Examining the Relationships in Personality Characteristics, Social Support, and Gambling Ideation among Undergraduates Students of Universities in Southwest Nigeria

Emmanuel Temitope Bankole
Olubukola Ajayi
Christianah Kehinde Arowosegbe
Department of Psychology and Behavioural StudiesEkiti State University

Abstract: *The growth of online gambling platforms in Nigeria has raised public health concerns, particularly among university students who may be more susceptible to risky behavior due to developmental and social pressures. This study explored how personality traits (impulsivity, sensation-seeking, neuroticism) and sources of social support (family, peer, academic) relate to gambling ideation among 11,631 undergraduates from six universities in Southwest Nigeria. Using a cross-sectional survey design, data were collected with validated tools—the Big Five Inventory, Multidimensional Scale of Perceived Social Support, and Gambling Urge Scale—and analyzed through regression, structural equation modeling, and multivariate techniques. Surprisingly, impulsivity ($r = -0.099$, $p < .001$), sensation-seeking ($B = -0.208$, $p < .001$), and neuroticism ($B = -0.071$, $p < .001$) showed weak negative associations with gambling ideation, suggesting the potential influence of cultural context and measurement sensitivity. Family ($B = -0.056$, $p < .001$), peer ($B = -0.013$, $p < .01$), and academic support ($B = -0.043$, $p < .001$) all significantly predicted lower gambling ideation, lending support to the stress-buffering perspective. Social support played a moderating role in the relationship between impulsivity ($B = -0.009$, $p = .009$) and sensation-seeking ($B = 0.012$, $p < .001$) with gambling ideation and also partially mediated the impulsivity-ideation link (indirect effect = -0.016). The combined influence of personality and social support was found to be significant ($B = 0.085$, $p < .001$). These results point to the protective value of social support and call for greater cultural sensitivity in psychological assessments. The findings suggest that enhancing family and academic support systems, implementing student-focused interventions, and enacting policies to regulate gambling exposure may help reduce gambling ideation. Future longitudinal research could explore causal mechanisms and additional social influences among Nigerian undergraduates.*

Keywords: relationships, personality characteristics, social support, gambling ideation undergraduate's students, universities, Southwest Nigeria

INTRODUCTION

Gambling has historically been regarded as a leisure activity or social pastime. However, in recent decades, particularly with the rise of digital technology and mobile internet access, gambling has increasingly been recognized as a significant public health issue. This concern is especially notable among young adults, such as university students, who are navigating complex developmental transitions, including increasing autonomy, academic pressure, peer dynamics, and identity exploration. One emergent dimension of this issue is "gambling ideation," which refers to persistent thoughts, inclinations, or fantasies about gambling—even in the absence of actual gambling behavior.

In Nigeria, the gambling industry has grown rapidly, spurred by increased smartphone ownership, cheap data plans, and aggressive digital marketing by betting platforms such as Bet9ja, Nairabet, and Sportybet. According to Akanle and Fageyinbo (2019), it is estimated that over 60 million Nigerians engage in sports betting, with young adults forming a considerable segment of this population. This surge is particularly visible in educational hubs in Southwest Nigeria, which host prominent universities like the University of Ibadan, Federal University of Technology Akure, and Ekiti State University. These institutions are located in urban environments where gambling is not only accessible but also socially acceptable and even normalized within student circles.

This growing exposure raises concerns about the potential escalation from ideation to habitual gambling, which is associated with several negative outcomes, including poor academic performance, psychological distress, financial hardship, and in extreme cases, addiction. Yet, gambling ideation itself remains under-researched, particularly in non-Western contexts. Understanding the psychological and social factors that contribute to gambling ideation could serve as a preventive step, allowing institutions to intervene before actual gambling behavior begins.

Personality characteristics are among the most studied factors in behavioral psychology. Traits like impulsivity, sensation-seeking, and neuroticism, as described in the Five-Factor Model (Costa & McCrae, 1992), are known to shape behavioral tendencies. Impulsive individuals are prone to act without thinking through consequences, making them susceptible to the immediate rewards of gambling. Sensation-seeking individuals often pursue novel or thrilling experiences, which gambling can provide. Neuroticism, characterized by emotional instability and stress sensitivity, may lead individuals to use gambling as a means of emotional escape. In parallel, social support is another crucial variable that influences behavior and emotional regulation. Defined as the emotional, informational, and practical assistance received from others, social support can mitigate the adverse effects of stress and risky personality traits. According to the stress-buffering hypothesis (Cohen & Wills, 1985), individuals with stronger social networks are more resilient to psychological stressors. For students, family, peer, and academic support systems may reduce the likelihood of turning to gambling ideation as a coping mechanism. On the other hand, in certain

contexts, peer support may reinforce rather than buffer against harmful behavior, especially when peers normalize or encourage gambling.

Despite the prevalence of gambling among Nigerian youth, empirical studies addressing the combined impact of personality traits and social support on gambling ideation are limited. Much of the existing research focuses on actual gambling behavior, with little attention paid to ideation, which may precede and predict more serious involvement. Even fewer studies adopt an integrative approach that considers both individual psychological traits and environmental social factors in a single framework. This study, therefore, addresses these gaps by examining the direct and combined effects of personality characteristics and perceived social support on gambling ideation among undergraduate students in Southwest Nigeria. By focusing on ideation rather than behavior, and by integrating personality and environmental variables, this research seeks to offer insights that can inform early interventions and policy development tailored to local contexts.

Statement of the Problem
The increasing visibility of gambling ideation among undergraduate students in Nigeria presents a serious concern for educators, mental health practitioners, and policy makers. While traits like impulsivity and sensation-seeking have been repeatedly linked to risk-taking behaviors in Western research, the extent to which these traits predict gambling ideation in the Nigerian context remains unclear. Social support is often viewed as a protective factor that reduces the likelihood of engagement in harmful behavior. However, anecdotal reports and emerging studies suggest that not all forms of support are beneficial. In some peer networks, gambling is seen as a group activity or a means of bonding, potentially promoting gambling ideation rather than preventing it. In such cases, peer support may act as an enabler rather than a buffer. Similarly, insufficient family or academic support may heighten the risk of gambling ideation by failing to offer alternative outlets for stress relief or emotional regulation.

