Social Impact of Gambling in Nigeria

Background

Gambling is becoming increasingly popular among young people driven by the introduction of new gaming products and technology integration (Uzobo *et al.* 2023; Adebisi *et al.* 2020). However, individuals grappling with gambling problems face heightened exposure to violence and abuse (Chukwu, 2023). Gambling, broadly defined as the act of wagering money or valuable items on an uncertain outcome in the pursuit of additional financial gains and/ or material possessions (Jole *et al.* 2022; Ayandele *et al.* 2019; Williams et *al.* 2017), has experienced rapid industry expansion. While this growth brings about advantages such as job creation and revenue generation for individuals and the government respectively, there are growing apprehensions regarding the substantial risks associated with addiction, financial strain and social consequences (Uzobo *et al*. 2023; Olaore *et al.* 2020). Gambling products are now advertised and hosted on e-platforms that are synchronized with bank accounts (Owonikoko, 2020). The Nigerian betting industry is relatively large as it is worth over $2 billion in revenue as of 2020, with over 60 million Nigerians between 18 and 40 spending $5.5 million daily on different products (Joel *et al.* 2023).

The Nigerian betting industry has captured the attention of both domestic and international investors. This game of chance encompasses approximately twenty-four distinct types of lotto games and is actively played throughout the year across Nigeria. In one of the most popular games, participants are prompted to predict five numbers that will be drawn on a predetermined date. Once the prediction is finalized, bettors make a payment and stand to receive winnings and bonuses if their selected numbers match the drawn ones. Another widely embraced product is the sports betting category. Nigeria stands as the second-largest online gambling market on the African continent, trailing only behind South Africa (Okechukwu, 2022). A considerable number of Nigerian youths exhibit fervent interest in major global sports leagues (Chukwu, 2023; Akanle and Fageyinbo, 2016), providing substantial insight into the widespread engagement in sports betting among this group. Notably, sports betting is among the legalized games subject to regulation by the National Lottery Commission in Nigeria. The sports betting governance is outlined by the National Lottery Act (2005) and the National Lottery Regulation (2007 as amended) (Akpasung and Oko, 2021). In this variant, participants predict various outcomes such as the overall winner, winning margin, the first team to receive a yellow card, the team to make the first throw-in, and the final result of the match by halftime among others. Notably, sports betting extends beyond soccer, now incorporating predictions for basketball, boxing, table tennis, lawn tennis matches, and, more recently, even national elections. The

diversity of offerings within the sports betting sphere showcases the evolving landscape of this industry in Nigeria. Sports betting firms have increased publicity in social media, and advertisements during the broadcasting of football matches, thus gaining more acceptance in recent years (Uzobo *et al.* 2023).

The growth of the betting industry in Nigeria has been one of the fastest across Africa and in developing countries (Adieme and Subramanian, 2020). Gambling has been linked to certain undesirable socioeconomic outcomes in the literature. For example, excessive gambling may subject family or personal income to severe instability resulting in distress situations, strained family relationships, trust gaps, health challenges and increased crime rates (Tade *et al.* 2021; Owonikoko, 2020; Mustapha and Enilolobo, 2019). Specifically, gambling has been linked to a reduction in quality of life, poor mental state and lower satisfaction with life, once gamblers have lost money. However, while several studies had explained that gambling could have positive externalities including entrepreneurial mindset and risk taking, and improving the livelihoods of the poor, the activity is risky and addictive (Williams *et al.* 2011). Numerous researchers have attempted to classify gamblers into two distinct categories, namely responsible and excessive gamblers, thereby framing the discussion of gambling within the framework of net social impact (Adieme and Subramanian, 2020). Responsible gamblers, constituting individuals aged 18 and above, engage in gambling without jeopardizing their income or resorting to criminal activities to fund their gambling pursuits. In contrast, excessive gamblers exist along a continuum where in they consistently mobilize their own resources and, at times, those of others, be it through legal or illegal means, to engage in frequent gambling activities even when they are losing their resources. This differentiation offers a nuanced understanding of the varied behaviors within the spectrum of gambling, acknowledging the diverse motivations and consequences associated with different levels of engagement.

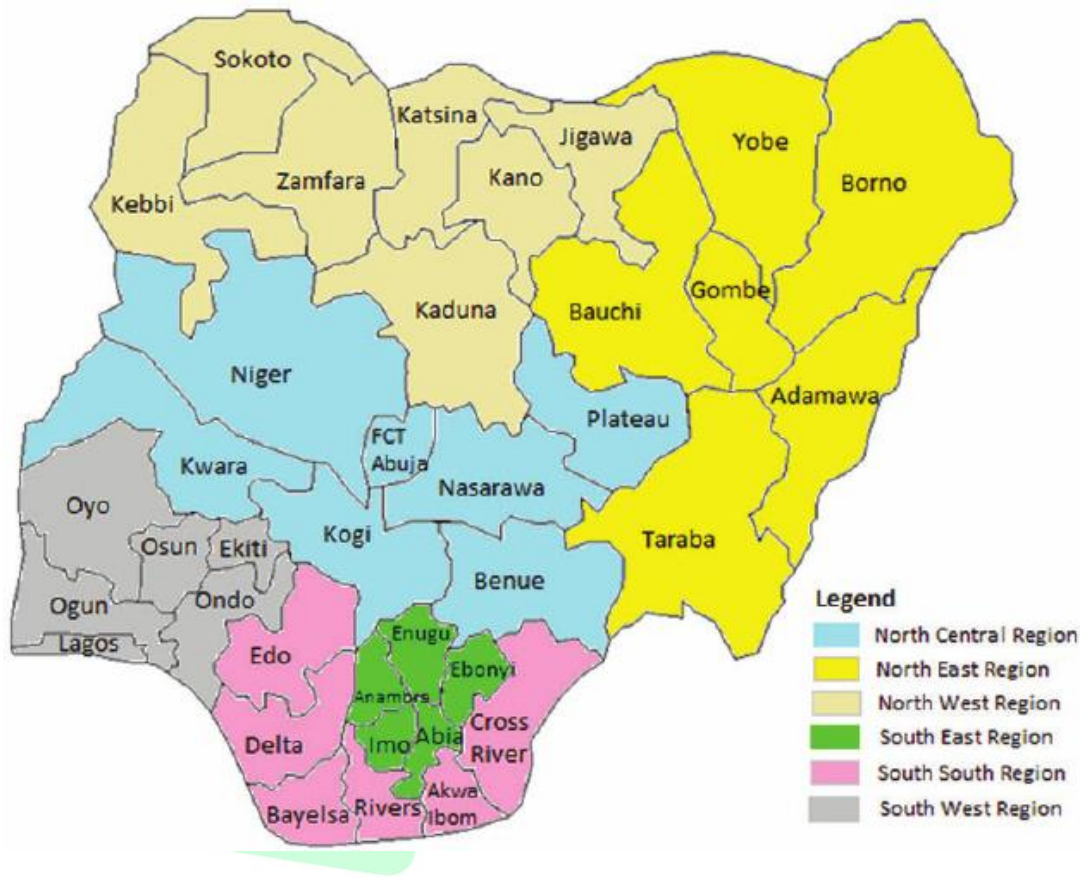
Objectives of the study

The broad objective of this study is to assess the prevalence of gambling, gambling harm and its severity in Nigeria. The specific objectives of this study are to:

- Profile the respondents based on their socioeconomic characteristics and gambling participation
- Analyze exposure to gambling harm and its severity in the study area
- Proffer recommendations based on key findings from the study

Methodology

Source and type of data: Primary data was collected from individuals who are above eighteen years of age in 34 states across the six geopolitical zones in Nigeria (see figure 1). The data included information on the socioeconomic characteristics of respondents, participation in betting activities, gambling harm and the awareness of treatment services among others.



Analytical tools: Relevant data were analyzed using descriptive statistical tools including frequency distribution tables and charts. Multivariable binary logistic regression model was used to assess predictors of gambling in the study area. The level of statistical significance was set at 0.05.

