

Religiosity, Parenting Styles and Emotional Intelligence as Predictors of Gambling Behaviour among Undergraduates

Ebele Evelyn Nandozie, Juliet Ifeoma Nwugo, & Obinna Osita Ike

Department of Psychology, University of Nigeria, Nsukka, Enugu state, Nigeria.

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ABSTRACT

Gambling behaviour represents a significant public health issue and has been a global and scholarly concern for several decades now. However, there are limited studies examining the risks and protective factors of this problematic behaviour, particularly among undergraduates where this is a great burden. This study adopted cross-sectional design to investigate the roles of religiosity, parenting style and emotional intelligence in gambling behaviour among undergraduates. Using convenient sampling method, 300 students (144 males and 156 females) from the University of Nigeria, Nsukka (UNN) participated in this study. Their age ranges from 18-40 years, with a mean age of 22.75 ($SD=2.95$) years. Religious Orientation Test (ROT), Parenting Style Inventory-II (PSI-II), Brief Emotional Intelligence Scale (BEIS) and Problem Gambling Severity Index (PGSI) were used to measure the study's variables. Hypotheses were tested with Hierarchical multiple regression. Results showed that religiosity negatively predicted gambling behaviour. Authoritative and permissive parenting style did not significantly predict gambling behaviour. However, authoritarian parenting style negatively predicted gambling behaviour. Emotional intelligence positively predicted gambling behaviour. These findings underscore the complex interplay of individual, familial, and psychological factors in shaping gambling behaviour among university undergraduates and suggest avenues for targeted interventions and prevention strategies.

Introduction

Gambling is a common problem behaviour among Nigerian youths and adolescents (Adebisi et al., 2021; Amazue et al., 2021; Ede et al., 2020; Temitope, 2019), which can be engaged in both online and offline, and is perceived by most youth as a business opportunity to get rich overnight (Temitope, 2019; Ede, 2019). Gambling refers to the act of participating in games of chance, such as casino games, sports betting, lottery tickets, or online gambling, with the anticipation of winning money or valuable prizes (American Psychiatric Association, 2013). This behaviour encompasses a wide range of activities, from occasional recreational gambling to more compulsive and problematic patterns. It is conceptualised as an act of betting with money and other valuables on a game with the tempting intention of gaining unrealistic profits which in turn may result to psychological malfunctioning of individual in the future due to untold losses (Ede et al., 2020). Some of the gambling activities found within university environment in Nigeria include but is not limited to draft, casino, sport betting, lottery, Baba Ijebu, online gaming, card games among others (Adesina, 2019; Ede, 2019).

Gambling behaviour has been identified as having serious

consequences on the health and habits of those who indulge in it and has been associated with some criminal behaviours such as stealing (Lavojo et al., 2020). Yet gambling activities have become part and parcel of the normal culture that is practised among different age groups, gender, and socio-economic status (Temitope, 2019). Students' engagement in gambling could be motivated by peer pressure, greed, economic deprivation, personality traits, counterfactual thinking, joblessness and financial strains, which are all shown to be the main catalysts for this behaviour in Nigeria (Awo et al., 2022; Lavojo et al., 2020; Onyedire et al., 2021). Given the above, it is important to explore the protective and risk factors that impact this problematic behaviour in undergraduates. Investigating this pathway can provide valuable insights, informing evidence-based interventions aimed at reducing this behaviour to a barest minimum in this group. This study aims to examine religiosity, parenting style and emotional intelligence as predictors of gambling behaviour among undergraduates.

The concept of religiosity crosses several academic disciplines, each approaching religiosity from different vantage points, and few consulting one another (Cardwell, 1980; Demerath & Hammond, 1969). A theologian would address religiosity from the

viewpoint of faith, while religious educators could focus on orthodoxy and belief (Groome, 1998). Sociologists, on the other hand, would consider the concept of religiosity to include church membership, church attendance, and doctrinal knowledge (Christiano et al., 2025; Giordan, 2016). Different components of human religiosity have been explored (Hill and Hood 1999), with multiple dimensions captured in this concept. For instance, Cornwaller et al. (1986) identify six dimensions of religiosity based on the understanding that there are at least three components to religious behaviour: knowing (cognition), feeling (affect), and doing (behaviour). For each of these components of religiosity there were two cross classifications resulting in the six dimensions: cognition (traditional orthodoxy, particularistic orthodoxy), affect (spiritual, church commitment), behaviour (religious behaviour, religious participation).

In this study, religiosity refers to behavioural observances, such as attendance to worship centers and private prayer, that individuals engage in to relate with a higher being (God) (Idehen, 2001). There are two aspects of religiosity: deep religious orientation, which refers to religious beliefs that guide thoughts and behaviours, and a superficial religious orientation, marked by inconsistency in religious observations in daily life (Idehen, 2001). Evidence exists in literature, on the impacts of religiosity on gambling behaviour across age groups, and particularly among youth. For instance, Bormann et al. (2019) found that higher levels of public and intrinsic religiosity were associated with reduced risk and better remission outcomes in problematic gambling among younger and older adults in the U.S.