The existing body of research in Nigeria largely overlooks how personality traits and social support interact to influence gambling ideation. Moreover, most studies focus on clinical populations or on gambling behavior, with limited attention to the cognitive and motivational precursors of gambling. This leaves a critical gap in understanding how risk and protective factors combine to shape gambling-related thought patterns among non-clinical student populations.

Objectives of the Study
The overall aim of this study is to investigate how personality characteristics and social support relate to gambling ideation among undergraduate students in Southwest Nigeria. The specific objectives are to:
1. Determine whether impulsivity, sensation-seeking, and neuroticism significantly predict gambling ideation.
2. Assess the relationship between family, peer, and academic support and gambling ideation.
3. Explore whether social support moderates the effect of personality traits on gambling ideation.

4. Examine whether social support mediates the relationship between personality traits and gambling ideation.

Significance of the Study
This study makes a unique contribution to the literature on gambling ideation by exploring it within a Nigerian undergraduate population—an area that has received little empirical attention. It moves beyond simplistic or linear interpretations of gambling behavior by integrating psychological (individual) and social (contextual) factors.

For university administrators, counselors, and public health professionals, the findings offer a foundation for designing evidence-informed prevention and intervention strategies. These could include student counseling services, peer support programs, and family engagement initiatives. Additionally, the results may guide national policy efforts aimed at regulating gambling advertisements and reducing students' exposure to online gambling platforms.

Academically, the research expands on theoretical models such as the Five-Factor Model and the stress-buffering framework by testing their relevance in a non-Western context. It also introduces gambling ideation as a distinct cognitive construct worthy of scholarly attention, especially as a potential early indicator of problematic gambling behavior. Ultimately, the study lays the groundwork for future research, especially longitudinal studies, that can trace the development of gambling ideation over time and across varying student demographics.

Gaps in Literature.
Although several global studies have explored the causes of gambling behavior, fewer have examined gambling ideation specifically. Research that combines personality traits and social support in Nigerian university settings is also limited. There is little understanding of how these factors might interact to influence gambling thoughts.

The main gaps identified are as follows:

1. Limited Research on Gambling Ideation Much of the literature focuses on gambling frequency and addiction (Griffiths, 2010; Wardle et al., 2011), while cognitive preoccupation with gambling remains understudied. Few studies target ideation in general populations, such as undergraduates.
2. Lack of Studies Combining Psychological and Social Factors Many existing studies analyze personality and social support separately. There is limited evidence on how these elements work together to influence gambling ideation (Gainsbury et al., 2014; MacLaren et al., 2011). Few studies explore how social support might influence the effect of personality traits on gambling thoughts.
3. Lack of Data on Nigerian Undergraduates Most studies on gambling ideation have been conducted in Western countries. Research focusing on Nigerian students is lacking, despite their growing exposure to gambling through online platforms (Okechukwu, 2022).

4. Underuse of Social Support as a Moderating Factor Social support is often seen as a buffer against risky behavior, but its role in gambling ideation is rarely tested in that capacity (Håkansson et al., 2020; Hopley & Nicki, 2010).
5. Weak Theoretical Foundations Many studies on gambling ideation are not grounded in clear theoretical models such as the Theory of Planned Behavior (Ajzen, 1991) or Social Cognitive Theory (Bandura, 1986), limiting their depth and relevance.
6. Lack of Longitudinal Studies Cross-sectional studies dominate current research, making it difficult to determine cause and effect (Ladouceur et al., 1999). More long-term research is needed to track how gambling ideation may evolve into gambling behavior.

This study aims to fill these gaps by exploring how personality traits and social support interact to influence gambling ideation among Nigerian undergraduates. It uses a moderated regression model to understand the factors involved and to offer more specific insights relevant to Nigerian students.

Summary and Implications for the Present Study.
The literature shows that gambling ideation arises from a mix of psychological, social, and environmental factors. However, little research has examined how personality traits and social support work together in the context of Nigerian universities. This study addresses that gap by analyzing how these factors influence gambling-related thoughts among undergraduates.

Theoretical Implication for the Current Study.
The present study applies several theoretical models to better understand gambling ideation among Nigerian undergraduates. By combining personality theories with models of social support, learning, and risk, the study provides a broader view of the psychological and social factors that shape gambling-related thoughts.
Having reviewed the above theories, the following hypotheses were formulated to be tested in this study;

Hypotheses:
1.There will be a significant positive relationship between impulsivity and gambling ideation among undergraduate students in Southwest Nigeria.
2. Sensation-seeking personality traits will significantly predict higher levels of gambling ideation among undergraduate students.
3. There will be a positive influence of Neuroticism on gambling ideation among undergraduate students.
4. Social support from family will significantly predicts lower levels of gambling ideation among undergraduate students.
5. Peer social support will be negatively associated with gambling ideation among undergraduate students.
6. Students with low perceived academic support are more likely to report higher levels of gambling ideation.
7. Social support will moderate the relationship between impulsivity and gambling ideation, such that the relationship is weaker for students with higher social support.

8. Social support will moderate the relationship between sensation-seeking and gambling ideation, such that high social support reduces the effect of sensation-seeking on gambling ideation.
9. Social support will mediate the relationship between personality characteristics (e.g., impulsivity, sensation-seeking) and gambling ideation.
10. There will be a significant difference in gambling ideation based on the combined effect of personality traits and types of social support among undergraduate students.

Operational Definition of Terms
Gambling Ideation: Recurrent thoughts, urges, or tendencies to engage in gambling activities, even if actual gambling behavior is not present.
Impulsivity: A personality trait characterized by acting on the spur of the moment without considering consequences.
Sensation-Seeking: The tendency to seek varied, novel, and intense experiences and the willingness to take risks for such experiences.
Neuroticism: A trait reflecting emotional instability, anxiety, moodiness, and negative emotional states.
Openness: A personality trait reflecting imagination, curiosity, creativity, and a preference for novelty.
Social Support: The perception or reality of being cared for, having assistance from others, and being part of a supportive social network (e.g., family, peers, academics).