Results and discussions

Table 1: Distribution of the respondents by age group and betting status

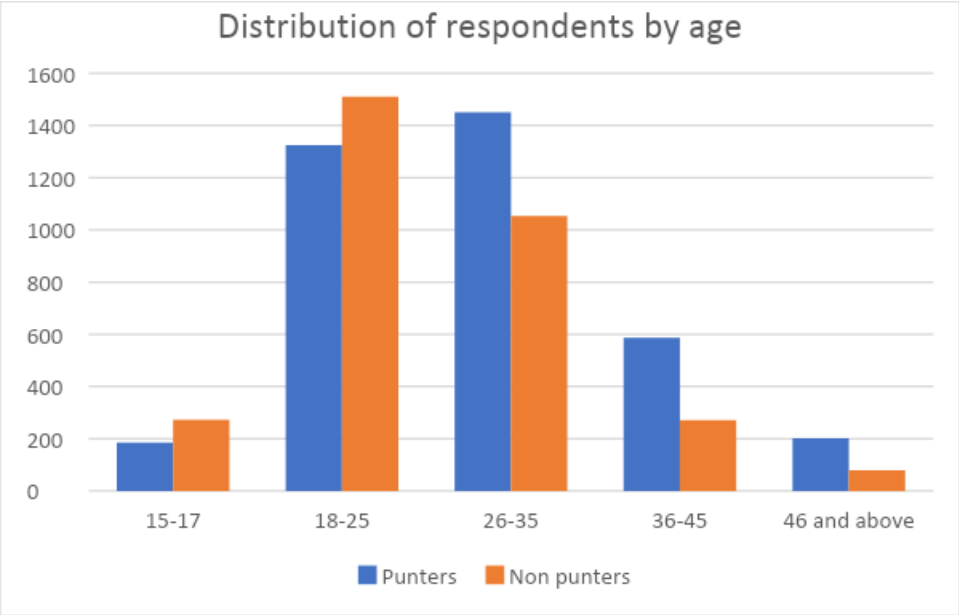


Table 1 reveals that respondents between 26-35 years old gamble the most, they are closely followed by those within the 18-25 years old bracket. An early initiation to gambling is observed in the 15-17 years old age group, as a significant number of the respondents are involved in gambling. The data shows a rise, plateau and decline pattern across the age groups, with ages 18-35 having the largest number of punters. This is consistent with the findings of Okechukwu (2022), who reported that sports betting was more popular among young Nigerians that are between 18 and 35 years of age.

Table 2: Distribution of the respondents by sex and betting status

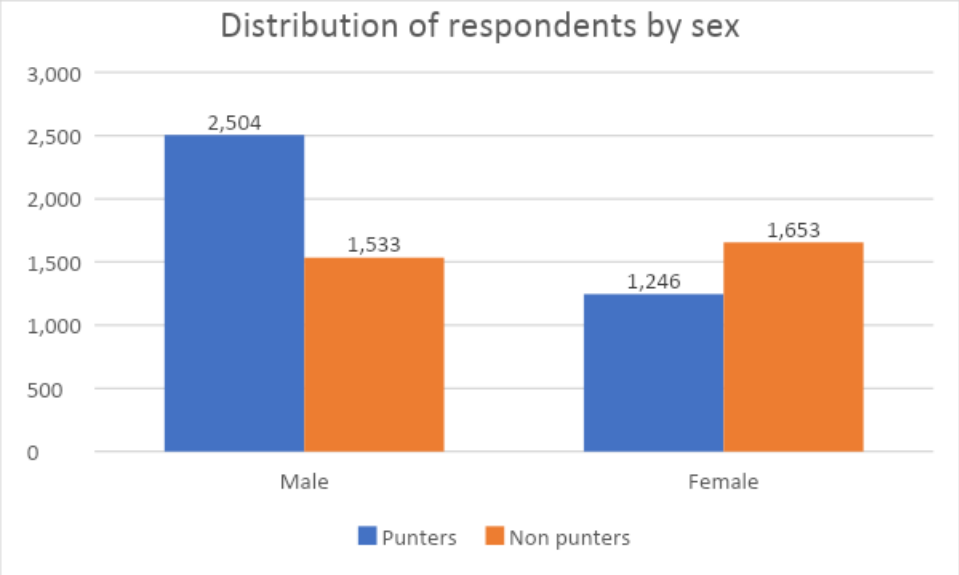


Figure 2 shows that more males are involved in gambling than females, as male punters are almost twice the number of female punters. For every female punter, there are 2 male punters. Also, 2 out of every 3 male respondents are involved in gambling, compared to 1 out of every 2 female respondents. This is consistent with the findings of Akpansung and Oko (2021) who reported that men are more likely tna women to be involved in sport wagering.

Figure 3: Distribution of the respondents by occupation and betting status

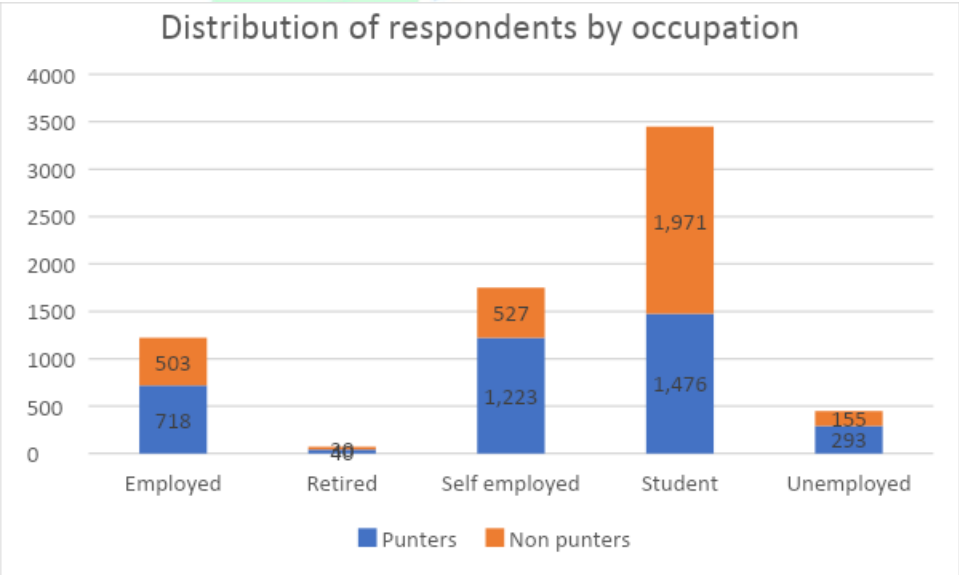


Figure 3 shows that a larger proportion of respondents across the occupation categories are involved in gambling except students. This is an indicator that a larger proportion of the total respondents are involved in gambling. The result also indicates that the punters are mostly students and self-employed individuals implying that they are not necessarily unemployed. This finding is consistent with the reports of Olaore *et al.*, (2021) and Uzobo *et al.* 2023.

Figure 4: Distribution of the respondents by geopolitical zones and betting status

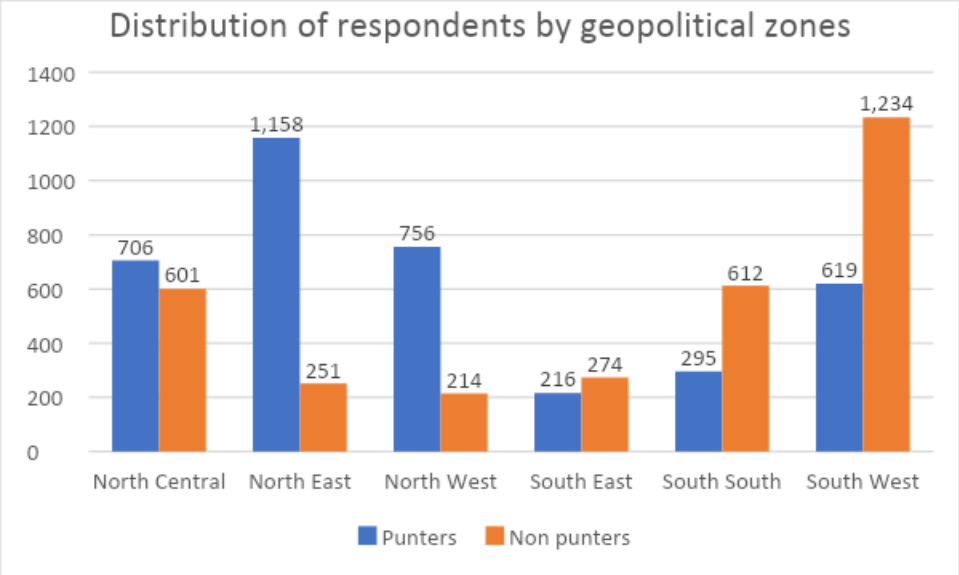


Figure 4 reveals that punters are pre-dominated in the North with the North East zone having the highest proportion of punters. The South West zone has the highest proportion of punters in the South, with the South East zone having the lowest proportion.

