

Online Gambling and Its Implication on the Mental Health of Undergraduates in Ekiti State University

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ABSTRACT

Behavioural addiction is seen as a menace among the youth in Nigeria, in which online gambling is taking the lead. The study delves into the intricate relationship between online gambling behaviour and the mental health outcomes among undergraduate students at Ekiti State University. This research employed survey method with a sample size of 541 participants involving male and female, selected through Snowball sampling techniques using Google Forms, the study utilized standardized questionnaires such as Problem Gambling Severity Index (PGSI), to assess online gambling, while mental health was evaluated using the General Health Questionnaire (GHQ)-28. The result, using Pearson's Correlation Coefficient, found a significant positive correlation between online gambling and four dimensions of mental health which are somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression ($p < .01$). The respondents were also categorized into four by their levels of gambling behaviour, the ANOVA result showed that the higher the level of gambling, the higher the level of distress in all the dimensions of mental health. The implication is that as gambling behaviour escalates, students exhibit higher mean scores in these dimensions, which illustrate a concerned trend. The study further revealed compelling evidence that a significant proportion of the students actively participate in online gambling, with over 55% indicating a high level of involvement, while only 17.6% reported no involvement. These findings align with previous research, emphasizing the significance of addressing detrimental effects of online gambling on mental health. This calls for proactive interventions and support systems to safeguard the well-being of undergraduate students.

Keywords: anxiety and insomnia, Behavioural addiction, depression, gambling behaviour, mental health social dysfunction, somatic symptoms

INTRODUCTION

The effect of online gambling on the mental health has become an issue of increasing concern, with numerous studies worldwide addressing its potential consequences, over the years, the popularity of online gambling has surged, facilitated by advancements in technology and the widespread accessibility of digital platforms. For the past two decades, there has been significant international public attention directed towards the issue of problematic online betting among adolescents (Aricak, 2019), Gambling typically entails participating in games of chance for monetary or other stakes, while online gambling encompasses a variety of betting and gaming activities available via internet-enabled devices (Gainsbury 2015), Gambling, as defined by (Allcock 2000), involves the exchange of property, typically money but occasionally other assets such as slaves, ears, and fingers, based largely, if not solely, on the outcome of an event determined by chance. While DSM-5 defines addiction as a pattern of gambling that is persistent and problematic, and causes significant distress or impairment. Gambling has become a pervasive activity, particularly among young adults and students. Nigeria, in particular, has witnessed a notable rise in the participation of its youth in various forms of gambling (Bankole 2019). The economic landscape in Nigeria has presented challenges, including high unemployment and underemployment rates, financial hardships, and increased depression rates among the population. These economic difficulties have driven many individuals, including undergraduate students, to seek alternative means of financial gain and coping strategies (Oyebisi, Alao and Popoola, 2012).

The Nigerian government's decision to legalize certain forms of gambling in the late 1990s, as reflected in Chapter 22, Section 236 of the Criminal Code Act, has further normalized gambling activities, Despite the high

risk associated with gambling, the industry has experienced substantial growth, both globally and within Nigeria (Aguocha & George, 2021).

Online gambling, in particular, has gained immense popularity due to its convenience and accessibility through internet platforms (Griffiths and Parke 2008), It has become a common pastime for various demographic groups, including undergraduate students, who are increasingly engaging in online gambling activities.

While online gambling offers entertainment and the potential for financial gains, research has raised concerns about its adverse effects on mental health, especially when it crosses the line into addiction (Purwaningsih and Nurmala, 2021)., adolescents engaging in online gambling have reported disruptions in mental health, including increased levels of depression and anxiety, (Scholes-Balog and Hemphill 2012).

Online gambling has become increasingly prevalent among undergraduate students, including those at Ekiti State University. Could what has been projected as ameliorating economic difficulties which has been said to have financial gain and also serve as coping strategies, become a problem impacting the mental health of the individuals. While there is a growing concern about the potential impact of online gambling on mental health, there is a need for empirical research specifically examining this relationship within the context of Ekiti State University.

This study seeks to provide valuable insights into the effect of online gambling on the mental health of undergraduate students, specifically within the context of Ekiti State University. The findings will contribute to the existing body of knowledge on this topic and inform the development of targeted interventions and support systems to promote the mental well-being of undergraduate students in the university.