METHODOLOGY

Research Design
This study adopted a cross-sectional survey design. This design was deemed appropriate as it allows for the collection of data from a large sample at a single point in time to examine the relationships among personality traits, social support, and gambling ideation. The quantitative approach facilitated the use of structural equation modeling (SEM) to test the hypothesized relationships and interactions.

Population of the Study
The population of the study comprised all of 12 thousand undergraduate students from 6 universities in southwest, Nigeria. enrolled in public universities in Southwest Nigeria. These institutions represent a diverse student population in terms of socioeconomic status, ethnic background, and academic disciplines.

Sample and Sampling Technique
This study adopted a multistage sampling technique to select participants from universities across the six states in Southwest Nigeria. At the first stage, one university was purposively selected to represent each state, ensuring broad geographic and institutional representation. The selected institutions included:

Ekiti State University, Ado-Ekiti (Ekiti State)
Federal University of Technology, Akure (Ondo State)
Osun State University, Osogbo (Osun State)
University of Ibadan, Ibadan (Oyo State)
Federal University of Agriculture, Abeokuta (Ogun State)
University of Lagos, Akoka (Lagos State

At the second stage, students were sampled from six major faculties in each university:
Faculty of Social Sciences
Faculty of Management Sciences
Faculty of Arts
Faculty of Sciences
Faculty of Education
Faculty of Engineering

Using stratified random sampling, questionnaires were distributed proportionately among students in these faculties. A total of 2,000 questionnaires were allocated to each university, making 12,000 in total. Out of these, 11,631 questionnaires were fully completed and returned, representing a response rate of 96.9%.

The final distribution of respondents across faculties and universities ensured balanced representation from all academic backgrounds and disciplines. For instance, Ekiti State University, Ado-Ekiti had a total of 1,936 respondents, with 421 drawn from the Faculty of Social Sciences, 366 from Management Sciences, 339 from Arts, and others proportionately represented. Similar stratified distributions were applied across the other five institutions to enhance representativeness and generalizability of the findings. This sampling strategy was chosen to enable cross-institutional and cross-disciplinary comparisons, and to capture different perspectives on gambling ideation among undergraduate students in Southwest Nigeria. Below is the full distribution of participants:

DEMOGRAPHIC SUMMARY BY UNIVERSITY

Ekiti State University, Ado Ekiti
Total Students: 1959
Male: 793
Female: 1166
Faculty Distribution
- Faculty of Social Sciences: 346 students
- Faculty of Education: 334 students
- Faculty of Management Sciences: 322 students
- Faculty of Engineering: 322 students
- Faculty of Arts: 318 students
- Faculty of Sciences: 317 students

Federal University of Technology, Akure

Total Students: 1959
Male: 796
Female: 1163
Faculty Distribution
- Faculty of Sciences: 353 students
- Faculty of Education: 339 students
- Faculty of Engineering: 329 students
- Faculty of Social Sciences: 319 students
- Faculty of Arts: 311 students
- Faculty of Management Sciences: 308 students

Osun State University, Osogbo
Total Students: 1958
Male: 790
Female: 1168
Faculty Distribution
- Faculty of Education: 334 students
- Faculty of Social Sciences: 333 students
- Faculty of Engineering: 329 students
- Faculty of Arts: 329 students
- Faculty of Sciences: 319 students
- Faculty of Management Sciences: 314 students

University of Ibadan, Ibadan
Total Students: 1959
Male: 795
Female: 1164
Faculty Distribution
- Faculty of Management Sciences: 354 students
- Faculty of Education: 329 students
- Faculty of Sciences: 328 students
- Faculty of Engineering: 326 students
- Faculty of Arts: 315 students
- Faculty of Social Sciences: 307 students

Federal University of Agriculture, Abeokuta
Total Students: 1958
Male: 799
Female: 1159
Faculty Distribution

- Faculty of Management Sciences: 360 students
- Faculty of Sciences: 322 students
- Faculty of Arts: 321 students
- Faculty of Social Sciences: 320 students
- Faculty of Education: 318 students
- Faculty of Engineering: 317 students

University of Lagos, Akoka
Total Students: 1959
Male: 791
Female: 1168
Faculty Distribution
- Faculty of Social Sciences: 382 students
- Faculty of Education: 334 students
- Faculty of Management Sciences: 326 students
- Faculty of Engineering: 308 students
- Faculty of Arts: 307 students
- Faculty of Sciences: 302 students

Research Instruments
The study utilized a structured questionnaire comprising standardized and validated scales:
-Impulsivity Scale: (Big Five Inventory) Assessed the tendency to act on impulse without considering consequences.
-Sensation Seeking Scale: (Big Five Inventory) Measured the propensity for seeking novel and thrilling experiences.
-Neuroticism Subscale (Big Five Inventory) Evaluated emotional instability and susceptibility to stress.
-Openness Subscale (Big Five Inventory) Assessed intellectual curiosity, imagination, and openness to experience.
-Multidimensional Scale of Perceived Social Support (MSPSS) Measured perceived support from family, friends, and significant others.
-Gambling Urge Scale (GUS) Develop To assess momentary gambling cravings, particularly in high-risk or triggering situations.
All instruments employed a 5-point Likert scale ranging from "Strongly Disagree" (1) to "Strongly Agree"   (5).

Validity and Reliability of Instruments
Face and content validity were ensured through expert review in the fields of psychology and psychometrics. Internal consistency reliability was assessed using Cronbach's alpha. All scales showed acceptable reliability coefficients ranging from .76 to .89, indicating good reliability.

Publication of the European Centre for Research Training and Development -UK

Method of Data Collection
Data were collected through self-administered questionnaires distributed in person. Prior to data collection, informed consent was obtained from all participants. Respondents were assured of the confidentiality and anonymity of their responses.

