PSYCHOSOCIAL PREDICTOR OF ONLINE GAMBLING BEHAVIOUR AMONG YOUNG ADULTS IN ABUJA, NIGERIA

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ABSTRACT: *The study investigated the psychosocial predictors of online gambling behaviour among young adults in Abuja, Nigeria. The study adopted a cross-sectional survey research design and gathered data from 242 young adults in Abuja. Age distribution shows that more of the respondents 92 (38%) were between 20 and 24 years old. Findings revealed that while social support had a negative relationship with online gambling behaviour (β= -.28; t = -3.87; p < .01), the financial strain was found to positively predict online gambling behaviour (β= .38; t = 5.98; p < .01). It was concluded that financial strain and social support were significant predictors of online gambling behaviour. It was therefore recommended that checks should be put in place that assist pathological gamblers to have better orientation on the need to be cautious when gambling, and also ensure that they are linked with their family members.*

KEYWORDS: Psychosocial Predictor, Online Gambling Behaviour, Young Adults, Abuja, Nigeria

INTRODUCTION

Gambling behavioural activity is not new throughout the world. Archaeological records showed that Egyptians and people from the Middle East gambled (Schwartz, 2007). Plato also wrote on behavioural problem arising from gambling behaviour. A noble faux pas traceable to problem gambling was recorded by King Henry VIII when he threw away in betting on the dice game the iconic bells of Jesus Christ in St. Paul's Cathedral, England (Meyer et al. 2009). Problem gambling is an addiction-like issue that involves the compulsion to gamble even when it is unwise to do so (Lungu, 2020). It is a non-substance addiction that includes being dependent on gambling and increasing the number of stakes on games just as it is in substance addiction.

The definition of problem gambling according to the Diagnostic Statistical Manual (DSM-V) of the American Psychological Association (2013) recognizes that this behavioural condition can lead to substantial clinical distress or impairments. But also, we can find those experiencing this problem among those who engage in gambling as a recreational activity which may not necessarily lead to any clinical condition (Machoka, 2020).

Problem gambling is a risky behaviour similar to maladaptive sexual activity (Farre et al., 2015), and it has been shown to lead to loss of school and hostel fees, absence from classes, sleep problems resulting from online overnight gambling, and culminating in academic failure most especially for youths in university (Stinchfield, et al., 2006). This social-public health menace has received lip service from relevant bodies in Nigeria because, rather than nipping it in the bud through the establishment of an agency to take care of problem gamblers, the government is setting up a regulatory body to harness the huge funds the gambling industry generates for them (Adigun, 2020).

Relatively, recent figures in Nigeria showed that money realizable from betting rose from 132 billion nairas in 2016 to 185 billion nairas in just one year (Awagyiram & Akinyelure, 2018). Surprisingly, 60 million Nigerians in their young and middle-aged groups bet on sports (News Agency of Nigeria, 2019). This suggests that this is an issue that needs the attention of all stakeholders, government, community, and religious organizations to stem the rising trend of the menace, as it will be disastrous if this problem is not well understood for proper regulations arise thereon. Essentially, gambling is a glamorous venture among university students who are known for risk-taking and adventure (Machoka, 2020; Alimi et al., 2020).

Moreover, technology and internet services have enhanced the accessibility of gambling activities (Derevensky et al., 2004; Zhao et al., 2018; Bankole, 2019). While the effect of problem gambling is raising its ugly head in Nigeria, the efforts to arrest it are not yet domesticated as research opinions about it are gleaned from Western literature. It is therefore important for this study to investigate the psychosocial predictors of online gambling behaviour among young adults in Abuja.

The National Lottery Act of Nigeria (2005) criminalizes anybody less than 17 years old playing gambling. Meanwhile, evidence has shown that older age influences problem gambling (Kristiansen & Jensen, 2014). More empirical evidence has shown that research on gambling and problem gambling is more focused on adolescents (Blin-Pike et al., 2010; Riley et al., 2021). These adolescents are shown to be more developmentally different than youths (Defoe et al., 2015).

According to Livazovic & Bojcic (2019), in a study on the role of psychosocial factors in gambling behaviour, they found that financial strain and peer pressure were joint predictors of gambling behaviour. While McBride and Derevensky (2016) concluded that age groups were not different for the gamblers category, it was confirmed that financial strain had an influence, though not significant in their study. This explains why financial strain and gambling disorders need more research attention, especially among young adults.

In an African-based study, Kagwa et al. (2022) reported that the most common gambling-related suicide was seen among university students who had used their school fees to gamble and then lost. Engaging in gambling activity can help university students from low socioeconomic backgrounds live more comfortably (Lungu, 2020); however, financial gain can also play an important role in gambling disorder (Lelonek-Kuneta & Bartczuk, 2021). Interestingly, gamblers tend to increase their stakes when they have been on winning streaks and vice-versa when they have been losing (Xu & Harvey, 2014).