RESEARCH OBJECTIVES

The research objectives are to

- i. assess the extent of the involvement of undergraduates in online gambling
- ii. investigate the relationship between online gambling behaviour and the mental health outcomes of undergraduate students in Ekiti State University.
- ii. examine the potential impact of online gambling on all dimensions of mental health of undergraduate and gain insights into the specific aspects of mental health that may be affected by online gambling activities.

The Cognitive Behavioural Model of addiction

The Cognitive Behavioural Model of addiction is a psychological framework that posits that addictive behaviours are influenced by individuals' thoughts, beliefs, and behaviors. This model proposes that online gambling being an addictive behaviour is influenced by cognitive processes and behavioural patterns that contribute to the development and maintenance of addiction (Beck, Wright, Newman, & Liese, 1993)

The Cognitive Behavioural Model of addiction provides insights into how distorted beliefs, reinforcement mechanisms, expectancies, and self-efficacy can contribute to the adverse effects of online gambling on the mental health of undergraduate students.

Cognitive distortion could arise as the individual begins to believe that they can control the outcome that are actually determined by chance. Moreover, such individual may experience cognitive biases, such as the gambler's fallacy (Goodie & Fortune, 2013), leading them to believe that there will be a pay-off after a series of losses, that previous losses increase their likelihood of winning in future gambling sessions, which can further perpetuate their engagement in online gambling activities. These cognitive distortions can lead to disappointment and emotional distress when their expectations are not met.

b. Positive and Negative Reinforcement. The Cognitive Behavioural Model emphasizes that addictive behaviours are reinforced through both positive and negative reinforcement. Positive reinforcement in the form of intermittent rewards in online gambling, such as winning or near-wins which trigger the release of dopamine,

the brain's reward chemical, leading to a heightened desire to continue gambling (Wulfert, Roland, Hartley, Wang, & Franco, 2018).

Conversely, negative reinforcement occurs, where gambling is used as a coping mechanism to escape from stress, academic pressures, or negative emotions (Shead, Derevensky, & Gupta, 2010). This negative reinforcement may lead to a cycle of increased gambling as a means to alleviate psychological distress..

c. Expectancies: This model also highlights the role of expectancies in addiction. Undergraduates engaging in online gambling may develop expectations that the activity will provide an escape from their academic pressures or a source of excitement. These expectations can fuel the cycle of gambling behaviour, as students believe that continued gambling will fulfil these perceived needs.

d. Self-Efficacy: Self-efficacy, or one's belief in their ability to control their behaviour, is a crucial component of the Cognitive Behavioural Model. In the context of online gambling, some undergraduate students may have low self-efficacy in resisting the urge to gamble, perceiving themselves as powerless to stop. This lack of self-efficacy can contribute to continued gambling behaviour and negatively impact their mental health.

The consequences of excessive online gambling on the mental health of undergraduates can be significant. Problematic online gambling behaviours have been linked to increased levels of stress, anxiety, depression, and even suicidal ideation among university students (Gainsbury 2016).

As online gambling is accessible 24/7 and can be done in the privacy of one's own space, it may lead to social isolation and withdrawal from social activities, further exacerbating mental health issues (Purwaningsih, & Nurmala 2021). Understanding these factors is essential for designing targeted interventions and support systems to address the mental health challenges associated with online gambling in the undergraduate population.

Several risk factors have been identified that may contribute to increased online gambling behaviour among undergraduate students. Research has identified various factors, these include psychological factors like impulsivity and sensation-seeking as reported by Buth, Friedrich, Natasha, Harald and Jens (2017); social factors such as peer influence, social media exposure; and personal factors in terms of financial difficulties, high stress levels (Clark, Lawrence, Astley-Jones, and Gray 2016).

Previous study by Riley et al (2021) has highlighted the importance of investigating gambling behaviour and risk factors among different age groups. Notably, the phenomenon of gambling behaviour has expanded beyond the traditional realm of adulthood. With the age of onset decreasing and younger individuals gaining increased access to gambling activities, researchers have turned their attention to preadolescent populations.

This shift in age of onset has raised the need for research to identify predictive factors associated with gambling behaviour in adolescents.

Research Question

i. What is the extent of the involvement of undergraduate students in online gambling?