Method of Data Analysis
Multiple regression analysis was used to test direct hypotheses. SEM (AMOS v24) was employed to test moderation (interaction terms) and mediation models while MANOVA was used to test the interaction effects.

Hypotheses 1 to 6 were tested using multiple regression.
Hypotheses 7 and 8 were tested using moderation analysis (interaction terms in SEM).
Hypothesis 9 was tested using mediation analysis (path analysis in SEM).
Hypothesis 10 was tested using multivariate analysis to explore interaction effects.

Ethical Considerations
Ethical approval for the study was obtained from the research ethics committee of a participating university. Participation was voluntary, and students were informed of their right to withdraw at any point. No personal identifiers were collected. Data were stored securely and used solely for academic purposes.

RESULTS

Table   1
Correlation Between Impulsivity and Gambling Ideation

Variable 1	Variable 2	r	p
Impulsivity	Gambling Ideation	-0.099	< .001

Note. N = 11,631. p < .001 indicates statistical significance.

Interpretation:
The analysis involved a total of 11,631 undergraduate students. A Pearson correlation was conducted to examine the relationship between impulsivity and gambling ideation. The result showed a statistically significant but weak negative correlation (r = -0.099, p < .001). This indicates that higher levels of impulsivity (measured as emotional reactivity) were associated with slightly lower levels of gambling ideation. The effect size, however, was minimal and may not be practically meaningful. This result contrasts with previous findings that suggest impulsivity positively predicts gambling behavior (e.g., & Blaszczynski, 2006), highlighting the importance of context, measurement specificity, and cultural moderators in gambling research.

Table   2

Regression Analysis of Sensation-Seeking Predicting Gambling Ideation

Predictor	B	SE	t	p
Sensation-Seeking	-0.208	0.007	-27.94	< .001

Note. N = 11,609. $F_{(1, 11607)}$ = 780.4, p < .001, R^2 = 0.063. p < .001 indicates statistical significance.

Interpretation:

A linear regression analysis was performed to determine the effect of sensation-seeking on gambling ideation using data from 11,609 undergraduate students. The results indicated a significant regression equation was found ($F_{(1, 11607)}$ = 780.4, p < .001), with an R^2 of 0.063. Sensation-seeking significantly predicted gambling ideation (B = -0.208, SE = 0.007, t = -27.94, p < .001). This implies that students who rated themselves as more imaginative were significantly less likely to report gambling ideation. The negative coefficient contrasts with some prior literature (e.g., Zuckerman, 1994), suggesting that imaginative openness in this context may reflect intellectual creativity rather than thrill-seeking behavior.

Table   3

Regression Analysis of Neuroticism Predicting Gambling Ideation

Predictor	B	SE	t	p
Neuroticism	-0.071	0.007	-10.76	< .001

Note. N = 11,631. $F_{(1, 11629)}$ = 115.68, p < .001, R^2 = 0.010. p < .001 indicates statistical significance.

Interpretation:

A linear regression analysis was conducted to examine the relationship between neuroticism and gambling ideation among 11,631 undergraduate students. The model was statistically significant, $F_{(1, 11629)}$ = 115.68, p < .001, with an R^2 of 0.010. Neuroticism significantly predicted gambling ideation (B = -0.071, SE = 0.007, t = -10.76, p < .001). Unexpectedly, the coefficient was negative, suggesting that students who reported higher neurotic tendencies were slightly less likely to exhibit gambling ideation. Although statistically significant due to the large sample size, the effect size was minimal, indicating a weak relationship. This finding contrasts with literature that typically links neuroticism to maladaptive coping strategies like gambling (Williams et al., 2012), possibly reflecting contextual or measurement differences in this sample.

Table   4

Regression Analysis of Family Support Predicting Gambling Ideation

Predictor	B	SE	t	p
Family Support	-0.056	0.004	-13.87	< .001

Note. N = 11,631. $F_{(1, 11629)}$ = 192.45, p < .001, R^2 = 0.016. p < .001 indicates statistical significance.

Interpretation:

A linear regression analysis was conducted with 11,631 undergraduate students to test whether emotional support from family predicted gambling ideation. The result showed a statistically significant model, $F_{(1, 11629)}$ = 192.45, p < .001, with an R^2 of 0.016. Family support significantly predicted lower levels of gambling ideation (B = -0.056, SE = 0.004, t = -13.87, p < .001). This supports the hypothesis that family support acts as a protective factor, consistent with previous studies (e.g., Wills & Shiffman, 1985).

Table   5

Regression Analysis of Peer Support Predicting Gambling Ideation

Predictor	B	SE	t	p
Peer Support	-0.013	0.004	-3.07	< .01

Note. N = 11,631. $F(1, 11629) = 9.41$, $p < .01$, $R^2 = 0.0008$. $p < .01$ indicates statistical significance.

Interpretation:

A linear regression analysis was conducted with 11,631 undergraduate students to examine whether peer support predicted gambling ideation. The regression model was statistically significant, $F(1, 11629) = 9.41$, $p < .01$, with an R^2 of 0.0008. The result indicated that peer support negatively predicted gambling ideation ($B = -0.013$, $SE = 0.004$, $t = -3.07$, $p < .01$), suggesting that those who perceived more supportive friendships reported slightly fewer gambling-related thoughts. Although statistically significant, the effect size was extremely small, indicating minimal practical influence.

Table   6

Regression Analysis of Academic Support Predicting Gambling Ideation

Predictor	B	SE	t	p
Academic Support	-0.043	0.004	-10.96	< .001

Note. N = 11,631. $F(1, 11629) = 120.14$, $p < .001$, $R^2 = 0.010$. $p < .001$ indicates statistical significance.

Interpretation:

A linear regression analysis involving 11,631 undergraduate students was conducted to determine the impact of academic support on gambling ideation. The model was statistically significant, $F(1, 11629) = 120.14$, $p < .001$, with an R^2 of 0.010. Academic support significantly predicted gambling ideation ($B = -0.043$, $SE = 0.004$, $t = -10.96$, $p < .001$), indicating that students who perceived greater academic support were less likely to report gambling-related thoughts. This aligns with prior findings that strong emotional and mentoring support in academic settings serves as a protective factor against maladaptive behaviors.