Similarly, Mutti-Packer et al. (2017) demonstrated that Canadian adults who scored higher in past-year religious service attendance and greater overall personal religiosity were less likely to engage in problem gambling. A good number of other studies (e.g., Billah et al., 2025; Calado et al., 2024; Gavriel-Fried, 2015; Vanheusden et al., 2025; Williams et al., 2022) reported similar pattern of relationship between religiosity and gambling behaviours across Indonesian, Portuguese, English, Israeli, U.K, and Australian samples of younger and older adults. However, Kim et al. (2018) found that higher religiosity was associated with heightened symptoms of disordered gambling among Canadian adult sample. Although numerous studies exist on religiosity-gambling behaviour link, they primarily focus on western adult populations while overlooking academic contexts. Research investigating this pattern of relationship among undergraduates in the Nigerian context remains sparse. The present study aims to bridge this gap.

Going further, the present study examines parenting style as another potential predictor of gambling behaviour among undergraduates. Parenting style is conceptualized as a constellation of attitudes or a pattern of parental authority towards the child which are conveyed to the child, creating the emotional context for the expression of parenting behaviour (Darling & Steinberg, 2017). Parenting style is thought to provide the emotional climate for interaction between parent and children (Gaspar et al., 2022;

Jankowska & Gralewski, 2022; Williams et al., 2009) and has significant impact on the family quality of life. Baumrind (1971) is commonly considered a pioneer of research into parenting styles. She introduced a typology with three parenting styles to describe differences in normal parenting behaviours: the authoritarian, authoritative and permissive parenting style. Baumrind (1971) suggested that authoritarian parents try to shape, control, and evaluate their children's behaviour based on the absolute set of standards, whereas permissive parents are warmer and more autonomy granting than controlling. She considered an authoritative parenting style to fall between those two extremes.

Few studies have implicated parenting styles in gambling behaviour. Among Australian high school students, Dixon et al. (2016) found that good parenting practices were associated with lesser gambling behaviours. On the other hand, Serna et al. (2023) found that showing that authoritative and indulgent parenting negatively predicted Internet addiction and online gambling addiction; authoritarian parenting positively predicted this problem behaviour among Spanish adolescents. Oketa et al. (2018) reported that higher scores on permissive, neglecting/rejecting and authoritarian parenting styles were associated with higher gambling behaviour in a Nigerian sample of undergraduates. In a Turkish sample, Kaya & Deveci (2022) demonstrated that higher paternal hostility/aggression and indifference/neglect were associated with heightened gambling disorder. Despite the above, comprehensive research is still limited regarding the differential impact of various parenting styles on gambling behavior among Nigerian undergraduates, highlighting the need for further investigation to clarify these relationships within this context, a need this study seeks to address.

Emotional intelligence, the third predictor of interest in this study, is most often defined as the ability to perceive, use, understand, manage, and handle emotions (Cherniss et al., 2004; Kanesan & Fauzan, 2019). It has been defined as “the subset of social intelligence that involves the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions” (Salovey & Mayer, 1990, p. 189). Goleman (1995) highlighted the role of EI in managing stress and frustration, both of which are common triggers for problematic gambling. Individuals with strong emotional intelligence are better equipped to cope with these emotions, reducing the likelihood of engaging in excessive or risky gambling behaviours. A narrative review by Henning et al. (2021) found that emotional intelligence plays a significant role in the development and maintenance of both substance use and behavioral addictions, including gambling behavior. The study highlights that individuals with higher emotional intelligence are better equipped to manage emotions and cope with stress, potentially reducing the risk of engaging in these problem behaviours.

Systematic reviews (Biolcati et al., 2025; Sánchez-López et al., 2022) further consolidate this pattern, revealing that emotional intelligence negatively predicts behavioural addictions,

including gambling behaviour, suggesting that higher emotional intelligence may serve as a protective factor by enhancing self-regulation and reducing vulnerability to addictive tendencies. However, the findings of these reviews primarily focus on general or clinical populations and often overlook specific contexts such as academic settings or the unique experiences of undergraduates. The present study seeks to fill this gap by examining the relationship between emotional intelligence and gambling behavior among Nigerian university students, providing insights relevant to this understudied group.

Bandura's (1977) social learning theory is a suitable theoretical framework for explaining how religiosity, parenting styles, and emotional intelligence impact gambling behaviour among undergraduates. This theory posits that individuals learn new behaviours by observing, imitating, and modeling the behaviours of others. In the context of undergraduates, religiosity may provide a set of moral guidelines and normative behaviours that could discourage engagement in gambling by promoting values such as self-restraint and ethical conduct (Jalees et al., 2024; Jawad, 2017). Parenting styles contribute significantly by shaping the behavioural patterns and coping mechanisms of young adults; for example, authoritative parenting may foster emotional regulation and responsible decision-making (Serna et al., 2023), while neglectful or permissive parenting might increase vulnerability to risky behaviours like gambling (Oketa et al., 2018). Additionally, emotional intelligence which enables students to effectively perceive, understand, and manage their emotions (Zhoc et al., 2020), can reduce impulsivity and the tendency to seek maladaptive coping strategies such as gambling when under stress (Kun & Demetrovics, 2010; Maddi et al., 2013; Megías-Robles et al., 2023). Together, these factors interact through social learning processes to influence whether undergraduates adopt or avoid gambling behaviours.