Hypotheses

i. There will be a significant relationship between online gambling behaviour and the mental health outcomes of undergraduate students in Ekiti State University.

ii. Online gambling will have a significant influence of on all the dimensions of mental health of undergraduate students

iii. Male undergraduate students will be involved in online gambling significantly more than their female counterparts

iv. Age and academic level will have no significant influence on involvement of undergraduate students in online gambling activities.

METHODS

Research Design

Survey method was used for the study, specifically employing the Snowball sampling technique, and integrates Google Forms as the data collection tool. Google Forms as an online survey platform allows participants to conveniently respond to research inquiries through the use of the respondents' mobile devices or laptops. This also facilitates a smooth and efficient data collection process for the researcher.

Participants

The study focused on undergraduate students in Ekiti State University, while participants' selection cut across all levels from 100-500 of randomly selected three Faculties (the Social Sciences, Science and education) which were reached through the class' social media platforms. Five hundred and forty one (541) participants responded to the Google form. The participants include three hundred and thirty four male, two hundred and one female and six individuals who did not indicate their gender.

Instruments

Problem Gambling Severity Index (PGSI), A standardized scale developed by (Ferris & Wynne, 2001) researchers at the Centre for Addiction and Mental Health (CAMH) in Canada. The CAMH team developed PGSI as a tool to measure the severity of gambling problems in individuals. It is widely used in research and clinical settings to assess and understand the level of gambling-related harm experienced by individuals. The PGSI consists of nine items that assess various aspects of gambling behavior and its impact on a person's life. It helps identify individuals at risk of developing gambling problems or experiencing harmful consequences due to their gambling activities. The nine items in the PGSI cover different domains related to gambling, including the frequency of gambling, amount of money spent, preoccupation with gambling, financial consequences, and impact on mental health and relationships. The PGSI exhibits good sensitivity and specificity in identifying individuals with gambling problems. Different cutoff scores are used to categorize individuals into different levels of gambling severity, ranging from non-problem gambling to low-risk, moderate-risk, and problem gambling.

Sensitivity and Specificity: The PGSI exhibits good sensitivity and specificity in identifying individuals with gambling problems. Different cutoff scores are used to categorize individuals into different levels of gambling severity, ranging from non-problem gambling to low-risk, moderate-risk, and problem gambling.

Assign scores to each response: For each question, assign the following scores based on the response options:

- Never: Score of 0
- Sometimes: Score of 1
- Most of the time: Score of 2
- Almost always: Score of 3

Sum the scores: Add up the scores you assigned to each response across all nine questions. This will give you a total score ranging from 0 to 27.

Interpretation the total score:

- 0: No gambling problems
- 1-2: Low level of gambling problems
- 3-7: Moderate level of gambling problems
- 8 or more: High level of gambling problems

The General Health Questionnaire (GHQ)-28. This is a standardized scale developed by Goldberg, & Williams, (1988) The GHQ was created as a screening tool to assess and measure psychological well-being and detect potential psychiatric disorders in individuals. The GHQ-28 was specifically designed to assess common mental health problems, such as anxiety and insomnia, depression, social dysfunction, and somatic symptoms. It includes items related to a person's mood, sleep patterns, concentration, self-esteem, and overall well-being. Over time, the GHQ-28 gained popularity and became one of the most widely used psychological screening instruments worldwide. Its brevity, ease of administration, and effectiveness in detecting psychological distress contributed to its widespread adoption in various clinical and research settings.

PROCEDURE FOR DATA COLLECTION

The data for this study was collected with the use of Google form which was administered to the respondents online. The Google form link was shared to the participants through their social media platform, mail and imessage. Each department and level has a class WhatsApp group, employing snowball sampling techniques, the class governors were engaged, who then assisted in sharing the link to their various class groups. However for further engagement and effective response, the researcher met with some of the students in each faculty, collected the contact of few of them that was willing, and the link was sent to their personal chat. As they gave their responses on the form, their response were automatically stored on the Google form, and was later downloaded directly from the form for analysis.