Table   7

Moderation Analysis of Social Support and Impulsivity Predicting Gambling Ideation

Predictor	B	SE	t	p
Impulsivity	-0.014	0.007	-1.93	.054
Social Support	-0.056	0.004	-13.72	< .001
Impulsivity × Social Support	-0.009	0.003	-2.60	.009

Note. N = 11,631. $R^2 = 0.017$. $p < .05$ indicates statistical significance.

Interpretation:

A moderation analysis using a linear regression model was conducted to examine whether family social support moderates the relationship between impulsivity and gambling ideation among 11,631 undergraduate students. The overall model was statistically significant and explained 1.7% of the variance in gambling ideation ($R^2 = 0.017$). The interaction between impulsivity and social support was significant ($B = –0.009$, $SE = 0.003$, $t = –2.60$, $p = .009$), indicating that social support moderates the relationship. As social support increases, the influence of impulsivity on gambling ideation becomes more negative. This suggests that social support buffers the impact of stress vulnerability (high impulsivity) on gambling tendencies, supporting Hypothesis 7.

Table   8
Moderation Analysis of Social Support and Sensation-Seeking Predicting Gambling Ideation

Predictor	B	SE	t	p
Sensation-Seeking	-0.193	0.008	-25.47	< .001
Social Support	-0.046	0.004	-11.57	< .001
Sensation-Seeking × Social Support	0.012	0.004	3.44	< .001

Note. N = 11,631. R^2 = 0.075. p < .001 indicates statistical significance.

Interpretation:
A moderation analysis was conducted to examine whether family social support moderates the relationship between sensation-seeking and gambling ideation among 11,631 students. The model was statistically significant and explained 7.5% of the variance in gambling ideation (R^2 = 0.075). Sensation-seeking negatively predicted gambling ideation (B = –0.193, p < .001), as did social support (B = –0.046, p < .001). However, the interaction term was significant and positive (B = 0.012, p < .001), indicating that the negative relationship between sensation-seeking and gambling ideation becomes weaker as social support increases. This finding suggests that social support, in this context, may lessen the protective effect of sensation-seeking against gambling ideation, providing partial support for Hypothesis 8 with an unexpected direction of effect.

Table   9
Mediation Analysis of Social Support Mediating the Relationship Between Impulsivity and Gambling Ideation

Path	B	SE	p
Impulsivity → Social Support	0.120	0.009	< .001
Social Support → Gambling Ideation	-0.132	0.009	< .001
Direct: Impulsivity → Gambling Ideation	-0.020	0.009	.035
Indirect Effect (a × b)	-0.016	—	—
Total Effect	-0.035	—	—

Note. N = 11,631. Mediation analysis conducted using 5,000 bootstrap samples. 95% CI for indirect effect [-0.022, -0.010]. p < .05 indicates statistical significance.

Interpretation:
A mediation analysis was conducted to test whether family social support mediates the relationship between impulsivity and gambling ideation. Results showed that impulsivity significantly predicted social support (B = 0.120, p < .001), and social support negatively predicted gambling ideation (B = –0.132, p < .001). The indirect effect of impulsivity on gambling ideation through social support was –0.016, while the direct effect remained significant (B = –0.020, p = .035), indicating partial mediation. This implies that students who are more impulsive tend to receive less social support, which in turn increases their likelihood of experiencing gambling ideation.

Hypothesis 10: There are significant differences in gambling ideation based on the combined effect of personality traits and types of social support among undergraduate students.
Results

A moderated multiple regression analysis was conducted to examine whether personality traits and types of social support predict gambling ideation among undergraduate students, and whether social support moderates the effect of personality traits on gambling ideation.

Table   10
Moderated Multiple Regression Analysis of Personality Traits and Social Support on Gambling Ideation

Predictor	B	t	p	95% CI
Intercept	1.813	226.149	.000	[1.798, 1.829]
Personality Centered	-0.011	-0.587	.557	[-0.048, 0.026]
Social Support Centered	-0.062	-9.615	.000	[-0.075, -0.050]
Interaction	0.085	6.551	.000	[0.059, 0.110]

Note. N = 11,726. F(3, 11726) = 55.26, p < .001, R² = .014. p < .05 indicates statistical significance.

The regression model was statistically significant, $F(3, 11726) = 55.26$, $p < .001$, explaining approximately 1.4% of the variance in gambling ideation ($R^2 = .014$). Personality traits alone did not significantly predict gambling ideation ($p = .557$), while social support had a significant negative effect ($B = -0.062$, $p < .001$). Importantly, the interaction between personality traits and social support was significant ($B = 0.085$, $p < .001$), indicating that the relationship between personality and gambling ideation is moderated by the level of social support.
Interaction model

DISCUSSION, CONCLUSION & RECOMMENDATIONS

This study examined the influence of personality characteristics and social support on gambling ideation among undergraduate students in Southwest Nigeria. It addressed a notable gap in the literature by exploring these relationships in a non-Western academic context. The findings

Discussion
Interpretation of Key Findings
This study explored the links between personality characteristics impulsivity, sensation-seeking, and neuroticism and gambling ideation among undergraduates, as well as the role of perceived social support from family, peers, and academic sources. The findings offer fresh insight into how these variables interact in a Nigerian academic context, especially where large-scale studies on gambling ideation are still emerging. While some results aligned with expectations, others contradicted prior studies, suggesting cultural or contextual differences.

Personality Traits and Gambling Ideation
Contrary to most literature, this study found weak negative correlations between the three personality traits and gambling ideation. Students who scored higher in impulsivity, sensation-seeking, and neuroticism reported slightly fewer gambling-related thoughts. While these findings were statistically significant due to the large sample size (N = 11,631), the actual effect sizes were small.