Figure 5: Distribution of the respondents by marital status and betting status

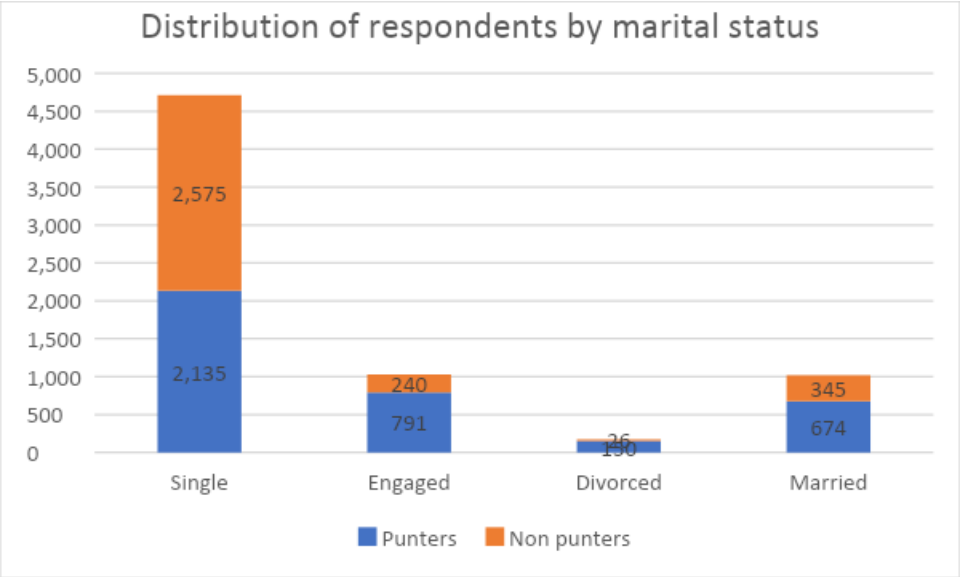
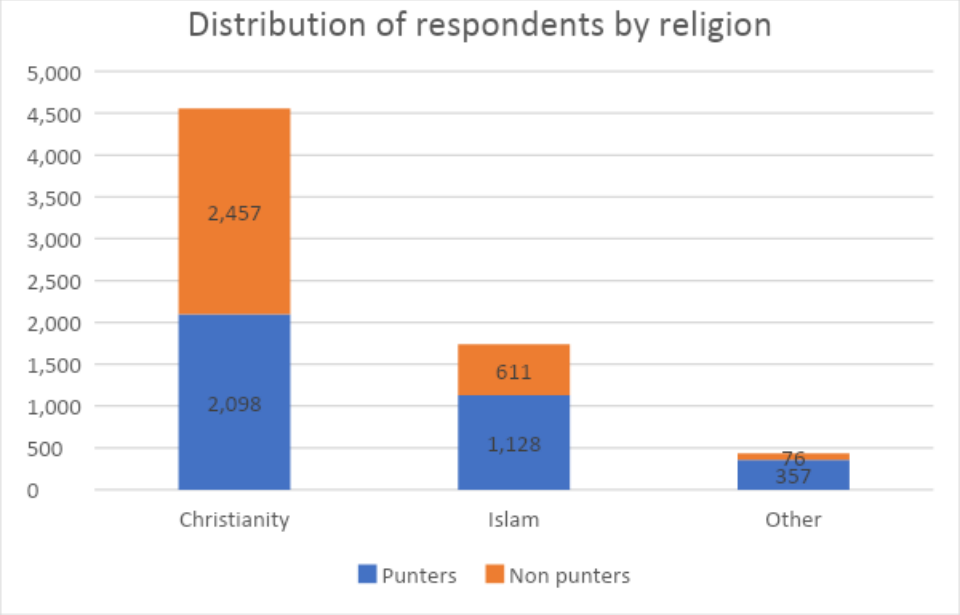


Figure 5 shows that the largest proportion of punters are single, this could be a result of having lesser responsibility and availability of extra financial resources to spend on gambling. This finding is consistent with the reports of Gainsbury *et al.*, (2013).

Figure 6: Distribution of the respondents by religion and betting status



The data shows that a larger number of punters practice Christianity relative to those practicing Islam. This could be attributed to differing religious beliefs. This finding on religion corroborates previous studies, which indicated that the majority of the punters in Nigeria are Christians (Akpansung and Oko, 2021).

Figure 7: Distribution of the respondents introduced to betting by close associate

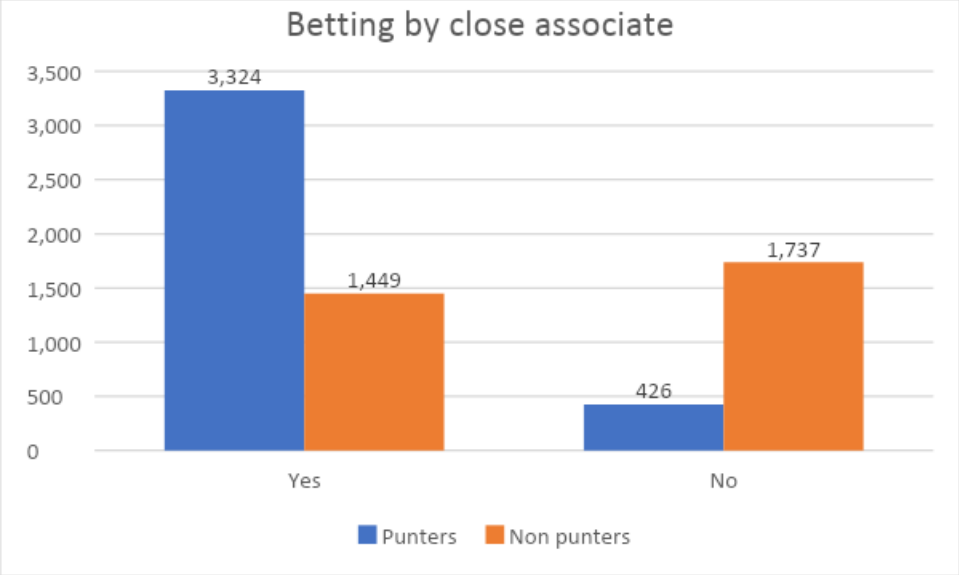


Figure 7 above reveals that a larger number of punters were introduced to gambling by their close associates. This implies that the punters could be involved in peer-based gambling as a result of influence and persuasion. This conforms with the earlier reports of Ayandele et al. (2019) and Joel *et al*. (2022) who reported a positive relationship between sports betting and peer influence in youths from Ilorin, Kwara State, Nigeria.

Figure 8a

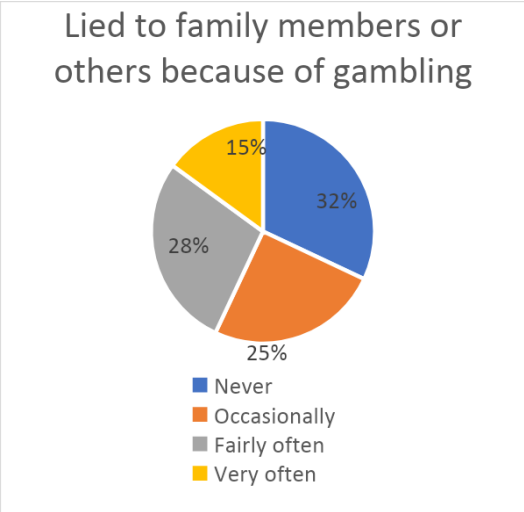
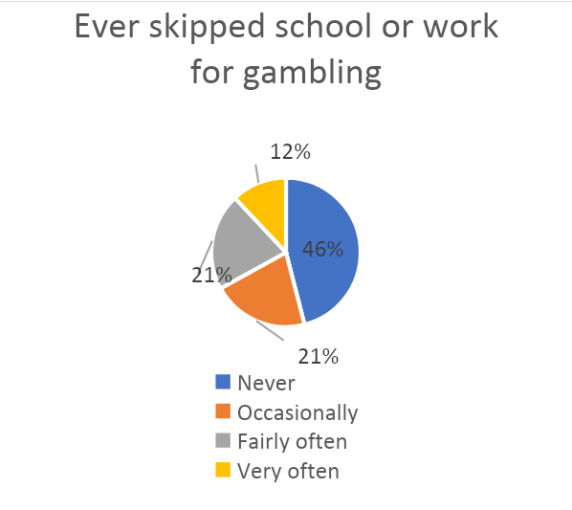
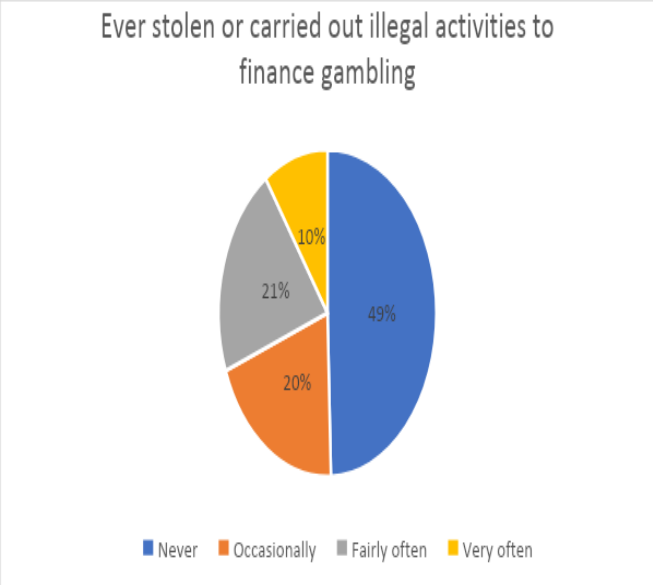


Figure 8b



Some vices are committed as a result of harmful gambling, such as lying to family, skipping school or work, stealing or committing illegal acts to finance gambling. This is reflected in figures 1a, 1b and 1c. This survey reveals that more than one-quarter of the respondents who gamble, fairly often lie to their family members or other people because of gambling. Fifty-three percent of respondents who gamble have skipped school or work, at least once because of gambling. More than half of the respondents had stolen or carried out illegal activities to finance gambling at least once.

