severity in the mild-to-moderate range, alongside the concentration of PWB scores in the moderate category, suggests that many affected students occupy an "at-risk" position: harms are emerging but have not yet reached their most severe expression, which is precisely the window in which early screening, brief counselling interventions, and structured support are likely to be most effective. The magnitude of the correlation further suggests that addressing problem gambling on campuses cannot be treated purely as a financial or disciplinary matter; it requires an integrated response that also safeguards students' broader psychosocial functioning.

VI. CONCLUSION AND RECOMMENDATIONS

The study concludes that problem gambling is closely and significantly associated with poorer psychological well-being among male university students in the Upper Eastern Region of Kenya. The strength of this negative relationship indicates that gambling-related harm extends beyond financial cost into core dimensions of psychosocial functioning, including relationships, self-acceptance, autonomy, personal growth, environmental mastery, and sense of purpose. These findings affirm the value of theorising gambling-related harm through both flow theory and cognitive behavioural frameworks, and they underscore the urgency of context-specific intervention in a region that has, until now, received limited empirical attention.

Based on these findings, students are encouraged to adopt self-management strategies that limit exposure to gambling-inducing conditions, including setting firm personal financial and time boundaries, avoiding gambling during periods of stress, and using digital tools to block or limit access to betting platforms, while also building healthier coping mechanisms such as structured study routines, physical activity, and peer support. Universities are encouraged to treat gambling-related harm as a student well-being and academic risk issue by establishing structured prevention programmes, confidential screening and referral systems within counselling units, and accessible, low-barrier counselling services, alongside efforts to strengthen protective social environments through clubs, mentoring, and structured student engagement. At the policy level, the Government of Kenya, through bodies such as the Betting Control and Licensing Board, should strengthen enforcement of existing gambling regulations, tighten age and identity verification requirements, restrict aggressive advertising targeted at students, and expand funding for youth-focused mental health and addiction services, supported by regular, standardised national surveillance of gambling patterns among university populations.

Future research should extend this inquiry to universities in major urban centres to test the generalisability of these findings, include female and postgraduate students to examine gender-based differences in gambling risk and well-being, and adopt longitudinal or mixed-methods designs capable of clarifying the direction and mechanisms underlying the gambling-PWB relationship, including the mediating or moderating roles of financial distress, peer pressure, coping strategies, and access to support services.

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