These results contrast with established studies that have linked these traits to increased gambling behavior. For instance, prior research identified impulsivity and sensation-seeking as predictors of risk-taking behavior, including gambling. A possible explanation for this contradiction lies in the nature of the personality subscales used. The impulsivity measure emphasized emotional reactivity rather than risk-driven behavior. Similarly, the sensation-seeking items may have captured creativity and imaginative openness rather than the pursuit of thrills. In academic environments like universities, such openness might be expressed through intellectual curiosity rather than gambling.

Cultural factors may also play a role. In Southwest Nigeria, gambling may not be strongly associated with sensation-seeking behavior. Instead, it might be perceived as a routine or casual activity rather than a high-risk or emotionally charged pursuit. This could explain why students with high neuroticism might not see gambling as a coping mechanism. Instead, they may rely on academic engagement or social support.

Social Support and Gambling Ideation
As expected, social support from family, peers, and academic institutions showed a significant inverse relationship with gambling ideation. Among these, family support had the strongest effect. This is consistent with previous research that positions family as a strong protective factor for young people. Support from academic institutions also played a significant role, suggesting that access to mentorship and academic resources can help students manage stress and reduce the appeal of gambling.

However, peer support showed the weakest link. This might be due to the dual nature of peer influence peers can either discourage or normalize gambling. In the Nigerian setting, peers may sometimes encourage gambling through shared experiences or group behavior. This makes it necessary to examine the quality and direction of peer support when considering interventions.

Moderation and Mediation Effects
Social support was found to moderate the relationship between personality traits and gambling ideation. Specifically, high levels of support appeared to weaken the link between impulsivity and gambling thoughts. On the other hand, a surprising finding was that support seemed to reduce the protective role of sensation-seeking. This could mean that in environments where support is strong, students with high sensation-seeking tendencies may be more exposed to gambling opportunities through their social networks.

The mediation analysis revealed that social support partly explains the link between impulsivity and gambling ideation. Students with high impulsivity reported lower levels of support, which in turn was associated with more gambling thoughts. This suggests that while impulsivity alone may not predict gambling ideation strongly, its impact is shaped by the level of support students receive.

Combined Effects

A final analysis showed that personality traits and social support, when considered together, had a stronger predictive value than either alone. The interaction effect explained a modest amount of variance in gambling ideation. This aligns with theories that emphasize the importance of both individual traits and environmental context, such as the Dual Systems Model and Social Cognitive Theory.

Theoretical Implications

The study's results have several theoretical implications. The weak or negative associations between personality traits and gambling ideation suggest that common Western-based models may not fully apply in this context. The Five-Factor Model, while useful, may require cultural adaptation when applied in non-Western settings.

In contrast, the stress-buffering model of social support was clearly supported. Social support served both a direct protective function and an indirect one by modifying the influence of personality traits. The Theory of Planned Behavior also remains useful, as perceived social norms and control shaped partly by support systems may influence gambling-related thoughts.

Practical Implications

The findings suggest several actions for universities, families, and policymakers. Interventions should focus on strengthening family and academic support networks. Universities can implement mentorship programs, counseling services, and parental involvement initiatives.

Programs targeting peer groups should be cautious. While peer influence can be positive, it can also encourage gambling. Initiatives might include awareness campaigns or peer-led support groups that promote healthier alternatives to gambling.

Finally, while personality traits had small predictive value, they should not be ignored. Rather, support structures should be tailored to accommodate individual personality differences, particularly for students who may be emotionally reactive or sensation-seeking.

Conclusion

This study contributes to ongoing efforts to understand and respond to gambling ideation as a public health issue. It emphasizes the importance of both individual characteristics and social support in shaping student behavior. As gambling becomes more accessible in Nigeria, this research calls for a coordinated response involving universities, families, mental health professionals, and policymakers.

The findings from this study highlight the importance of addressing both personal characteristics and social environments in reducing gambling ideation among Nigerian university students. The following recommendations aim to guide stakeholders in creating supportive, informed, and resilient student communities:

1.	Strengthen Family and Academic Support Systems
a. Family Engagement Initiatives: Universities should organize workshops or forums to involve parents in supporting their children's academic and personal growth. These events can promote open communication and awareness about gambling risks.
b. Academic Mentorship and Counseling: Schools should expand access to mentoring and counseling services. Training faculty members to recognize signs of gambling-related distress can also improve early intervention efforts.
2.	Develop Peer-Led Interventions to Influence Student Norms
a. Peer Education Programs: Implement peer-led clubs or awareness groups focused on promoting healthy recreational activities and debunking myths about gambling.
b. Positive Peer Role Models: Encourage student groups to spotlight peers who succeed through academic and responsible behavior, helping to shift campus norms.
3.	Implement Awareness Campaigns within Universities
a. Public Health Messaging: Run consistent campaigns using posters, social media, and seminars to educate students on gambling risks and promote alternatives.
b. Curriculum Integration: Add basic financial literacy and behavioral awareness modules to general studies courses to improve student decision-making.
4.	Advocate for Stronger Regulation of Gambling Promotions
a. Control Advertising to Youth: Policymakers should enforce stricter rules on gambling ads, especially those targeting young people through mobile and online platforms.
b. Collaborative Responsibility: Universities and betting companies can work together to fund education initiatives that promote responsible behavior.
5.	Support Further Research and Culturally Appropriate Tools
a. Longitudinal Studies: Institutions should support long-term studies that trace gambling behaviors from ideation to action.
b. Culturally Sensitive Measures: Adapt existing psychological tools to suit the Nigerian context, ensuring that traits like impulsivity and sensation-seeking are measured in ways that reflect local expressions.
6.	Encourage Cross-Disciplinary and Community-Based Efforts
a. Interdisciplinary Task Forces: Form collaborative teams within universities that involve mental health experts, educators, and administrators to plan interventions.
b. Community Engagement: Involve religious and local community leaders in public education efforts, especially where they hold influence over student values and behavior.
7.	Design Tailored Interventions Based on Risk Profiles
a. Personalized Assessment: Offer individualized assessments for students who may be vulnerable due to high impulsivity or low social support.
b. Context-Driven Strategies: Utilize technology-based tools, such as mental health apps or gamified education platforms, to reach students where they are most active.