RESULTS

Table1: Bivariate relationship between gambling and mental health

Variable	Mean	SD	Gambling (r)
Gambling	7.56	5.49	—
Somatic Symptoms	7.13	4.29	.363**
Anxiety & Insomnia	8.49	4.80	.523**
Social Dysfunctions	8.12	3.86	.642**
Severe Depression	6.03	4.73	.536**

**Significant at .01 N = 541

Correlation analysis in table 1 showed that there is a significant relationship between gambling and all the dimensions of mental health

The direction of the score on the mental health is the higher the score the greater the mental distress. Therefore the significant positive relationships showed that the more the level of online gambling the higher the somatic symptoms [r(539) = .363, p<.01], anxiety and insomnia [r(539) = .523, p<.01], social dysfunctions [r(539) = .642, p<.01] and severe depression [r(539) = .536, p<.01].

Testing the significant influence of Online gambling on all the dimensions of mental health

Table 2 : Descriptive and F test table on the influence of gambling on mental health

Variable	Gambling Level	Mean	Std. Dev	n	F(3,537)
Somatic Symptoms	No gambling	5.56	5.28	99	
	Low level gambling	5.84	5.73	37	
	Moderate gambling	6.96	4.08	107	15.91xx
	High level gambling	8.23	3.42	298	
	Total	7.13	4.29	541	
Anxiety and Insomnia	No gambling	4.35	4.65	99	
	Low level gambling	7.51	5.37	37	
	Moderate gambling	7.72	4.56	107	49.97xx
	High level gambling	10.25	3.84	298	
	Total	8.49	4.8	541	

Social Dysfunction	No gambling	4.75	3.4	99	
	Low level gambling	5.81	3.37	37	
	Moderate gambling	6.96	3.49	107	78.76xx
	High level gambling	9.95	3.04	298	
	Total	8.12	3.86	541	
Severe Depression	No gambling	2.82	4.21	99	
	Low level gambling	2.97	3.59	37	
	Moderate gambling	5.33	4.22	107	41.55xx
	High level gambling	7.73	4.38	298	
	Total	5.96	4.66	541	

Table 2 showed that the higher the level of gambling, the higher the level of distress in all the dimensions of mental health, This table presents statistical data illustrating the impact of online gambling on different aspects of mental health, with varying levels of gambling intensity showing higher mean scores for somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression, suggesting a potential link between higher gambling levels and worse mental health outcomes

Table 3: Post hoc analysis

Variable	Comparison Group	NG	LG	MG
Somatic Symptoms	MG	—	—	
	HG	xx	x	xx
	LG	xx		
Anxiety & Insomnia	MG	xx	—	
	HG	xx	x	x
	LG	—		
Social Dysfunction	MG	xx	—	
	HG	xx	x	xx
	LG	—		
Severe Depression	MG	xx	x	
	HG	x	xx	xx

No sig. difference —, x Sig at .05, xx Sig at .01

NG = No gambling LG = Low gambling MG = Moderate gambling HG = High gambling

Table 4: Independent t-test table showing the sex different in practice of online gambling

Variable	Sex	N	Mean	SD	df	t
Gambling	Male	334	8.63	4.89	533	6.27xx
	Female	201	5.66	5.93		

Table 3 showed significant sex different in the practice of online gambling among undergraduate students. $t(533) = 6.27, P < .01$ the hypothesis that there will be a significant sex different in the practice of online gambling among undergraduate student in Ekiti State University is confirmed.

Table 5: One- way ANOVA table showing age group difference in the practice of online gambling

Age Group (Years)	N	Mean	SD	F
14–22	232	4.88	4.91	
23–31	272	9.29	4.74	63.47xx
32–40	37	11.67	6.45	

Table 3b showed significant age group different in the practice of online gambling among undergraduate student in Ekiti State University. $F = 25.66, P < .01$, confirming the hypothesis on a significant age group different in the practice of online gambling among undergraduate student in Ekiti State University.

Table 6: One- way ANOVA table showing academic level difference in the practice of online gambling and mental health

Academic Level	N	Mean	SD	F (4,536)
100 Level	53	3.11	2.52	
200 Level	102	7.75	5	
300 Level	207	7.92	5.27	10.62
400 Level	147	8.27	5.84	
500 Level	32	8.68	6.97	

Table 5 showed significant academic level different in the practice of online gambling among undergraduate student in Ekiti State University. $F(4, 536) = 10.62, P < .01$

DISCUSSION

The aim of this research is to investigate and understand the relationship between online gambling behaviour and mental health outcome of undergraduate students in Ekiti state university; to assess the impact of online gambling on mental wellbeing of these students and gain insight into the specific aspects of mental health that may be affected by online gambling activities.