The very concept of gambling, in which after staking, a gambler expects something in return, ensures that money could be one of the motivations for engaging in gambling. According to Bankole (2019), this leads gamblers to fantasize that the benefits of gambling would positively impact many aspects of their lives.

Alternatively, financial strain, which is viewed as economic distress and being unable to meet financial goals (Adam et al., 2016), interlinks with maladaptive, uncontrollable behaviours such as substance use (Shaw et al., 2011) and risky sexual behaviour (Farre et.al, 2015). Bankole et al. (2019), while investigating personality and financial strain as predictors of gambling behaviour revealed that financial strain presupposes gambling behaviour. Speaking about problem gambling, a more direct result from Koomson et al. (2022) is that there is a positive association between problem gambling and financial stress.

Evidence has shown research efforts on gambling behaviour activity in Nigeria among youths (Bankole, 2019; Bankole et al., 2019 and Olatunji et al., 2020), but little attention has been paid to online gambling or any psychosocial variables that could influence it among young adults in Abuja. Therefore, this study aimed to investigate the role of financial strain and social support in online gambling behaviour among young adults. It is hypothesized that there would be significant independent and joint contributions of financial strain and social support on online gambling among young adults in Abuja, Nigeria. This study will add to the burgeoning literature on the risk factors of gambling in Nigeria and also provide evidence for directions of intervention.

METHOD
Research Design
The study adopted a cross-sectional research design to examine the demographic determinants of online gambling behaviour among youths in Abuja. The research design offered the researcher the opportunity to gather data at one point in time from different categories of people in terms of age, gender, etc.

Population
The general population for this study consists of all students who own laptops, and smartphones and have regular access to internet-enabled devices. American Psychiatric

Association (2013) put certain conditions of addiction. They are indicated by five or more of the following: preoccupation or obsession, withdrawal, tolerance, loss of control, loss of interest, continued overuse, deceiving, escape of negative feelings, functional impairment, and must be met within a year to be diagnosed as IGD as explained below:

(1) is preoccupied with gambling (e.g., preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble), (2) needs to gamble with increasing amounts of money to achieve the desired excitement, (3) has repeated unsuccessful efforts to control, cut back, or stop gambling, (4) is restless or irritable when attempting to cut down or stop gambling, (5) gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression), (6) after losing money gambling, often returns another day to get even ("chasing" one's losses), (7) lies to family members, therapist, or others to conceal the extent of involvement with gambling, (8) has committed illegal acts such as forgery, fraud, theft, or embezzlement to finance gambling, (9) has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling, and (10) relies on others to provide money to relieve a desperate financial situation caused by gambling.

These will be achieved by first of all trying to observe the participants and a brief interview was also conducted on them before administering the scale to see if they will meet at least one of the aforementioned criteria.

Sampling and Sampling Technique

The sample size for this study was determined using Roasoft sample size calculator. The online version was used to determine the participants for the study. The margin of error used was 5% with a confidence level of 95%. The total population size of youths in the three universities was 8531 for Baze, 9000 for Nile and 400 for Regent Pre-University which gave a total population of 17,931 (Evidence of the calculation attached in the appendix section). The sample size as calculated was found to be 377.

Participants

The study considered all those who have used or are using smartphones or laptops more than four hours a day and have gambled using different online platforms. Students found in the school lobby, students lounge and e-library were sampled and a brief interview was conducted with them before the questionnaires were administered to them through their social media handles such as WhatsApp, emails, etc using Google form links while those that accepted the hard copies were also issued the printed version of the questionnaire.

Instruments

A structured questionnaire was used to gather data from selected respondents to gather information on demographic factors as well as to use the related instrument to test for convergent validity. The instrument consists of two (2) sections; A and B.

Section A: Socio-Demographic Variables: This section consists of the socio-demographic information of respondents. It will consist of five (5) socio-demographic information of respondents. The following variables will be contained in section A; Gender, age, marital status, religion and highest educational qualification.

Section B: The Online Gambling Symptom Assessment Scale (OGSAS): The OGSAS is a 12-item scale designed to assess the severity of gambling behaviour (Kim et al. 2009). The current study adopted the modified version by Kalkan and Griffiths (2021) to assess for convergence validity of the Online Gambling Behaviour Scale (OGBS) developed in this study. The modified items assess gambling behaviour symptoms based on the past seven days of online gambling activity.