By applying these recommendations, institutions and policymakers can reduce gambling ideation and promote healthier environments for student growth and development.

Recommendations

This study examined how personality traits and social support relate to gambling ideation among undergraduate students in Southwest Nigeria. The findings offer important insights into the psychological and social contributors to gambling-related thoughts in an evolving cultural and technological context.

Contrary to some expectations, traits such as impulsivity, sensation-seeking, and neuroticism showed weak negative relationships with gambling ideation. In contrast, family, peer, and academic support were found to reduce the likelihood of gambling-related thoughts. The moderating and mediating roles of social support further point to its importance in shaping student behavior. Based on these results, the following recommendations are presented to help reduce gambling ideation, improve resilience, and support student mental health.

1.   Strengthen Family and Academic Support Systems The analysis showed that both family support (B = -0.056, p < .001) and academic support (B = -0.043, p < .001) were significant protective factors. Universities should consider:
a. Family Engagement Initiatives: Institutions can organize workshops or webinars for parents and guardians to increase awareness about gambling ideation and how to support students effectively. This could include guidance on communication and supervision.
b. Mentoring and Counseling Services: Expanding mentoring and counseling services can provide students with guidance during stressful periods. Faculty, peer mentors, and professional counselors can be trained to identify early warning signs and offer support.
2.   Develop Peer-Led Interventions Although peer support had a small negative effect (B = -0.013, p < .01), peer influence remains important. Interventions should include:
a. Peer Education Programs: Student-led initiatives, such as awareness campaigns and clubs, can educate their peers about the risks of gambling and offer alternatives.
b. Promotion of Positive Role Models: Highlighting students who demonstrate healthy coping and responsible behavior can create positive peer influence.
3.   Implement Awareness Campaigns on Campuses With the increasing exposure to online gambling platforms, students need to be better informed about the associated risks. Strategies include:
a. Targeted Awareness Campaigns: Universities can collaborate with mental health experts to design campaigns using posters, social media, and workshops to challenge myths and warn about potential harms.
b. Curriculum Integration: Adding financial literacy and gambling awareness into general education courses can equip students with knowledge to avoid risky behavior.
4.   Advocate for Regulation of Gambling Advertisements Aggressive advertising and easy access to gambling platforms are contributing factors. Policy actions should involve:
a. Stricter Advertising Controls: Authorities should limit gambling promotions aimed at young people and enforce age restrictions.
b. Public-Private Collaboration: Work with gambling companies to promote responsible messaging and support prevention campaigns.

5.   Promote Research and Data Collection Some of the findings were unexpected, indicating a need for further research.
a. Longitudinal Studies: Studies over time can help track how gambling ideation progresses and inform targeted interventions.
b. Locally Relevant Tools: Develop and adapt measurement tools that better capture the traits and thoughts relevant to the Nigerian context.
c. Wider Contextual Research: Explore the role of other factors like economic hardship or social beliefs in shaping gambling ideation.
6.   Foster Collaboration Across Disciplines Addressing gambling ideation requires input from multiple fields.
a. Interdisciplinary Task Forces: Institutions should form teams that include psychologists, sociologists, and educators to plan and implement prevention strategies.
b. Community Engagement: Religious and community leaders can support anti-gambling messaging, especially given their influence in the region.
7.   Tailor Interventions to Specific Needs The study found that the relationship between personality and social support significantly influences gambling ideation (interaction effect B = 0.085, p < .001).
a. Individual Counseling: Assessing students' traits and support levels can help target those at higher risk. For instance, students with high impulsivity and low support may need focused attention.
b. Context-Based Programs: Use culturally relevant tools, including apps and digital platforms, to reach students with useful support and education.

Limitations and Directions for Future Research
This study used a cross-sectional design, which prevents conclusions about cause and effect. Future research should adopt longitudinal methods to track how gambling ideation evolves over time. Additionally, the small effect sizes suggest other important factors such as economic conditions or cultural beliefs should be included in future models.

Self-report measures also come with limitations, including potential bias or underreporting. Future studies may benefit from mixed methods or behavioral tracking. Finally, since the study focused on three universities in one region, it may not fully represent students across Nigeria. Broader studies could help validate and expand on these findings revealed that while personality traits showed weak negative associations with gambling ideation, social support played a more consistent and protective role.

Contrary to what has been found in many Western-based studies, traits such as impulsivity, sensation-seeking, and neuroticism did not increase gambling ideation. Instead, students who scored higher in these traits reported slightly lower gambling thoughts. This suggests that the cultural and academic environment in Nigeria might influence how personality traits are expressed in relation to gambling behavior.

More importantly, strong social support—from family, peers, and academic sources—was associated with lower gambling ideation. These findings support the idea that supportive networks help students manage stress in healthier ways. The study also showed that social support could both weaken and, in some cases, modify the effects of personality traits on gambling ideation.

The large sample size (11,631 respondents) enhances the reliability of these findings. However, the study's cross-sectional design and reliance on self-reported data mean that caution should be taken when interpreting cause-and-effect relationships. Future research using longitudinal designs could provide clearer insights into how gambling ideation develops over time.

These findings offer a useful foundation for creating targeted interventions. By focusing on family engagement, academic mentorship, and peer support, universities and policymakers can better support students in avoiding risky behaviors like gambling. There is also a need for broader awareness and regulation of gambling advertisements, especially those targeting youth. Finally, further research should examine the reliability of existing psychological scales in local contexts, ensuring they reflect the experiences and values of Nigerian students.

REFERENCES

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. Criminology, 30(1), 47–87. https://doi.org/10.1111/j.1745-9125.1992.tb01093.x

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Akanle, O., & Fageyinbo, K. T. (2019). European football clubs and football betting among the youths in Nigeria. *Soccer & Society*, *20*(1), 1-20.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory.

Bitanihirwe, B. K., Adebisi, T., Bunn, C., Ssewanyana, D., Darby, P., & Kitchin, P. (2022). Gambling in sub-Saharan Africa: traditional forms and emerging technologies. *Current Addiction Reports*, *9*(4), 373-384.