The correlation analysis in Table 1 indicates that there is a significant relationship between online gambling and all the dimensions of mental health among undergraduate students at Ekiti State University, at $p < .01$ level significance

Somatic Symptoms: The correlation coefficient between gambling and somatic symptoms is .363, indicating a significant positive relationship ($p < .01$). This suggests that there is a statistically significant tendency for students to experience more somatic symptoms due to online gambling, indicating a link between online gambling and the physical manifestations of psychological distress among these students.

Furthermore, descriptive statistics on Table 2 presents data related to somatic symptoms in individuals categorized based on their gambling behaviour. The table consists of four categories of gambling behaviour: "no gambling," "low-level gambling," "moderate gambling," and "high-level gambling," with a total of 541 participants.

No Gambling: Participants who reported no gambling behaviour had a mean somatic symptom score of approximately 5.56, with a standard deviation of approximately 5.28. This group comprised 99 individuals.

Low-Level Gambling: Those engaging in low-level gambling had a slightly higher mean somatic symptom score of about 5.84, with a standard deviation of approximately 5.73. This group consisted of 37 individuals.

Moderate Gambling: The group involved in moderate gambling exhibited a mean somatic symptom score of approximately 5.96, with a standard deviation of approximately 4.08. This category included 107 individuals.

High-Level Gambling: Participants with high-level gambling behaviour had the highest mean somatic symptom score, measuring approximately 8.23, with a standard deviation of around 3.42. This group was the largest, comprising 298 individuals.

Overall, the data suggests that as the level of gambling behaviour increases, there is an apparent trend of higher mean somatic symptom scores. The standard deviation indicates the degree of variability within each group, with higher variability observed in the "no gambling" and "low-level gambling" groups compared to the "moderate gambling" and "high-level gambling" groups. These findings demonstrate that online gambling significantly influences somatic symptoms, with a significance level of ($P < .01$), underscoring the reliability of these results beyond random chance. This research highlights that losses incurred from online gambling can lead to financial stress, potentially resulting in physical symptoms like increased blood pressure and heart palpitations. Additionally, undergraduates engaging in higher levels of online gambling may develop cognitive

distortions, such as irrational thinking and an obsession with gambling outcomes. These cognitive patterns can subsequently lead to physical symptoms such as tension headaches or even panic attacks.

These findings align with previous research by Dowling et al.,(2015), Research suggests that individuals with gambling problems may experience increased levels of physical distress, including headaches, sleep disturbances, and gastrointestinal issues, which can be linked to the stress and anxiety associated with gambling-related issues

Anxiety and Insomnia: The correlation coefficient between gambling and anxiety and insomnia is .532, also showing a significant positive relationship ($p < .01$), This indicates that the observed relationship between online gambling, anxiety and insomnia is not likely due to chance. It's statistically meaningful. This suggests that online gambling is associated with an increased likelihood of these students having anxiety-related symptoms and sleep disturbances. Also the descriptive statistics in table presents data on the levels of anxiety and insomnia symptoms in individuals categorized by their gambling behaviour. There are four categories of gambling behaviour: "No gambling," "Low-level gambling," "Moderate gambling," and "High-level gambling," with a total of 541 participants.

No Gambling: Participants who reported no gambling behaviour had a mean score of approximately 4.35 for anxiety and insomnia symptoms, with a standard deviation of about 4.65. This group consisted of 99 individuals.

Low-Level Gambling: Individuals engaged in low-level gambling had a higher mean score of approximately 7.51 for anxiety and insomnia symptoms, with a standard deviation of approximately 5.37. This category included participants 37.

Moderate Gambling: The group involved in moderate gambling exhibited a mean score of approximately 7.72 for anxiety and insomnia symptoms, with a standard deviation of around 4.56. This category consisted of 107 individuals.

High-Level Gambling: Participants with high-level gambling behaviour had the highest mean score, measuring approximately 10.25 for anxiety and insomnia symptoms, with a standard deviation of about 3.84. This group was the largest, comprising 298 individuals.