Items 1 to 4 assess average online gambling use, items 5 to 7 assess the average online gambling frequency, item 8 assesses the time spent on online gambling or online gambling-related behaviour, item 9 assesses the excitement caused by online gambling, item 10 assesses the excitement or pleasure associated with winning online, item 11 assesses emotional distress caused by online gambling, and item 12

assesses personal difficulties from online gambling.

Each item has a score ranging from 0 to 4. The total score ranges from 0 to 48, and individuals are classed as 8–20 for mild, 21–30 for moderate, 31–40 for severe, and 41–48 for extreme online gambling behaviour symptoms. All items ask for an average symptom based on the past seven days (Kim et al. 2009, p. 77). Kalkan and Griffiths (2021) added the word "online" to the instrument with written permission from the authors who developed the original instrument (i.e.Kim et al. 2009).

Examples of the OGSAS items include "If you had unwanted urges to gamble online during the past WEEK, on average, how strong were your urges?" During the past WEEK, how many hours (add up hours) were you preoccupied with your urges to gamble online?" and "During the past WEEK, approximately how much total time did you spend gambling online or on online gambling-related activities?" (Modified from Kim et al. 2009).

Section C: Financial strain: These evoked responses concerning financial strain, which were measured using a financial strain scale. Aldana and Liljenquist created an 18-item rating scale (1998). The scale aids in the identification of people who are experiencing financial hardship as well as potential negative health consequences. The scale's response format ranged from never (1) to always (5). The scale includes items such as, there are disagreements about money in my home; do you ever get headaches from worrying about money; and I find it difficult to pay my bills. For this study, a Cronbach's reliability coefficient of.80 was estimated. The study by Bankole (2019) reported a reliability coefficient of .91.

Section D: Social support: Social support was developed by Zimet, et al., (1988). The social support scale is a 12-item scale developed to measure the extent to which individuals perceives they receive support from different sources. It is a 7-point rating scale,

Demographic Information
This section presents the demographic distribution of respondents.

ranging from very strongly disagree "1", to 7 "very strongly agree". The items tended to divide into factor groups relating to the source of the social support, namely family, friends or significant other (3-subscales). There are no reversed items. A two reliability tests was conducted in by Zimet et al., (1988) and obtained the following coefficients; split-half coefficient part1 =.63 and part2 =.74; spearman-Brown coefficient =.74; and Guttman split-half coefficient =.69 and Cronbach's Alpha of .72 for this research.

Procedure
The researcher got permission from the health research ethics committee of the Department of health and Human Services, Federal Capital Territory (FCT) after which she visited the selected institutions along with two (2) trained researchers. After introducing themselves to the participant institutions and consent was given, she proceeded to visit various locations in the universities such as classrooms, e-library, student lounge, and multipurpose halls to share the questionnaires which was done using their social media handles and those who were willing to fill the printed copies. Out of 900 links sent 100 hard copies shared, only 244 were considered good to be used as several others declined to participate while others stopped halfway.

Data Analysis
The gathered data was analyzed using descriptive and inferential statistics. Descriptive statistics such as simple frequencies and percentages were utilized to describe the demographic features of respondents as well as the content and face validity of the instrument. The inferential statistics made use of Pearson r correlation, t-test for independent sample and one-way analysis of variance (ANOVA).

RESULTS
This section presents results of gathered data on the demographic determinants of online gambling behaviour among youths in Abuja. Results are presented in sub-sections.

Table 1: Frequency distribution of respondents

SN	Variables	Response	Frequency	Percentage
1	Gender	Male	182	75.2
		Female	60	24.8
2	Age	Less than 20 years	78	32.2
		20-24 years	92	38
		25 years above	72	29.8
3	Religion	Christianity	101	41.7
		Islam	132	54.5
		Others	9	3.8
4	Educational qualificat.	No formal education	10	4.1
		Primary	29	12
		Secondary/High school	45	18.6
		National Diploma	65	26.9
		University/Higher Diploma	78	32.2
		Postgraduate	15	6.2
5	Marital status	Single	172	71.1
		Married	30	12.4
		Divorced	15	6.2
		Separated	23	9.5
		Widowed	2	0.8
		Total	**242**	**100**

Table 1 presents results on the demographic distribution of youths in the study. Gender distribution shows that more of the respondents 182 (75.2%) were males, while the other 60 (24.8%) were females. Age distribution shows that more of the respondents 92 (38%) were between 20 and 24 years old, 78 (32.2%) were less than 20 years old, while the other 72 (29.8%) were 25 years old and above. In addition, more of the respondents 132 (54.5%) indicated to be Muslims, 101 (41.7%) were Christians, while the other 9 (3.8%) practices other religion. Further, more of the respondents 78 (32.2%) were University/higher national diploma certificate holders, 65 (26.9%) were ordinary national diploma certificate holders, 45 (18.6%) were secondary/high school certificate holders, 29 (12%) were primary school certificate holders, 15 (6.2%) were postgraduate certificate holders, while the other 10 (4.1%) had no formal education. Finally, more of the respondents 172 (71.1%) were single, 30 (12.4%) were married, 23 (9.5%) were separated, 15 (6.2%) were divorced, while the other 2 (0.8%) were widowed.