Brunborg, G. S., Johnsen, B. H., Mentzoni, R. A., Molde, H., & Pallesen, S. (2013). Personality and gambling: A population-based study. *Addictive Behaviors*, 38(12), 2935–2939. https://doi.org/10.1016/j.addbeh.2013.07.001

Castrén, S., Grainger, M., Lahti, T., Alho, H., & Salonen, A. H. (2015). At-risk and problem gambling among adolescents: A convenience sample of first-year junior high school students in Finland. *Substance Abuse Treatment, Prevention, and Policy, 10*(1), Article 9. https://doi.org/10.1186/s13011-015-0003-8

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98(2), 310–357. https://doi.org/10.1037/0033-2909.98.2.310

Costa, P. T., Jr., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Psychological Assessment Resources.

Cunningham-Williams, R. M., Cottler, L. B., Compton, W. M., III, & Spitznagel, E. L. (2000). Problem gambling and comorbid psychiatric and substance use disorders among drug users recruited from drug treatment and community settings. *Journal of Gambling Studies*, *16*(4), 347–376. https://doi.org/10.1023/A:1009428122460 cdspress.ca+7

Derevensky, J. L., & Gupta, R. (2000). Title of the work not specified in the document. [Note: Verify the title, publication type, and details, as the document does not provide specific source information.]

Derevensky, J. L., & Gupta, R. (2004). Psychosocial variables associated with adolescent gambling. *Psychology of Addictive Behaviors, 18*(2), 170–179. https://doi.org/10.1037/0893-164X.18.2.170

Gainsbury, S. M., Russell, A., Hing, N., Wood, R., & Blaszczynski, A. (2014). The prevalence and determinants of problem gambling in Australia: Assessing the impact of interactive gambling and new technologies. *Psychology of Addictive Behaviors, 28*(3), 769–779. https://doi.org/10.1037/a0036207

Glozah, F., Bunn, C., & Sichali, J. M. (2023). Young people and gambling in sub-Saharan Africa: towards a critical research agenda.

Griffiths, M. D. (2010). *The convergence of gambling and digital media: Implications for gambling in young people*. Journal of Gambling Studies, 26(1), 175–187.

Håkansson, A., Mårdhed, E., & Zaar, K. (2020). *Impact of COVID-19 on online gambling: A general population study of gambling behaviour during the pandemic in Sweden*. International Journal of Environmental Research and Public Health, 17(11), 4013. https://doi.org/10.3390/ijerph17114013

Hopley, A. A. B., & Nicki, R. M. (2010). Predictive factors of excessive online poker playing. *Cyberpsychology, Behavior, and Social Networking, 13*(4), 379–385. https://doi.org/10.1089/cyber.2009.0223

Barnes, G. M., Welte, J. W., Hoffman, J. H., & Tidwell, M.-C. O. (2010). Comparisons of gambling and alcohol use among college students and noncollege young people in the United States. *Journal of American College Health, 58*(5), 443–452. https://doi.org/10.1080/07448480903540499

LaBrie, R. A., Shaffer, H. J., LaPlante, D. A., & Wechsler, H. (2003). Correlates of college student gambling in the United States. *Journal of American College Health, 52*(2), 53–62. https://doi.org/10.1080/07448480309595725

Ladouceur, R., Boudreault, N., Jacques, C., & Vitaro, F. (1999). Pathological gambling and related problems among adolescents. *Journal of Child & Adolescent Substance Abuse, 8*(4), 55–68.

MacLaren, V. V., Fugelsang, J. A., Harrigan, K. A., & Dixon, M. J. (2011). *The personality of pathological gamblers: A meta-analysis. Clinical Psychology Review, 31*(6), 1057–1067. https://doi.org/10.1016/j.cpr.2011.02.002

Mishra, S., Lalumière, M. L., & Williams, R. J. (2010). Gambling as a form of risk-taking: Individual differences in personality, risk-accepting attitudes, and behavioral preferences for risk. *Personality and Individual Differences, 49*(6), 616–621. https://doi.org/10.1016/j.paid.2010.05.032

Nower, L., & Blaszczynski, A. (2002). A pathways model of problem and pathological gambling. *Addiction, 97*(5), 487–499. https://doi.org/10.1046/j.1360-0443.2002.00015.x

Sharpe, L. (2002). A reformulated cognitive–behavioral model of problem gambling: A biopsychosocial perspective. Clinical Psychology Review, 22(1), 1–25. https://doi.org/10.1016/S0272-7358(00)00087-8

Steinberg, L. (2008). A social neuroscience perspective on adolescent risk-taking. Developmental Review, 28(1), 78–106. https://doi.org/10.1016/j.dr.2007.08.002

Okechukwu, C. E. (2022). The need for a nationwide epidemiological study on the gambling disorder caused by compulsive sports betting in Nigeria: A narrative review. *Apollo Medicine, 19*, 32–36.

Vachon, J., Vitaro, F., Wanner, B., & Tremblay, R. E. (2004). *Adolescent gambling: Relationships with parent gambling and parenting practices*. *Psychology of Addictive Behaviors, 18*(4), 398–401. https://doi.org/10.1037/0893-164X.18.4.398

Wardle, H., Moody, A., Spence, S., Orford, J., Volberg, R., Jotangia, D., Griffiths, M., Hussey, D., & Dobbie, F. (2011). *British gambling prevalence survey 2010*. London, UK: National Centre for Social Research.

Wills, T. A., & Shiffman, S. (1985)**.** *Coping and substance use: A conceptual framework.* In S. Shiffman & T. A. Wills (Eds.), Coping and substance use (pp. 3–24). Academic Press.

Zuckerman, M. (1994). Behavioral expressions and biosocial bases of sensation seeking. Cambridge University Press.

Zuckerman, M., & Kuhlman, D. M. (2000). Personality and risk-taking: Common biosocial factors. *Journal of Personality, 68*(6), 999–1029. https://doi.org/10.1111/1467-6494.00124