The data suggests that as the level of gambling behaviour increases, there is a notable increase in the mean score for anxiety and insomnia symptoms. The standard deviation values provide insights into the variability of these symptoms within each group, with higher variability observed in the "No gambling" and "Low-level gambling" groups compared to the "Moderate gambling" and "High-level gambling" groups. Analysis of Variance indicating that online gambling has a significant influence on anxiety and insomnia, with the significance level ($P < .01$) in table 2 suggests that these results are highly reliable and not likely due to random chance.

The research highlights that Students who wager money they cannot afford to lose, lead to financial instability and anxiety about their financial future, Losing bets can be emotionally distressing, causing individuals to chase their losses by gambling more, resulting in increased anxiety, Spending excessive hours gambling online can disrupt sleep schedules, leading to insomnia and increased anxiety due to fatigue and unrealistic belief in winning big can lead to disappointment, frustration, and heightened anxiety when those expectations are not met.

These findings align with previous research by Gainsbury et al. (2015), which investigated online gambling's impact on mental health, particularly insomnia. They found that late-night online gambling was associated with sleep disturbances and insomnia. This supports the idea that online gambling can be linked to sleep-related issues. Similarly, examining the relationship between problem gambling and psychiatric disorders, discovering a strong positive correlation between problem gambling severity and anxiety disorders, including generalised anxiety disorder.

Social Dysfunctions: There is a notable positive correlation ($r = .642$, $p < .01$) between gambling and social dysfunctions, indicating a statistically significant tendency for students who gamble to experience increased social dysfunctions. This implies that heightened online gambling activity is linked to challenges in interpersonal

relationships and social functioning, such as struggles in maintaining healthy friendships, conflicts with family members, and difficulties in interactions with peers and the broader social environment.

Table 2 presents data on social dysfunction in individuals categorised by their gambling behaviour. There are four categories of gambling behaviour: "No gambling," "Low-level gambling," "Moderate gambling," and "High-level gambling," with a total of 541 participants.

No Gambling: Participants who reported no gambling behaviour had a mean score of approximately 4.73 for social dysfunction, with a standard deviation of about 3.40. This group consisted of 99 individuals.

Low-Level Gambling: Individuals engaged in low-level gambling had a mean score of approximately 5.81 for social dysfunction, with a standard deviation of approximately 3.37. This category included 37 participants.

Moderate Gambling: The group involved in moderate gambling exhibited a mean score of approximately 6.96 for social dysfunction, with a standard deviation of around 3.49. This category consisted of 107 individuals.

High-Level Gambling: Participants with high-level gambling behaviour had the highest mean score, measuring approximately 9.95 for social dysfunction, with a standard deviation of about 3.05. This group was the largest, comprising 298 individuals.

This report suggests that there is a clear trend of increased social dysfunction as the level of gambling behaviour rises. The standard deviation values provide insights into the variability of social dysfunction within each group, with relatively consistent variability across all categories. The ANOVA table 2 further confirms these findings through statistical analysis, demonstrating that online gambling significantly influences anxiety and insomnia. The significance level ($P < .01$).

This research underscores the impact of online gambling which can be done in the privacy of one's own space, making it easy for individuals to isolate themselves from friends and family. Excessive gambling can lead to a withdrawal from social activities and relationships, Losses in online gambling can lead to significant financial stress, which can strain personal relationships and contribute to anxiety and depression, and Excessive gambling can interfere with a student's ability to focus on their studies, leading to academic underperformance or failure. This can exacerbate stress and negatively impact self-esteem.

These findings attest to a comprehensive review by Gainsbury et al. (2013) on the social consequences of problem gambling. The review highlights that individuals with gambling-related problems often grapple with challenges in their interpersonal relationships, including strained family ties, difficulties in maintaining friendships, and conflicts with peers.

Severe Depression: The correlation coefficient between gambling and severe depression is .536, signifying a significant positive relationship ($p < .01$). This indicates that undergraduate students that engage in higher levels of online gambling, there is a significant and meaningful tendency for them to experience more severe symptoms of depression. This suggests that online gambling may be linked to the worsening of depression symptoms among these students which refers to a state of deep and intense sadness or despair that significantly affects a person's daily life and functioning. It can include symptoms like persistent low mood, loss of interest in activities, changes in appetite or sleep patterns, feelings of hopelessness, and even thoughts of self-harm or suicide. Further analysis also show in table 2 presents data on the prevalence of severe depression in individuals categorized by their gambling behaviour. It shows significant difference in the four categories of gambling behaviour which are "No gambling," "Low-level gambling," "Moderate gambling," and "High-level gambling".