To the best of the present researchers' knowledge, no study has, in single research, explored the roles of religiosity, parental styles, and emotional intelligence in gambling behaviour. Most studies in this area focused on the general adult population, ignoring the academic settings, particularly the context of undergraduates, where this problem behaviour is a great burden. This study intends to add to clinical research literature by examining religiosity, parenting style and emotional intelligence as predictors of gambling behaviour among university undergraduates in Nigeria, to determine whether these factors play differential roles in this group, compared to the general population. It is therefore hypothesized that: (1) religiosity will negatively predict gambling behaviour among undergraduates (2a) authoritative parenting style will negatively predict gambling behaviour among undergraduates (2b) permissive parenting style will positively predict gambling behaviour among undergraduates (2c) authoritarian parenting style will positively predict gambling behaviour among undergraduates (3) emotional intelligence will negatively predict gambling behaviour among undergraduates.

Method

Participants

Three hundred students comprising 144 males (48.0%) and 156 females (52.0%) from the University of Nigeria, Nsukka participated in this study. Their age ranges from 18-40 years, with a mean age of 22.75 ($SD = 2.95$) years. Using convenient sampling method, participants were drawn from the Faculty of the Social Sciences, and Faculty of Arts in the institution. With regards to level of education in the institution, they were in first year ($n = 39$), second year ($n = 48$), third year ($n = 38$), fourth year ($n = 133$), fifth year ($n = 17$), and other classes ($n = 25$). The participants included 268 (89.3%) persons who were never married, 28 (9.3%) married persons, 2 (0.7%) divorced and 2 (0.7%) who did not have a clear response regarding their marital status. Majority of the participants practice Christians ($n = 265$, 88.3%); but there were 30 (10.0%) who practice Islamic religion, 3 (1.0%) who responded that they were adherents of other religions, and 2 (0.7%) who did not indicate their religion. The eligibility criteria for participating in the study was being an undergraduate student of the institution.

Instruments

Religious Orientation Test (Idehen, 2001)

The Religious Orientation Test (ROT) was developed as a quantitative assessment of religiosity by Idehen (2001). It assesses the frequency of behavioural observances such as church attendance and private prayer. The ROT can differentiate between a deep religious orientation (religious beliefs that guide thoughts and behaviours) and a superficial religious orientation (religion is not regarded in daily life). It is a 6-items scale in which respondents are asked to reflect on their religious life. The items are presented in an interrogative format and participants are asked to respond on a 5-point likert-type scale. The items assessed the strength of belief, observance dimensions and the importance of religion. There are different response alternatives for each item which guard against response sets and social desirability responses. Items are scored from the most positive 1 to the most negative 5. An example of an item and response option is "How often do you attend religious services" (Very = 1 to Not at all = 5). Items scores are summed to get the total religiosity score. Low scores indicate a deep religious orientation, and high scores indicate a superficial religious orientation. The scale has a cronbach α of .80 and a test-retest reliability of .75. For the present study, the Cronbach α was .91.

Parenting Style Inventory-II (Darling & Toyokawa, 1997)

Parenting Style Inventory-II was developed by Darling and Toyokawa (1997). It consists of 15 items that measures three forms of parent-offspring relationship (authoritative, authoritarian and permissive scale parenting style) with five items for each style. The inventory is scored on a five likert-type format, ranging from Strongly Disagree (1) to Strongly Agree (5). Six items are reverse scored. The reliability of the yielded accepted levels of Cronbach's alpha reliabilities of internal consistency are as follows:

authoritative .74, authoritarian .74 and permissive .75 (Darling & Toyokawa (1997). The present researchers obtained a Cronbach α of .84..

Brief Emotional Intelligence Scale (Davies et al., 2010)

The Brief Emotional Intelligence Scale (BEIS-10) is a 10-item self-report instrument developed by Davies et al. (2010) to measure the capacity of individuals to perceive control and evaluate emotions. It was adapted by the developers from the 33-item Schutte's Self-Report Emotional Intelligence Test (Schutte et al., 1998) in an effort to find a measure of emotional intelligence that can be useful in situations where brevity is important. The items are scored on a 5-point response format of 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree. Examples of items in the BEIS-10 are *I know why my emotions change, I help other people feel better when they are down, I can tell how people are feeling by listening to the tone of their voice.* There was evidence of BEIS-10's test-retest reliability over a 2-week period and its internal consistency reliability Cronbach's α was .84 (Davies et al, 2010). For the present study, a Cronbach's α reliability .70 was obtained.

Problem Gambling Severity Index (Ferris & Wynne, 2001)

The Problem Gambling Severity Index, developed by Ferris and Wynne (2001), is a population-based survey instrument that is becoming the preferred epidemiology tool for estimating the prevalence of disordered gambling. The Problem Gambling Severity Index contains nine questions in which participants are asked to rate how frequent in the past 12 months they experienced certain symptoms commonly associated to problem gambling. Sample items include: "when you think of the past 12 months, have you bet more than you could really afford to lose?" "Has gambling causes any health problems including stress and anxiety?". Responses are scored on a 4- point scale: 0= Never, 1= Sometimes, 2= Most of the time, 3= Almost always. The PGSI correlates strongly with DSM-IV and SOGS at .83 (Ferris & Wynne, 2001). Internal reliability was high; Cronbach's α = .84. Test-retest was assessed by re-surveying 417 participants from Ferris and Wynne, (2001) original sample of 3,120 survey respondents. The reliability coefficient was .78. A Cronbach's α reliability of .86 was obtained in the present study.