Figure 8c



The results presented in figure 9a indicates that 59 percent of the punters had previously asked others to provide money or gotten into a desperate situation because of gambling. Similarly, figure 9b revealed that 70 percent of the punters previously reduced their spending in order to accommodate gambling in their expenses. In addition, 26 percent of the respondents indicated that they had lost something of significance to gambling. Majority of the punters had sold properties or raised loans to finance their gambling activities. This situation indicates addiction to gambling and the welfare losses attached to the addition.

Figure 9a

Figure 9b

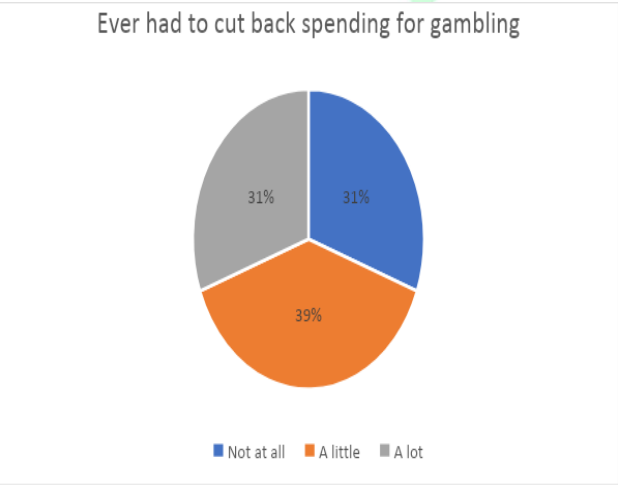


Figure 9c

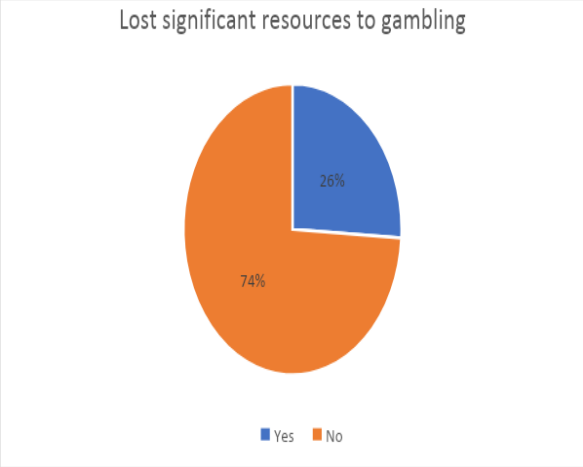
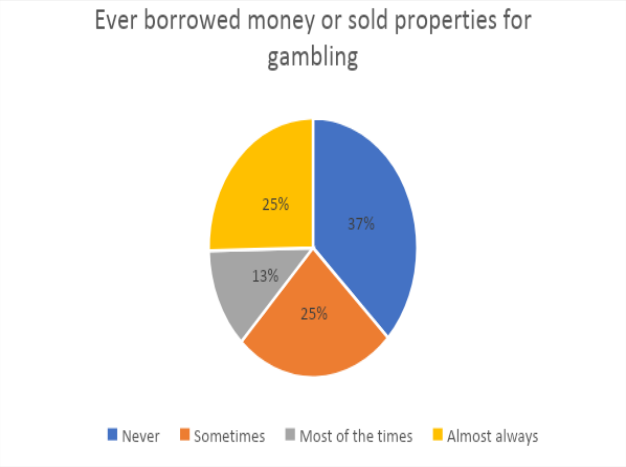


Figure 9d



According figures 10a, 10b and 10c, 69 percent of the punters felt guilty for gambling, 57 percent felt isolated because of gambling while only 35 percent of the punters sought help for themselves or others. This implies that while a significant proportion of the respondents were facing mental health issues due to excessive gambling only a few were able to seek help.

Figure 10a

Figure 10b

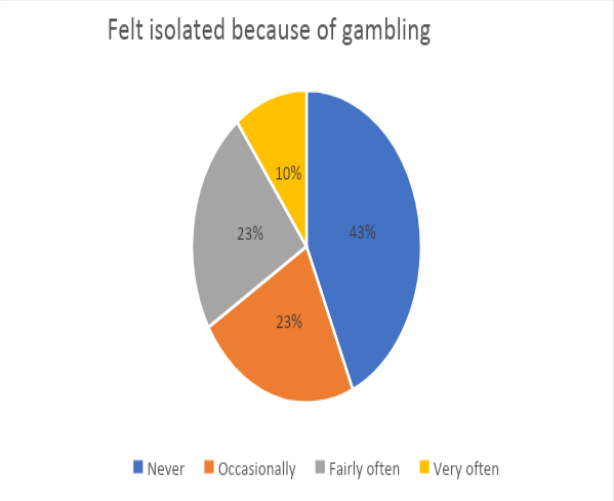


Figure 10c

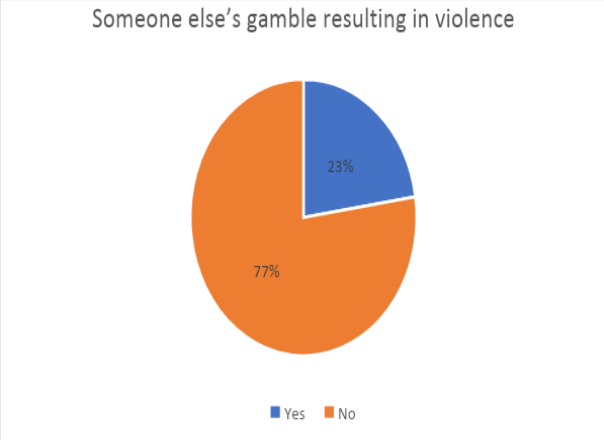
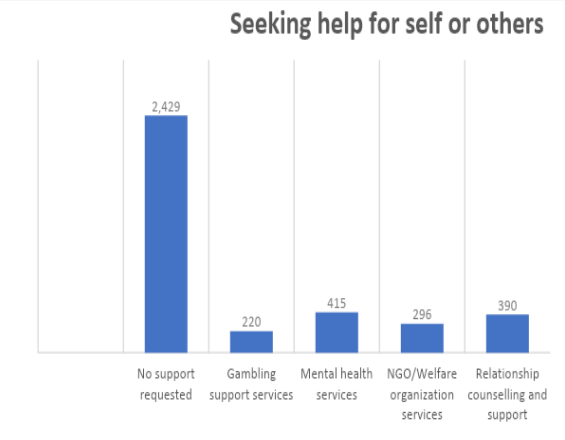


Figure 10 d



The results presented in figures 11a, 11b, 11c and 11d indicate that 31 percent of the punters were willing to pay to access clinical services while only 19 percent ever paid to access support services. This highlights the difference between the willingness to pay and ability to pay for support services. The study found about 30 percent of the respondents were aware of the activities of Gamble Alert while 68 percent of the punters did not believe that self-exclusion was effective. Therefore, the reason only 34 percent of the punters were willing to pay for self-exclusion is not far-fetched. This implies that more awareness needs to be created among the punters to ensure they adopt the self-exclusion tool for improved outcomes.