Prevalence measures
Table 2: Prevalence of online gambling

Online gambling *Mean = 38.22* *SD = 7.62*	Frequency	Percentage
Low	23	9.5
Moderate	54	22.3
High	165	68.2
Total	**242**	**100**

Table 2 presents results on the frequency distribution according to engagement in online gambling behaviour among youths in Abuja. The prevalence rate of online gambling among youths in Abuja shows that about 68.2% of youths engage in online gambling.

Inter-correlation among variables

Table 3: Zero-order correlation summary table showing results on the relationship among variables

SN	Variables	Mean	SD	1	2	3
1	Online gambling behaviour	38.22	7.62	-		
2	Financial strain	11.05	5.09	.56**	-	
3	Social support	45.65	13.24	-.34**	.17	-

Table 3 presents results on the relationship amongst variables of the study. It is shown that there exists significant relationship between online gambling behaviour and financial strain (r = .56; p < .01). The direction of the relationship is positive, hence implies that the higher the financial strain, the higher the online gambling behaviour. Also, it is shown that there exists significant relationship between online gambling behaviour and social support (r = -.34; p < .01).

The direction of the relationship is negative, therefore means that the higher the social support, the lower the online gambling behaviour.

3.3 Hypothesis testing

Hypothesis states that financial strain and social support will jointly and independently predict online gambling behaviour among young adults in Abuja, Nigeria. This was tested using multiple regression analysis and the result is presented on Table 4;

Table 4: Multiple regression analysis summary table showing results on the joint and independent influence of financial strain and social support on online gambling behaviour

Predictors	β	t	p	R	R²	F	p
				.45	.20	6.98	< .01
Financial strain	.38	5.98	< .01				
Social support	-.28	-3.87	< .01				

Table 4 presents results on the joint and independent influence of financial strain and social support on online gambling behaviour among young adults in Abuja, Nigeria. It is shown that financial strain and social support were significant joint predictors of online gambling behaviour among young adults [R = .45; R2 = .20; F (2, 239) = 6.98; p < .01]. Collectively, financial strain and social support accounted for about 20% variance in online gambling behaviour among young adults. Also, financial strain (β= .38; t = 5.98; p < .01) and social support (β= -.28; t = -3.87; p < .01) were significant independent predictors of online gambling behaviour among young adults in Abuja, Nigeria. The direction of the beta value shows that the higher the financial strain (β= .38), the higher the online gambling behaviour. Also, the higher the social support (β= -.28), the lower the online gambling behaviour. This confirms the stated hypothesis and, hence was retained in this study.

DISCUSSION

The study investigated the psychosocial predictors of online gambling behaviour among young adults in Abuja, Nigeria. It was discovered that financial strain and social support were significant joint and independent predictors of online gambling behaviour among young adults in Abuja, Nigeria. Similarly, Watanapongvanuch et al., (2021) examined the relationship between financial strain and online gambling behaviour among young adults in Japan. The study adopted a quantitative research method and gathered data from 354 university students. It was discovered that there exists a significant and positive relationship between financial strain and online gambling behaviour. Also, Heiskanen (2017) confirmed that there exists a significant and negative relationship between financial strain and online gambling behaviour.

In another study, Petry and Weiss (2011) confirmed the result of the relationship between social support and pathological gambling behaviour. This connotes that the higher the social support, the lower the pathological gambling behaviour. Also, Penfold and Ogden (2023) confirmed that university students with high social support reported lower levels of gambling behaviour than those with low social support. Similarly, Sirola et al., (2023) reported that there exists a significant and negative

relationship between social support and problem gambling behaviour.

Based on the findings, it is concluded that financial strain and social support were significant determinants of online gambling behaviour. It is therefore recommended that the services of clinical psychologists should be recruited to ensure that better psycho-therapeutic intervention is provided for gamblers. It should be mandated that betting bodies recruit the services of psychologists to help individuals with financial strain identified to be tilting towards pathological gambling.

This could be placed as a form of corporate social responsibility for organizations in the lottery industry. Also, it is recommended that checks should be put in place that assist pathological gamblers to have better orientation on the need to be cautious when gambling, and also ensure that they are linked with their family members. Finally, it is recommended that more studies should be carried out on other psychosocial predictors of online gambling behaviour.

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