Procedure

The Institutional Review Board (IRB) of the Department of Psychology, the University of Nigeria, Nsukka, approved this study's protocols and procedures. Participants were approached by the researchers in their classrooms, and the nature of the study was explained to them including what they were required to do. They were informed that they were free to withdraw at any stage of the study, without any prejudice, and that their personal information would remain confidential. Those who gave consent were given the

questionnaires to fill. They were also encouraged to answer the questions as honestly as possible. All the participants voluntarily agreed to participate in the study and were not provided with any reward for participation. It was observed that the length of questionnaire items was not a problem to the respondents in the current research as there were no such complaints during the study. The researcher educated the participants when explanations were needed. All the items in the questionnaires were written in simple English and hence most of the participants did not find it hard to understand. The questionnaire was returned to the researcher by the participants as soon as it was completed. The researcher encouraged participants to respond to all the items in order to obtain complete data. Out of the 315 questionnaires distributed, 15 copies were discarded due to improper filling, leaving a total of 300 that were analyzed.

Design/Statistics

The study is primarily a survey, and cross-sectional design was adopted. The data obtained from participants was analysed using the Statistical Package for Social Sciences (SPSS) version 26. Pearson's correlation (r) analysis was conducted to determine the relationships that exist between the study variables, while hierarchical multiple regression was employed to statistically test study hypotheses. The choice of correlation and regression was based on Urbina (2004) assertion that correlation allow researchers to make predictions by implying a certain amount of common shared variance, while regressions play a major role in demonstrating linkages between (a) scores on different tests (b) test scores and non-test (demographic) variables, (c) scores on parts of tests and scores on whole tests, etc. (Urbina, 2004). Some authors (Tabachnik & Fidell, 2001; Mendellhall et al., 2009) assert that multiple regression analysis allows researchers to simultaneously use several predictor variables. Thus, one would be able to explain the variations or differences in the dependent variables and make more accurate predictions.

Results

Table 1: Means, Standard Deviations, and Correlations among the Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8
1 Gender	—	—	—							
2 Level of study	—	—	.14*	—						
3 Age	22.76	2.96	-.12*	.58***	—					
4 Religiosity	13.33	5.62	.07	.244***	.12*	—				
5 Authoritative PS	18.02	3.36	.06	.00	-.06	-.27***	—			
6 Permissive PS	15.70	2.97	-.18***	.02	.04	.03	.35***	—		
7 Authoritarian PS	16.36	3.41	.14*	.05	.05	.08	.29***	.08	—	
8 EI	36.40	6.86	-.02	.01	.01	-.08	.39***	.29***	.15**	—
9 Gambling behaviour	16.40	6.93	-.36***	-.14*	-.02	-.15**	-.02	.01	-.22***	.19***

Note: Gender was coded: male = 1, female = 2; level of study: 100L = 1, 200L = 2, 300L = 3. 400L = 4, 500L = 5, Other = 6; PS = Parenting style; EI = Emotional intelligence Age and the remaining variables were coded such that higher scores represent older age or higher values of the particular construct. $N = 300$, * = $p < .05$ (two-tailed), ** = $p < .01$ (two-tailed), *** = $p \leq .001$ (two-tailed).

The results of the correlations in Table 1 indicated that among the demographic variables (i.e., gender, level of study, age), gender ($r = -.36, p < .001$) and level of study ($r = -.14, p = .016$) were negatively correlated with gambling behaviour. However, age was not significantly correlated with gambling behaviour. Therefore, age was not included in subsequent analysis. Religiosity was negatively correlated with gambling behaviour ($r = -.15, p = .009$). Of the three dimensions of parenting

style (i.e., authoritative, permissive, and authoritarian), only authoritarian parenting style negatively correlated with gambling behaviour ($r = -.22, p < .001$), whereas authoritative, and permissive parenting style had no significant correlations with gambling behaviour. Finally, emotional intelligence was positively correlated with gambling behaviour ($r = .19, p = .001$).

Table 2: Hierarchical multiple regression predicting gambling behaviour by religiosity, parenting styles and emotional intelligence

Variable	Step 1 β	Step 2 B	Step 3 β	Step 4 β
<i>Controls</i>				
Gender	-.36***	-.36***	-.35***	-.35***
Level of study	-.09	-.06	-.06	-.06
<i>Predictors</i>				
Religiosity		-.11*	-.08	-.08
Authoritative parenting style			.05	-.027
Permissive parenting style			-.06	-.099
Authoritarian parenting style			-.17**	-.18***
Emotional intelligence				.24***
Adjusted R ²	.143	.151	.171	.217
ΔR ²	.148	.011	.028	.048
ΔF	25.868***	3.949*	3.329*	18.373***

Note. * $p < .05$, *** $p < .001$.