Figure 11a

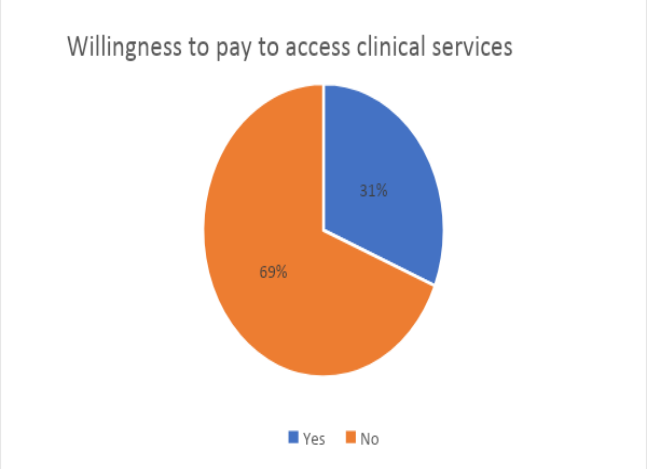


Figure 11b

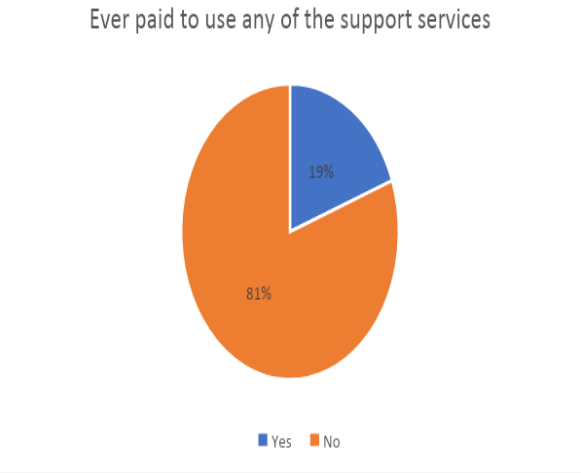


Figure 11c

Figure 11d

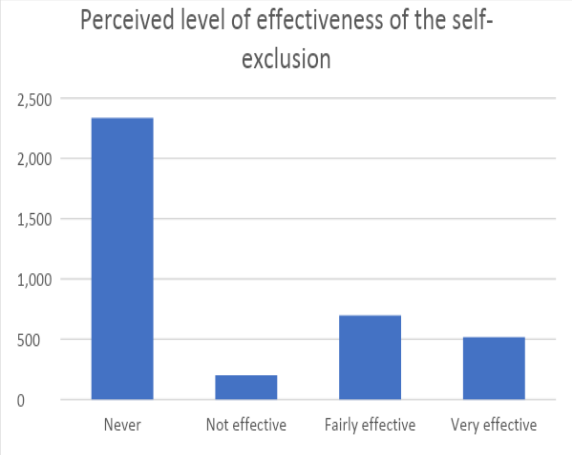
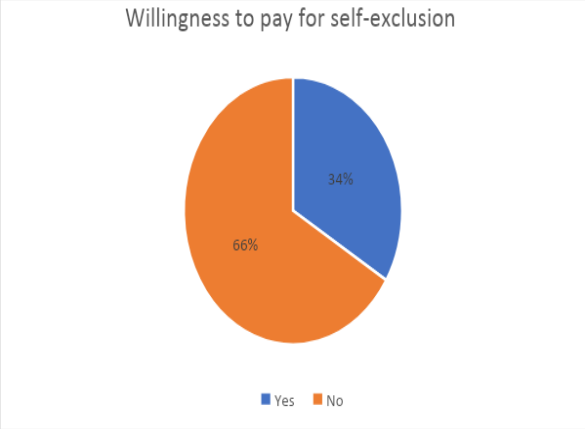


Figure 11e



Degree of harmful betting or problem gambling

The results presented in Table 1 revealed the level of problem gambling among the punters based on their responses to selected harmful betting questions. Punters who answered yes to four out of the fourteen

harmful betting questions were classified into a low category, medium category comprises of those who answered yes to between 5 and 10 questions, while those who indicated yes to at least 11 questions were taken as high. Based on this classification, 48 percent of the punters were in the medium level, 33 percent were classified as low while 19 percent were categorized as high on the problem gambling scale. This implies that a significant portion of the punters need help to ensure a reversal of their addition to gambling.

Table 1: Distribution of punters based on the harmful betting scale

Category	Frequency	Percentage
Low	1,204	33
Medium	1,736	48
High	691	19

Determinants of participation in gambling

The correlates of participation in gambling were modelled using a bivariate logistic regression model. The results presented in Table 2 indicates that individuals who are aged between 18 and 25 years (OR 1.30, 95% CI 1.10, 1.67; p=0.042), those between 26 and 35 (OR 1.33, 95% CI 1.03, 1.73; p=0.004), individuals between 36 and 45 years (OR 1.62, 95% CI 1.17, 2.20; p=0.004) and those above 46 years of age (OR 2.03, 95% CI 1.27, 3.24; p=0.003) has higher odds of gambling compared to those between 15 and 17 years of age. Similarly, males have higher odds (OR 2.50, 95% CI 2.20, 2.84; p<0.001) of gambling compared to the females. In terms of occupation, individuals who are self-employed (OR 1.60, 95% CI 1.35, 1.90; p<0.001) are more likely going to be involved in gambling relative to students. This implies that gambling is more pronounced among artisans and business owners. Individuals living in North East (OR 7.02, 95% CI 5.56, 8.88; p<0.001), North West (OR 4.16, 95% CI 3.24, 5.33; p<0.001), and North Central (OR 1.92, 95% CI 1.55, 2.38; p<0.001) are likely going to be involved in gambling compared to those living in South South, Nigeria. This confirms the earlier results indicating that the highest number of punters live in North East, Nigeria. Individuals that are engaged (OR 1.55, 95% CI 1.29, 1.92; p<0.001) and divorced (OR 2.40, 95% CI 1.38, 4.18; p=0.002) have higher odds of gambling compared to those who are single. Finally, individuals who have at least one close associate who is involved in gambling (OR 8.64, 95% CI 7.50, 9.96; p<0.001) have higher odds of gambling compared to those who do not. This implies that gambling can be traced to peer pressure, hence targeting close associates with advocacy campaigns may help reduce gambling.

Table 2: Determinants of participation in gambling activities

Variable	Odds ratio	95% CI	P-values
Sex			
Female	Ref		
Male	2.50	2.20, 2.84	**<0.001**
Age (years)			
15-17	Ref		
18-25	1.30	1.10, 1.67	**0.042**
26-35	1.33	1.03, 1.73	**0.031**
36-45	1.62	1.17, 2.20	**0.004**
Above 46	2.03	1.27, 3.24	**0.003**
Occupation			
Student	Ref		
Self-employed	1.60	1.35, 1.90	**<0.001**
Employed	1.05	0.86, 1.28	0.629
Unemployed	1.21	0.92, 1.59	0.166
Retired	0.40	0.4785, 1.4391	0.507
Religion		0.21, 0.78	0.700
Christianity	Ref		
Islam	1.22	1.05, 1.42	0.100
Traditional	2.07	1.36, 3.14	**<0.001**
Others	2.13	1.55, 2.93	**<0.001**
Geopolitical zone			
South South	Ref		
North East	7.02	5.56, 8.88	**<0.001**
North West	4.16	3.24, 5.33	**<0.001**
North Central	1.92	1.55, 2.38	**<0.001**
South East	1.24	0.96, 1.61	0.107
South West	0.83	0.68, 1.01	0.063
Marital Status			
Engaged	1.55	1.25, 1.92	**<0.001**

Married	0.88	0.70, 1.11	0.276
Divorced	2.40	1.38, 4.18	**0.002**
Gambling by a close associate			
No	Ref		
Yes	8.64	7.50, 9.96	**<0.001**

Table 3: **Relationship of Age and Borrowed/Sold Property**

	Borrowed/Sold property					χ^2 Value	P-value
	Never	Sometimes	Most of the Time	Almost Always	Total		
Age Group(Years)						249.7	<.001
15–17	330 (72.2%)	43 (9.4%)	49 (10.7%)	35 (7.7%)	457		
18–25	2069 (72.9%)	323 (11.4%)	297 (10.5%)	150 (5.3%)	2839		
26–35	1562 (62.3%)	375 (15.0%)	396 (15.8%)	175 (7.0%)	2508		
36–45	448 (52.2%)	165 (19.2%)	165 (19.2%)	81 (9.4%)	859		
46+	112 (39.9%)	55 (19.6%)	76 (27.0%)	38 (13.5%)	281		

Rating values are expressed as Frequency (percentage)

The Chi-square test of independence revealed a statistically significant relationship between age group and likelihood of borrowing or selling property due to gambling, χ^2 (12, N = 6944) = 249.7, $p < .001$. The younger age groups (15–25) were less likely to borrow or sell property compared to older age groups. Particularly,

those aged 46 and above had the highest proportion of respondents who reported that they engaged in borrowing/selling activity (40% never compared to 27% most of the time and 13.5% almost always). This shows financial gambling distress increases with age.

Table 4: **Relationship of Education and Borrowed/Sold Property**

	Borrowed/Sold property					χ^2 Value	P-value
	Never	Sometimes	Most of the Time	Almost Always	Total		
Education Level						396.3	<.001
O'level	694 (46.2%)	250 (16.6%)	371 (24.7%)	187 (12.5%)	1502		
Undergraduate	2719 (73.2%)	450 (12.1%)	370 (10.0%)	174 (4.7%)	3713		
Graduate	1108 (64.1%)	261 (15.1%)	242 (14.0%)	118 (6.8%)	1729		

Rating values are expressed as Frequency (percentage)

The level of education was strongly correlated with borrowing/selling property due to gambling, χ^2 (6, N = 6944) = 396.31, $p < .001$. Those with O'level only were most likely to borrow/sell property, with nearly 37% confessing this at least 'most of the time' or 'almost always'. Undergraduates were least likely to borrow/sell, with over 73% reporting 'never'. This would indicate that the level of education could be a protective factor against financially harmful gambling activity.