The results of the hierarchical multiple regression in Table 2 in which gambling behaviour was the outcome variable indicated that when gender and level of study were entered in Step 1 of the equation as control variables, they accounted for 14.3% variance in gambling behaviour. However, it was only gender that negatively predicted gambling behaviour ($\beta = -.36, p < .001$), whereas level of study did not significantly predict it. This indicates that female university undergraduates are less likely to engage in gambling behaviour compared with their male counterparts. When religiosity was entered as a predictor in Step 2 of the equation, it accounted for additional 1.1% variance in gambling behaviour. Religiosity also negatively predicted gambling behaviour ($\beta = -.11, p = .048$).

In Step 3, the three dimensions of parenting style (i.e., authoritative, permissive, and authoritarian) were entered into the equation as predictors. Collectively, they accounted for additional 2.8% variance in gambling behaviour. However, it was only authoritarian parenting style that negatively predicted gambling behaviour ($\beta = -.17, p = .003$), whereas authoritative, and permissive parenting style did not significantly predict gambling behaviour. Although, authoritarian parenting style did have a significant

negative predictive relationship with gambling behaviour, it was not in the hypothesized direction. Finally, emotional intelligence was entered in Step 4 of the equation as a predictor. It accounted for additional 4.8% variance in gambling behaviour. Emotional intelligence also positively predicted gambling behaviour ($\beta = .24, p < .001$).

Discussion

This study investigated the contributions of religiosity, parenting style and emotional intelligence on gambling behaviour amongst undergraduate students. The result indicated that religiosity negatively predicted gambling behaviour. Thus, the first hypotheses which stated that religiosity would negatively predict gambling behaviour among university undergraduates was supported by the present study's findings. This is consistent with findings of past research (e.g., Bormann et al., 2019; Mutti-Packer et al., 2017; Billah et al., 2025; Calado et al., 2024; Gavriel-Fried, 2015; Vanheusden et al., 2025; Williams et al., 2022) which demonstrated that higher religiosity is linked with lesser addictive behaviours. However, this finding disagrees with the results of Kim et al.'s study (2018) which showed that found that higher religiosity was associated with heightened symptoms of disordered gambling in a Canadian adult

sample. One possible explanation for our finding in this study is that students who practice religion that prohibits gambling may avoid gambling activities as they conflict with their religious beliefs and values. By implication, being religious may decrease the likelihood of engaging in gambling behaviour by providing moral guidance, fostering self-discipline, and encouraging adherence to social norms that discourage risky behaviours.

Furthermore, we found that while authoritarian parenting style negatively predicted gambling behaviour, authoritative and permissive parenting styles did not significantly predict gambling behaviour. Thus, the third hypothesis which stated that authoritarian parenting style would negatively predict gambling behaviour among undergraduates was supported by our findings, whereas the second and fourth hypothesis (permissive parenting style would positively predict gambling behaviour among undergraduates, and authoritarian parenting style would positively predict gambling behaviour among undergraduates), were not supported by our findings. These findings contradict past research (Cristina et al., 2023; Oketa et al., 2018) which showed that authoritarian parenting, characterized by use of strictness and imposition practices, was a risk factor for behavioural addiction. Our finding suggests that while authoritarian parenting style may promote discipline and the internalization of rules, resulting in lower tendencies toward gambling behaviour among undergraduates, authoritative and permissive parenting styles may lack the necessary structure or control to effectively deter such behaviours. Probably, the clear boundaries and firm expectations set by authoritarian parents help students develop better self-regulation and resistance to risky activities like gambling. Therefore, parenting approaches that emphasize strictness and clear limits might be more effective in reducing gambling tendencies, whereas more lenient or inconsistent parenting styles may fail to provide the guidance needed to prevent such behaviours.

Finally, result showed that emotional intelligence positively predicted gambling behaviour. This did not support the last hypothesis that emotional intelligence would negatively predict gambling behaviour among undergraduates, thus contradicting extant research findings (e.g., Biolcati et al., 2025; Henning et al., 2021; Sánchez-López et al., 2022) which revealed that emotional intelligence was a negative predictor behavioural addiction. Higher emotional intelligence among undergraduates may result in increased social involvement and activity, exposing them to more gambling activities, particularly in peer-driven or recreational environments where such behaviours are permitted. In this sense, emotional intelligence may be connected to increased participation in social activities, such as gambling. The positive prediction reported in this study may thus reflect a non-pathological kind of gambling associated with novelty-seeking or social bonding, rather than an indication of addiction. This shows that the relationship between emotional intelligence and gambling activity may be more complex than previously thought, with elements such as gambling purpose, setting, and perceived risks all having an impact. This

study's findings add to the ongoing discussion on Social Learning Theory (Bandura, 1977), suggesting that observed behaviours, value systems, and emotional regulation strategies acquired from parents, religious models, and social environments play a critical role in shaping students' gambling tendencies.

Limitations of the study and Suggestion for Future Studies

One limitation of this study is that the study was exclusive to one institution, University of Nigeria, Nsukka, which may make generalization of the results to the entire population of Nigerian students difficult. Two, the instruments used were self-report instruments, and one of the disadvantages of self-report measures is that they encourage or make fake or exaggerated responses from respondents' possible social desirability bias. Three, as a correlational study, this study does show for relationship between variables, but it does not show causation. In other words, the correlational design cannot prove cause-effect relationship. Four, the study only assessed undergraduates, and so the findings may not be generalized to other populations. Future studies should endeavour to incorporate more participants from various universities in Nigeria, thereby cutting across various culture, which will build strong evidence in this area of research. Also, a larger sample should be used; this will foster credibility in the generalization of the findings to the general population. Also, subsequent studies should adopt mixed method approach in-order to show causality effect. Equally, further studies should expand on the population domain to include graduates.