Table 5: **Relationship of Education and Gambling Participation**

	Gambling Participation			χ^2 Value	P-value
	Yes	No	Total		
Awareness of Service				128.1	<.001
O'level	993 (66.1%)	509 (33.9%)	1502		
Undergraduate	1815 (48.9%)	1898 (51.1%)	3713		
Graduate	944 (54.6%)	785 (45.4%)	1729		

Rating values are expressed as Frequency (percentage)

The Chi-square test also indicated a statistically significant relationship between educational level and gambling participation, χ^2 (2, N = 6944) = 128.11, p < .001. The highest gambling participation (66%) belonged to O'level educated participants, while 49% of undergraduates and 55% of graduates participated. This finding suggests that greater gambling participation could be linked with lower education.

Table 6: **Relationship of Gambling Support and Gambling Participation**

	Gambling Participation			χ^2 Value	P-value
	Yes	No	Total		
Awareness of Service				39.4	<.001
Aware	890 (61.3%)	561 (38.7%)	1451		
Not Aware	2862 (52.1%)	2631 (47.9%)	5493		

Rating values are expressed as Frequency (percentage)

Awareness of gambling support services was significantly related to gambling participation, χ^2 (1, N = 6944) = 39.41, p < .001. Participants who were aware of support services were more likely to have gambled (61%) compared with participants unaware of support services (52%). This counterintuitive result may reflect that

awareness campaigns are likely to reach the already active gamblers, or gambling participation evokes people to notice available support services.

Spatial Effect Analysis of Gamble Harm in Nigeria

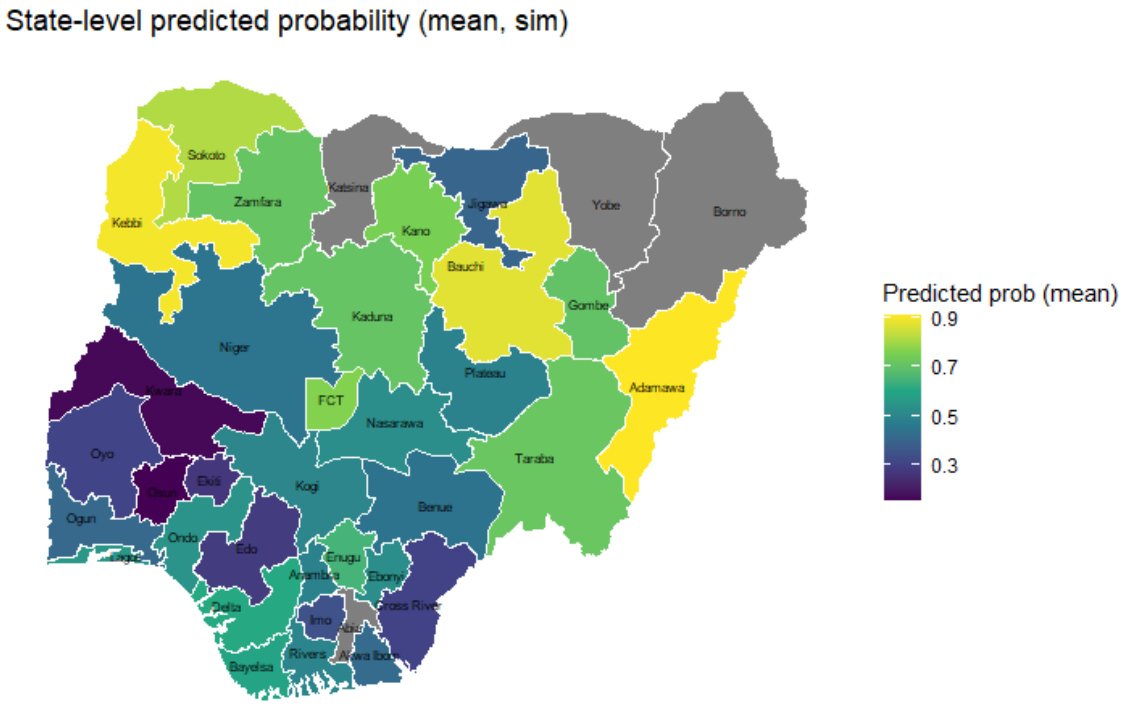


Figure 12: Predicted Probability (Mean)

Predicted Probability (Mean)

- What it measures: The model's best estimate of the probability of gambling participation in each state, after accounting for spatial patterns.
- Colour meaning:
    - Darker yellow/green = higher predicted probability ("hot spot").
    - Lighter blue = lower predicted probability ("cold spot").

- Spatial effect:
    - North (Adamawa, Kebbi, Bauchi, Sokoto) has very high predicted values (>0.80). This spatial concentration indicates a strong northern concentration of gambling risk.
    - South (Bayelsa, Cross River, Ekiti) has very low predicted probabilities (<0.30), which means gambling involvement is much less likely in these states.
- Interpretation: High-probability northern states may require priority awareness campaigns and policy attention, whereas low-probability southern states may require only monitoring interventions.

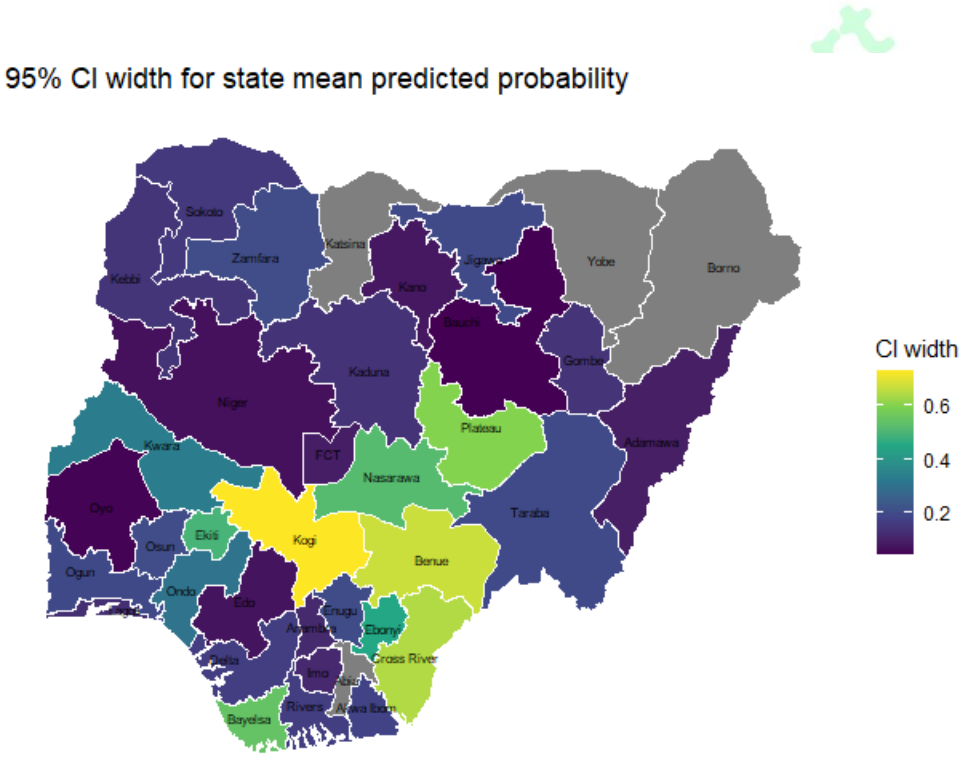


Figure 14: Predicted Probability (CI width)

Confidence Interval (CI Width)

- What it reports: Certainty about each estimate; wide intervals = more uncertainty, narrow intervals = more reliability.
- Colour interpretation:

- Darker yellow shades = wide CI (low certainty).
- Lighter blue shades = narrow CI (high certainty).

- Spatial effect:
  - States with large samples (e.g., Lagos, Bauchi) → narrow CI, accurate predictions.
  - States with small samples (e.g., Yobe, Zamfara) → wide CI, volatile estimates.
- Interpretation: If a state is light yellow on the probability map but also yellow on the CI map, it exercises caution that the hotspot could be caused by uncertainty rather than reality. When planning, Gamble Alert should treat wide CI states as "data gaps", i.e., additional data are needed before committing many resources.

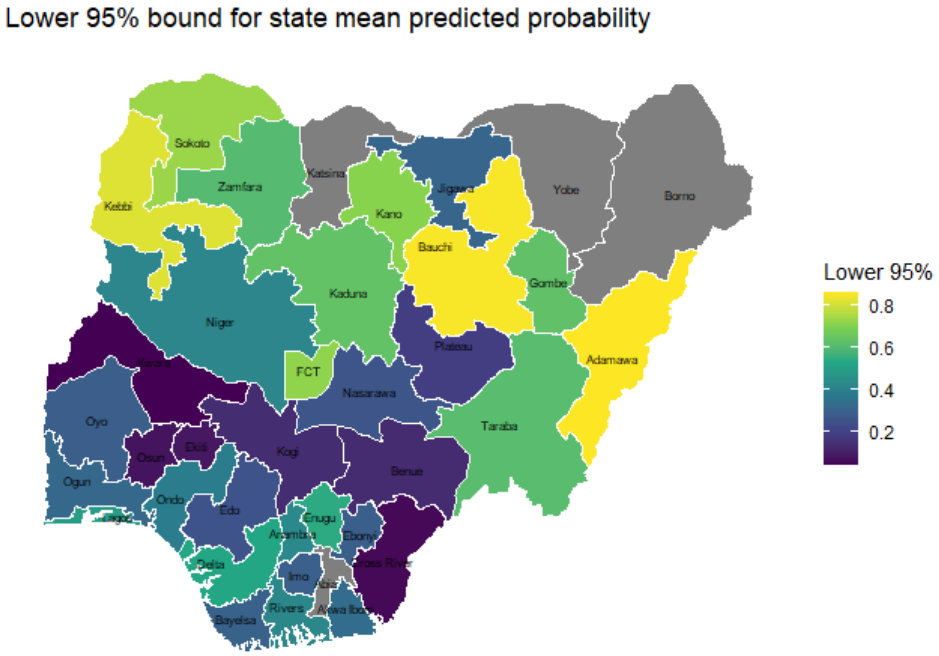


Figure 15: Predicted Probability (Lower 95%)

Lower 95% Bound

- What it measures: The conservative minimum participation rate that we are 95% confident of, essentially a "worst-case" scenario.
- Colour interpretation:

- Darker colours = even in the worst case, gambling prevalence is still high (strong evidence).
- Lighter colours = weak or ambiguous participation in the worst case.

- Spatial effect:
  - High lower bounds (Adamawa ≈0.86, Bauchi ≈0.75): Even conservatively, gambling participation is very likely strong evidence of risk.
  - Low lower bounds (Ekiti ≈0.04, Bayelsa ≈0.06): Worst case, participation is negligible to weak evidence.
- Interpretation: If both mean probability and lower bound are high, then the state is an evidence-strong hotspot ideal for immediate policy or intervention targeting.

DISCUSSION

This report provides an in-depth explanation of the spatial effects of Nigerian states' involvement in gambling, as forecast in a model estimating widths of confidence intervals, predicted probabilities, and lower 95% bounds. The results are particularly beneficial to an NGO such as Gamble Alert, whose work comprises advocacy, policy consultation, and planning for harm reduction intervention. The interpretation is couched as an intellectual discourse, weaving statistical evidence and practical implications.

The forecast probability map, or the central estimates of the model, shows strong spatial heterogeneity in gambling involvement across the states. The northern states, particularly Adamawa, Kebbi, Bauchi, and Sokoto, exhibit very high predicted probabilities, all above 0.80. These results indicate serious state clustering of high-risk states in the north, indicating spatial hotspots where gambling engagement is particularly probable. In contrast, however, are some of the southern states, such as Bayelsa, Cross River, and Ekiti, with forecast probabilities below 0.30, meaning gambling involvement is significantly lower in such regions. Spatially, this north-south contrast is striking and points to regional processes, perhaps socio-economic, cultural, or policy-based. For Gamble Alert, this evidence would mean that northern states need to be accorded higher priority in awareness campaigns and policy lobbying, since they are high-density areas of high risk, whereas southern states can be relegated to second-class areas where minimal monitoring and preventive interventions would be sufficient.

Although the predicted probabilities provide valuable information on spatial clustering, their accuracy depends on the width of the confidence intervals. The width of the confidence interval (CI) map indicates the level of certainty attached to each estimate. States like Lagos and Bauchi, which possess high sample sizes, have very thin confidence intervals, making them more credible. States like Yobe and Zamfara, with their much lower sample sizes, have large intervals, some up to 0.73. These wide CIs signify doubt in the estimates and caution against over-interpretation. Analytically, this is a valid distinction: a large predicted mean with a wide CI may imply a hotspot state, but pragmatically, the estimate can be misleading since

there is missing or univariate data. To Gamble Alert, the CI width map successfully points out where there is strong evidence and where further data gathering is required. Wide-CI states are to be considered "data gaps," or interventions in such states are to be grounded on stronger evidence before heavy investment. Such knowledge prevents misallocation of scarce resources and ensures interventions based on solid evidence.

The 95% lower bound map adds an additional and very conservative level of interpretation. This metric shows the lowest level of gambling participation that can be expected in each state at 95% confidence. States like Adamawa and Bauchi, with lower bounds of as much as 0.86 and 0.75, respectively, are making a strong case for wide participation. Even on the most unfavourable statistical grounds, the prevalence in the two states is dangerously high. This is an important observation for Gamble Alert because it confirms that high-risk states are not just high on mean estimates but remain so even when considered on conservative assumptions. In contrast, states such as Ekiti and Bayelsa possess extremely low lower bounds, close to 0.04 and 0.06, respectively, so that even under liberal assumptions, participation in gambling in these states is low. These results enable us to distinguish between strong and weak hotspots: strong hotspots are those where both the predicted mean is high and the lower bound is high as well, while weak hotspots are those where high means are not paired with high lower bounds.

Comparing all three scales predicted probability, CI width, and lower bound provides a multi-dimensional picture of the spatial effects. The mean estimate says where the gambling will occur; the width of the CI indicates how confident we can be in those predictions; and the lower bound assures us of a minimum risk regardless of how conservative our assumptions are. Together, these tools enable us to fit a reflective narrative. For example, a state like Adamawa is high on both lower bound and predicted mean and possesses a relatively narrow CI and is therefore an evidence-strong hotspot where immediate interventions are indicated. Conversely, a state like Zamfara might appear as a hotspot from the mean map but, with its wide CI, be treated cautiously and prioritized for future enumeration. On the other hand, low

mean and lower bound states like Ekiti clearly emerge as cold spots where there is little room for intervention.

Statistically and on a broader policy level, the findings affirm that Nigeria's northern belt repeatedly lights up as a hotspot of gambling participation. This is not only seen in the estimated means but confirmed by the conservative lower bounds, which remain high in most of the northern states. The southern states, on the other hand, look like cold spots, but in some cases, the evidence is less pointy due to small sample sizes. The CI width map, which reveals abnormal distribution of uncertainty, also indicates that while some of the northern states exhibit robust patterns, others exhibit greater uncertainty, emphasizing the significance of precision in interpreting spatial models. For Gamble Alert, this means interventions must not be equally distributed across the country but strategically targeted. Prompt policy reaction and awareness campaigns must be aimed at the northern CI-broad hotspots, whereas states with wide CIs must be brought to attention for additional data collection to validate the apparent risks. In the south, prevention education and monitoring must be prioritized over mass campaigns.

Overall, the combination of predicted probability, CI width, and lower 95% limits provides Gamble Alert with a rich basis for action. These measures, considered as a whole, distinguish between weak and strong hotspots and hence guide near-term interventions as well as longer-term agendas of research. The superiority of the north in forecast probabilities and lower bounds calls for focused lobbying and policy interventions there. By contrast, the CI width measure highlights the necessity of enhanced evidence construction in under-sampled states before resource deployment. This approach ensures Gamble Alert interventions are not only effective and focused but also scientifically defensible, thereby ensuring credibility in advocacy and operational effectiveness.

Conclusion and recommendations

The study investigated the prevalence of gambling, problem gambling and the determinants of gambling in Nigeria. Descriptive statistical tools and bivariate binary logistic regression model was used to model the determinant of gambling in the study area. The study found most gamblers are males who are between 18 and 35 years of age, students and single living in North East, Nigeria. The study found that many Nigerians are involved in problem gambling while some are willing to seek support but are unable to pay for the services. The results of the regression model indicates that individuals who are males, self-employed, have a close associate involved in gambling, reside in North East, North West and North Central, Nigeria have high odds of gambling. There are northern states like Adamawa, Bauchi, Kebbi, and Sokoto that have very high levels of gambling and are "hotspots." On the other hand, some of the southern states like Bayelsa, Ekiti, and Cross River have relatively low levels and are "cold spots. In some places, we don't have enough data to be 100% sure about the numbers, so more information is needed before making big decisions. The study also found that people with more education are less likely to get into serious gambling problems, while those with less schooling are at higher risk. Gamblers themselves seem to be more informed about support services than non-gamblers. This would mean that awareness programs succeed in targeting the gamblers themselves but fail to reach the people who actually need prevention or early warning.

Based on the findings of this study, the following are recommended:

- Government and development partners should intensify advocacy campaigns against excessive gambling in Nigeria.
- Development partners should collaborate with organizations such as Gamble Alert to develop, implement, and monitor programs that will help reduce problem gambling.
- Nigerians should reduce their gambling activities by allocating idle funds if they must gamble to reduce their vulnerabilities.
- Target interventions in northern hotspot states of Adamawa, Bauchi, Kebbi, and Sokoto, where gambling is highest according to the spatial analysis.
- Since the Chi-square results indicate that those with only O'level education are most likely to experience gambling-related financial harm, prevention and awareness efforts need to target this group in particular with risk education and financial literacy.