Conclusion

This study's results highlight how social influences and internal emotional competencies, when modeled or reinforced, can either buffer against or contribute to the development of gambling behaviour among undergraduates. Interventions should include strengthening students' value systems through religious and moral education, encouraging parenting approaches that promote discipline and structure, and guiding the development of emotional intelligence in ways that discourage gambling. While the broader consequences of gambling are important, the emphasis here should be on the observed predictors and how they can inform targeted prevention strategies within the university context. Parents, teachers, and religious leaders have a critical role in shaping these influences and reducing gambling tendencies among undergraduates, ultimately contributing to student well-being and societal development.

Data availability statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of Interest/Disclosure statement: E. E. Nnadozie, J. I. Nwifo and NO. O. Ike declare that they have no conflict of interest.

Informed Consent: All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000 (5). Informed consent was obtained from all patients for being included in the study.

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References

- Ainsworth, M. D. S. (1973). The development of infant-mother attachment. In B. Cardwell and H. Ricciuti (Eds.), *Review of Child Development Research* (Vol. 3, pp. 1-94). University of Chicago Press.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. <https://doi.org/10.1176/appi.books.9780890425596>
- Azari, N.P., Missimer, J. & Seitz, R.J. (2005). Religious experience and emotion: Evidence for distinctive cognitive neural patterns. *International Journal for the Psychology of Religion*, 15, 263-281.
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1, pp. 141-154). Englewood Cliffs, NJ: Prentice hall.
- Barnes, G. M., Welte, J. W., & Hoffman, J. H. (2010). Tapping the Beer Barrel: A representative sample of US gambling patterns. *UNLV Gaming Research & Review Journal*, 14(1), 1-24.
- Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child Development*, 37(4), 887-907.
- Billah, M. A., Sofiah, D., & Arifiana, I. Y. (2025). The Relationship Between Religiosity and Self-Control with Online Gambling Addiction in Online Gamblers. *Journal of Scientific Research, Education, and Technology (JSRET)*, 4(1), 279-288. <https://doi.org/10.58526/jsret.v4i1.696>
- Biolcati, R., Özal, Z., Ambrosini, F., Villano, P., Palareti, L., & Mancini, G. (2025). Emotional Intelligence and Behavioural Addictions: A Systematic Review. *Journal of Clinical Medicine*, 14(4), 1125. <https://doi.org/10.3390/jcm14041125>
- Blaszczyński, A., & Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction*, 97(5), 487-499.
- Blaszczyński, A., & Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction*, 97(5), 487-499. <https://doi.org/10.1046/j.13600443.2002.00015.x>
- Blinn-Pike, L., Worthy, S. L., & Jonkman, J. N. (2007). Disordered gambling among college students: A meta-analytic review. *Journal of Gambling Studies*, 23(2), 175-183.
- Bormann, N.L., Allen, J., Shaw, M. & Black, D. W. (2019). Religiosity and chance beliefs in persons with DSM-IV pathological gambling enrolled in a longitudinal follow-up study. *Journal of Gambling Studies*, 35, 849860 (2019). <https://doi.org/10.1007/s10899-019-09857-w>
- Bowlby, J. (1969). *Attachment and Loss*. Vol. 1. Attachment. Basic Books.
- Calado, F., Vernon, M., Nuyens, F., Alexandre, J., & Griffiths, M. D. (2024). How does religiosity influence gambling? A cross-cultural study between Portuguese and English youth. *Journal of Gambling Studies*, 40(2), 1005-1019.
- Cherniss, C., Roche, C., & Barbarasch, B. (2004). Emotional intelligence. In C. Spielberger (Ed.), *Encyclopedia of applied psychology* (Vol. 2, pp. 271-277). Elsevier. <https://doi.org/10.1016/b978-0-12-397045-9.00207-x>
- Christiano, K. J., Kivisto, P., Swatos, W. H., Jr., & Swatos, W. H. (2025). *Sociology of Religion: Contemporary Developments* (4th ed.). Rowman & Littlefield.
- Darling, N. & Toyokawa, T. (1997). *Construction and validation of parenting style inventory II (PSI II)*. Unpublished manuscript Department of Human Development and Family Studies The Pennsylvania State University United States of America.
- Darling, N., & Steinberg, L. (2017). Parenting style as context: An integrative model. In J. E. Grusec and P. D. Hastings (Eds.), *Interpersonal development* (pp. 161-170). Routledge.
- Davies, K. A., Lane, A. M., Devonport, T. J., & Scott, J. A. (2010). *Brief Emotional Intelligence Scale (BEIS-10)* [Database record]. APA PsycTests. <https://doi.org/10.1037/t06713-000>
- Davies, K. A., Lane, A. M., Devonport, T. J., & Scott, J. A. (2010). Validity and reliability of a Brief Emotional Intelligence Scale (BEIS-10). *Journal of Individual Differences*, 31(4), 198-208.
- Dixon, R. W., Youssef, G. J., Hasking, P., Yücel, M., Jackson, A. C., & Dowling, N. A. (2016). The relationship between gambling attitudes, involvement, and problems in adolescence: Examining the moderating role of coping strategies and parenting styles. *Addictive Behaviors*, 58, 42-46.
- Gaspar, T., Cerqueira, A., Guedes, F. B., & de Matos, M. G. (2022). Parental emotional support, family functioning and children's quality of life. *Psychological Studies*, 67(2), 189-199.
- Gavriel-Fried, B. (2015). Attitudes of Jewish Israeli adults towards gambling. *International Gambling Studies*, 15(2), 196-