Appendix

Table 7: **Distribution of the respondents by socioeconomic characteristics**

Variable	Frequency	
Age (Years)	Yes	No
15-17	185	272
18-25	1,325	1,511
26-35	1,451	1,053
36-45	587	271
46 and above	202	79
Geopolitical zone		
North Central	706	601
North East	1,158	251
North West	756	214
South East	216	274
South South	295	612
South West	619	1,234
Sex		
Male	2,504	1,533
Female	1,246	1,653
Occupation		
Employed	718	503
Retired	40	30
Self employed	1,223	527
Student	1,476	1,971
Unemployed	293	155
Marital Status		
Single	2,135	2,575
Engaged	791	240

Divorced	150	26
Married	674	345
Religion		
Christianity	2,098	2,457
Islam	1,128	611
Other	357	76
Traditional	167	42
Betting by close associate		
Yes	3,324	1,449
No	426	1,737

Table 8: **Distribution of respondents disaggregated by perceived effects and level of harmful betting**

Variables	Frequency
Lied to family or others because of gambling	
Never	1,207
Occasionally	936
Fairly often	1,030
Very often	577
Ever skipped school for gambling	
Never	1,738
Occasionally	778
Fairly often	785
Very often	449
Ever stolen or carried out illegal activities to finance gambling	
Never	1,856
Occasionally	741
Fairly often	792
Very often	361
Ever asked others to provide money or gotten into desperate situation because of gambling	
Never	1,546
Occasionally	891
Fairly often	877
Very often	436
Ever had to cut back spending to gamble	
Not at all	1,319
A little	1,668
A lot	1,319
Lost significant resources to gambling	
Yes	973
No	2,777

Variables	Frequency
Ever borrowed money or sold properties for gambling	
Never	1,395
Sometimes	934
Most of the times	470
Almost always	951
Ever had a broken relationship because of betting	
Yes	989
No	2,640
Ever felt guilty for gambling	
Never	1,154
Sometimes	1,186
Most of the times	456
Almost always	954
Felt isolated because of gambling	
Never	1,627
Occasionally	862
Fairly often	873
Very often	388
Victim of violence and abuse due to gambling	
Yes	924
No	2,826
tab	
Suicide thoughts from gambling	
Yes	930
No	2,820
Thoughts of spiritual influence	
Yes	908
No	2,842
Close person involved in gambling	
No	389

Variables	Frequency
Yes, a friend	1,755
Yes, a family member	1,606
Lying to family members because of gambling	
Never	1,769
Occasionally	907
Fairly often	1,074
Someone else's gamble resulting in stress or anxiety	
Never	1,790
Almost always	863
Sometimes	854
Most of the time	243
Someone else's gamble resulting in violence	
Yes	848
No	2,902
Seeking help for self or others	
No support requested	2,429
Gambling support services	220
Mental health services	415
NGO/Welfare organization services	296
Relationship counselling and support	390
Willingness to pay to access clinical services	
Yes	1,169
No	2,581
Ever paid to use any of the support services	
Yes	727
No	3,023
Awareness of gambling alert	
Yes	1,123
No	2,627
Awareness of self-exclusion Gamban	

Variables	Frequency
Yes	1,135
No	2,615
Level of effectiveness of the self-exclusion	
Never	2,337
Not effective	201
Fairly effective	696
Very effective	516
Willingness to pay for self-exclusion	
Yes	1,264
No	2,486

Table 9: Distribution of the Spatial Effect Values

State	Mean_Pred	SIM_Mean	Lower_95
Adamawa	0.907347	0.904643	0.855698
Kebbi	0.899081	0.893184	0.812059
Bauchi	0.870048	0.869019	0.84916
Sokoto	0.815317	0.811809	0.728093
FCT	0.764285	0.762683	0.715567
Kano	0.749501	0.747436	0.70729
Taraba	0.717805	0.713965	0.609484
Zamfara	0.711546	0.707688	0.60255
Kaduna	0.709572	0.706664	0.63351
Gombe	0.699258	0.6993	0.627478
Enugu	0.645443	0.644384	0.539468
Delta	0.608559	0.607311	0.523088
Bayelsa	0.592271	0.587277	0.297615
Lagos	0.551295	0.550723	0.490087
Ondo	0.536918	0.537563	0.383254
Ebonyi	0.526519	0.522773	0.286327
Nasarawa	0.52945	0.522696	0.256157

Kogi	0.506623	0.49773	0.136851
Rivers	0.494402	0.496013	0.417655
Plateau	0.473722	0.481777	0.186836
Anambra	0.480922	0.481444	0.423389
Niger	0.443859	0.443896	0.413107
Benue	0.44448	0.440073	0.129447
Akwa Ibom	0.415363	0.41529	0.331907
Ogun	0.408017	0.408848	0.317011
Jigawa	0.399323	0.39886	0.306603
Imo	0.342296	0.342454	0.289622
Oyo	0.305795	0.305918	0.284842
Cross River	0.278402	0.299526	0.053436
Edo	0.282918	0.282733	0.249755
Ekiti	0.252197	0.26875	0.081649
Kwara	0.153056	0.164499	0.040332
Osun	0.146483	0.152835	0.073836

References

Adebisi T., O. ALabi, O. Arisukwu and F. Asamu (2020). Gambling in transition: Assessing youth narratives of gambling in Nigeria. *Journal of Gambling Studies*, 37:59-82.

Adieme, N. T., & Subramanian, R. (2020). Exploration of the Socioeconomic Challenges, Incremental Technological/Digital impact and Critical Incidents Influencing the Lottery gambling and Gaming industry. *Editorial Policy*, *17*, 37.

Akanle O. and K.T. Fageyinbo (2016). European football clubs and football betting among the youths in Nigeria. *Journal of Soccer & Society*, 20(1):1-20.

Akpansung A.O. and E.A. Oko (2021). Socio-economic impacts of sports betting: Evidence from North-East senatorial district of Benue State, Nigeria. *International Journal of Economics and Development Policy*, 4(1): 55-71.

Ayandele O., Popoola O. and A.C. Obosi (2019). Influence of Demographic and Psychological factors on attitudes toward sports betting among young adults in Southwest Nigeria. *Journal of Gambling Studies*, 36: 343-354.

Chukwu C.C. (2023). Perception of football betting and the birth of deviant behaviour among youths in the South-South Geo-political zone of Nigeria. *International Journal of Social Sciences and Management Research*, 9(6):29-46.

Gainsbury, S. M., Russell, A., Blaszczynski, A., & Hing, N. (2014). The interaction between gambling activities and modes of access: A comparison of internet-only, land-based only, and mixed mode gamblers'. *Addictive Behaviours*, 41, 34-40.

Joel K.I., D. O. Dike, G.C. Nji, T.I. Iwuagwu and O.J. Awosika (2022). Social predictors of sports betting among youths in Ilorin, Kwara State, Nigeria. *Journal of Physical Education and Health*, 11(20):23-32.

Joel K.I., Dauda-Olajide R.O. and O.J. Awosika (2023). Sports gambling among youths: The role of demographic factors and prevalence. *Shodh Sari- An International Multidisciplinary Journal*, 2(2):134-137.

Mustapha S.A. and O.S. Enilolobo (2019). Effects of gambling on the welfare of Nigerian youths: A case study of Lagos State. *Journal of Gambling Issues*, 41(3):29-44.

Okechukwu C.E. (2022). Gambling disorder caused by compulsive sports betting in Nigeria: A narrative review. *Apollo Medicine*, 19(1): 32-36.

Olaore G.O., B.O. Adejare and E.E. Udofia (2020). The nexus between the increasing involvement of youth in betting games and unemployment: the Nigerian perspective. *Journal of Humanities and Applied Social Sciences*, 3(3):163-181.

Owonikoko S.B. (2020). Game of hope; game of addiction: rising football betting among Nigerian youths and its implications for peace, security and stability. *Soccer and Society*, 21(7): 821-833.

Tade O., C.E. Dinne and O.I. George (2023). 'I have lost more than I have won': sports betting and bettors experiences in Nigeria. *African Identities,* (2023):1-14.

Uzobo E., Scent G.A.T., Moroyei B.O. and E.F. Owutuamor (2023). Sports betting and depression among youths in the South-South region of Nigeria. *Adiktologie*, 23(2): 145-157.

Williams R.J., R.A. Volberg, R.M.G. Stevens, L.A. Williams and J.N. Arthur (2017). The definition, dimensionalization and assessment of gambling participation. A report prepared for the Canadian Consortium for Gambling Research, pp1-157.

Williams, R.J., Rehm, J., and R.M. Stevens (2011). The Social and Economic Impact of Gambling. Final Report prepared for the Canadian Consortium for Gambling Research.