- 2 1 1 .
<https://doi.org/10.1080/14459795.2015.1012178>
- Giordan, G. (2016). Spirituality: From a religious concept to a sociological theory. In K. Flanagan & P. C. Jupp (Eds.), *A sociology of spirituality* (pp. 161–180). Routledge.
- Goleman, D. (1995). *Emotional intelligence* (2020 ed.). Bloomsbury Publishing.
- Gorenko, J. A., & Konnert, C. A. (2023). Examination of the Problem Gambling Severity Index for use with older adults: A Rasch model approach. *Journal of Gambling Studies*, 39, 559–577. <https://doi.org/10.1007/s10899-022-10138-2>
- Grant, J. E., & Kim, S. W. (2002). Parental bonding in pathological gambling disorder. *Psychiatric Quarterly*, 73, 239–247. <https://doi.org/10.1023/A:1016044906341>
- Gupta, R., & Derevensky, J. (1998). An empirical examination of Jacobs' General Theory of Addictions: Do adolescent gamblers fit the theory? *Journal of Gambling Studies*, 14(1), 17–49.
- Gupta, R., & Derevensky, J. L. (2000). Adolescents with gambling problems: From research to treatment. *Journal of Gambling Studies*, 16(2–3), 315–342.
- Henning, C., Crane, A. G., Taylor, R. N., & Parker, J. D. (2021). Emotional intelligence: relevance and implications for addiction. *Current Addiction Reports*, 8, 28–34. <https://doi.org/10.1007/s40429-021-00356-w>
- Hill, P. C., & Hood, R. W., Jr. (1999). *Measures of religiosity*. Religious Education Press.
- Iannaccone, L. R. (1990). Religious practice: A human capital approach. *Journal for the Scientific Study of Religion*, 29(3), 297–314.
- Idehen, E. E. (2001). The development and evaluation of a religiosity scale. *IFE Psychologia: An International Journal*, 9(2), 58–69. <https://doi.org/10.4314/ifep.v9i2.23617>
- Jalees, T., Khan, S., Zaman, S. I., & Miao, M. (2024). The effect of religiosity, materialism and self-esteem on compulsive and impulsive buying behavior. *Journal of Islamic Marketing*, 15(11), 2697–2731.
- Jankowska, D. M., & Gralewski, J. (2022). The familial context of children's creativity: parenting styles and the climate for creativity in parent–child relationship. *Creativity Studies*, 15(1), 1–24.
- Jawad, C. (2017). *A Pragmatic Mixed Methods Analysis of Experiences, Behaviours and Perceptions of Gamblers Towards the Efficacy of Responsible Gambling in Minimising “Problem Gambling”*. University of Wales Trinity Saint David (United Kingdom).
- Kanesan, P., & Fauzan, N. (2019). Models of emotional intelligence: A review. *e-Bangi: Journal of Social Sciences & Humanities*, 16(7), 1–9. <https://ejournals.ukm.my/ebangi/article/view/34511>
- Kaur, I., Schutte, N. S., & Thorsteinsson, E. B. (2006). Gambling control self-efficacy as a mediator of the effects of low emotional intelligence on problem gambling. *Journal of Gambling Studies*, 22, 405–411. <https://doi.org/10.1007/s10899-006-9029-1>
- Kaya, E., & Deveci, A. (2022). Parental acceptance/rejection perceptions and attachment styles of men with online gambling disorder. *Journal of Gambling Studies*, 38(3), 817–832. <https://doi.org/10.1007/s10899-021-10084-5>
- Kaya, E., & Deveci, A. (2022). Parental acceptance/rejection perceptions and attachment styles of men with online gambling disorder. *Journal of Gambling Studies*, 38, 817–832. <https://doi.org/10.1007/s10899-021-10084-5>
- Kim, H. S., Shifrin, A., Sztainert, T., & Wohl, M. J. (2018). Placing your faith on the betting floor: Religiosity predicts disordered gambling via gambling fallacies. *Journal of Behavioral Addictions*, 7(2), 401–409. <https://doi.org/10.1556/2006.7.2018.23>
- Kun, B., & Demetrovics, Z. (2010). Emotional intelligence and addictions: a systematic review. *Substance Use & Misuse*, 45(7–8), 1131–1160.
- Kuppens, S., & Ceulemans, E. (2019). Parenting styles: A closer look at a well-known concept. *Journal of Child and Family Studies*, 28, 168–181. <https://doi.org/10.1007/s10826-018-1242-x>
- Maddi, S. R., Erwin, L. M., Carmody, C. L., Villarreal, B. J., White, M., & Gundersen, K. K. (2013). Relationship of hardiness, grit, and emotional intelligence to internet addiction, excessive consumer spending, and gambling. *The Journal of Positive Psychology*, 8(2), 128–134.
- Main, M., & Solomon, J. (1986). Discovery of an insecure-disorganized/disoriented attachment pattern. In T. B. Brazelton & M. W. Yogman (Eds.), *Affective development in infancy* (pp. 95–124). Ablex Publishing.
- Martin, R. J., Usdan, S., Nelson, S., Umstadd, M. R., LaPlante, D., Perko, M., & Shaffer, H. (2010). Using the theory of planned behavior to predict gambling behavior. *Psychology of Addictive Behaviors*, 24(1), 89–97.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3–31). Basic Books.
- Megías-Robles, A., Sánchez-López, M. T., Gómez-Leal, R., Cabello, R., Gutiérrez-Cobo, M. J., & Fernández-Berrocal, P. (2023). Impulsivity and sensitivity to reward as mediating factors of the negative relationship between

<https://doi.org/10.1186/s40359-023-01417-7>

- Miller, N. V., Currie, S. R., Hodgins, D. C., & Casey, D. (2013). Validation of the Problem Gambling Severity Index using confirmatory factor analysis and Rasch modelling. *International Journal of Methods in Psychiatric Research*, 22(3), 245–255. <https://doi.org/10.1002/mpr.1392>
- Mutti-Packer, S., Hodgins, D. C., & Williams, R. J. (2017). The protective role of religiosity against problem gambling: Findings from a five-year prospective study. *BMC Psychiatry*, 17, 356. <https://doi.org/10.1186/s12888-017-1518-5>
- Mutti-Packer, S., Hodgins, D. C., Williams, R. J., & Konkoly Thege, B. (2017). The protective role of religiosity against problem gambling: Findings from a five-year prospectivestudy. *BMC Psychiatry*, 17, 1-10. <https://doi.org/10.1186/s12888-017-1518-5>
- Oketa, M. C., Oginyi, R. C., Mbam, O. S., & Nwonyi, K. S. (2020). Personality trait, parenting style and peer influence on gambling behaviour among undergraduates of Ebonyi State University. *South East Journal of Public Relations*, 3 (2) , 1 2 – 2 0 . https://www.sejpr.net/uploads/678031_1658061577.pdf
- Parker, J. D. A., Taylor, R. N., Eastabrook, J. M., Schell, S. L., & Wood, L. M. (2008). Problem gambling in adolescence: Relationships with internet misuse, gaming abuse and emotional intelligence. *Personality and Individual Differences*, 45 (2) , 1 7 4 – 1 8 0 . <https://doi.org/10.1016/j.paid.2008.03.018>
- Sánchez-López, M. T., Fernández-Berrocal, P., Gómez-Leal, R., & Megías-Robles, A. (2022). Evidence on the relationship between emotional intelligence and risk behavior: A systematic and meta-analytic review. *Frontiers in Psychology*, 13, 810012. <https://doi.org/10.3389/fpsyg.2022.810012>
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167–177.
- Serna, C., García-Perales, J., & Martínez, I. (2023). Protective and risk parenting styles for internet and online gambling addiction. *Human Behavior and Emerging Technologies*, 2 0 2 3 (1) , 6 6 7 4 5 4 1 . <https://doi.org/10.1155/2023/6674541>
- Serna, C., García-Perales, J., & Martínez, I. (2023). Protective and risk parenting styles for internet and online gambling addiction. *Human Behavior and Emerging Technologies*. Online first.. <https://doi.org/10.1155/2023/6674541>.
- Shaffer, H. J., Forman, D. P., Scanlan, K. M., & Smith, F. (2002). Awareness of gambling-related problems, policies and educational programs among high school and college administrators. *Journal of Gambling Studies*, 18(3), 265–283.
- Sharpe, L. (2002). A reformulated cognitive-behavioral model of problem gambling: A biopsychosocial perspective. *Clinical Psychology Review*, 22(1), 1–25.
- Sroufe, L. A., Egeland, B., Carlson, E. A., & Collins, W. A. (2005). *The development of the person: The Minnesota Study of Risk and Adaptation from birth to adulthood*. Guilford Press.
- Stark, R., & Bainbridge, W. S. (1987). *A theory of religion*. Peter Lang.
- Vanheusden, F. J., Vadapalli, S. K., Rashid, M., Griffiths, M. D., & Kim, A. (2025). Religiosity, Financial Risk Taking, and Reward Processing: An Experimental Study. *Journal of Gambling Studies*, 41, 767–788. <https://doi.org/10.1007/s10899-024-10324-4>.
- Welte, J. W., Barnes, G. M., Tidwell, M. C. O., & Hoffman, J. H. (2004). The prevalence of problem gambling among U.S. adolescents and young adults: Results from a national survey. *Journal of Gambling Studies*, 20(2), 103–127.
- Williams, B. M., Browne, M., Rockloff, M., Stuart, G., & Smith, B. P. (2022). Protective action and risky beliefs: The relationship between religion and gambling fallacies. *Journal of Gambling Studies*, 38(1), 253-263.
- Zhoc, K. C., King, R. B., Chung, T. S., & Chen, J. (2020). Emotionally intelligent students are more engaged and successful: examining the role of emotional intelligence in higher education. *European Journal of Psychology of Education*, 35(4), 839-863.