No Gambling: Participants who reported no gambling behaviour had a mean score of approximately 2.83 for severe depression, with a standard deviation of about 4.21. This group consisted of 99 individuals.

Low-Level Gambling: Individuals engaged in low-level gambling had a mean score of approximately 2.97 for severe depression, with a standard deviation of approximately 3.59. This category included 37 participants.

Moderate Gambling: The group involved in moderate gambling exhibited a mean score of approximately 5.33 for severe depression, with a standard deviation of around 4.22. This category consisted of 107 individuals.

High-Level Gambling: Participants with high-level gambling behaviour had the highest mean score, measuring approximately 7.73 for severe depression, with a standard deviation of about 4.39. This group was the largest, comprising 298 individuals.

The data indicates that there is a noticeable increase in the mean score for severe depression as the level of gambling behaviour increases. The standard deviation values provide insights into the variability of severe depression within each group, with relatively consistent variability across all categories. The result also shows that online gambling significantly influences severe depression ($P < .01$), indicating the reliability of these results, unlikely to be attributed to random chance.

The study highlights that online gambling can lead to financial stress due to losses, potentially causing feelings of hopelessness and despair. Additionally, it can result in social isolation as students spend extended periods alone in front of screens, exacerbating loneliness and depression. Some students may attempt to recover losses by continuing to gamble, contributing to a cycle of financial strain and emotional distress, which can lead to depression. Furthermore, excessive online gambling may lead to neglect of academic responsibilities and personal relationships, potentially causing academic and personal problems that can further contribute to depression. The emotional ups and downs associated with gambling, with winning fostering unrealistic expectations and losing triggering feelings of failure and disappointment, can also lead to emotional instability. Chronic losses in online gambling can erode self-esteem and self-worth, common triggers for depression. These findings align with the research of Scholes-Balog and Hemphill (2012), who identified a significant positive correlation between depressive symptoms and gambling symptoms in their study.

Table 4 displays data related to the sex difference in relation to online gambling. It shows that there are 334 male participants with a mean online gambling score of 8.63 and a standard deviation (SD) of 4.89. There are 201 female participants with a mean online gambling score of 5.66 and a higher SD of 5.93, the table indicates a significant difference between males and females in online gambling ($t(533) = 6.27$) and the "P" value ($<.01$) suggests that this difference is statistically significant. This shows that there is indeed a significant difference in the practice of online gambling between male and female undergraduate students in Ekiti State University. Male students, on average, (mean = 8.63) engage in online gambling more frequently than their female counterparts (mean = 5.66). Also Wardle et al, (2011) identifies that there is a significant difference between female and male gamblers.

Table 5 examines the variable "Age" in relation to online gambling, categorizing participants into age groups: 14-22, 23-31, and 32-40. The table indicates that there is a significant difference in online gambling based on age groups, with the highest effect seen in the 23-31 age group ($F(2,538) = 63.47$), and the "P" value ($<.01$) suggests that this age-based difference is statistically significant. This indicates that there is a significant difference in the practice of online gambling among different age groups of undergraduate students in Ekiti State University. The 23-31 age group, in particular (mean = 11.67), shows the highest variation in online gambling behaviour. Adults has been consistently associated with a higher risk of online gambling problems. Studies such as Calado and Griffiths (2017) and Delfabbro et al (2013) have found that adolescents are more prone to engaging in excessive online gambling.

Table 6 examines the variable "Academic Level" in relation to online gambling, It categories participants into different academic levels, such as 100, 200, 300, 400, and 500, it indicates that there is a significant difference in online gambling based on academic levels ($F(4,536) = 10.62$) and The "P" value ($<.01$) suggests that this academic-level-based difference is statistically significant, This reveals that there is a significant difference in the practice of online gambling among students at different academic levels in Ekiti State University.

Although online gambling may start as a mere game, but one of the behavioural outcome, known as "chasing losses," can lead to a cycle of increasing bets (Gainsbury et al., 2014). This deregulation can lead to emotional distress over time, negatively affecting mental health as gambling progresses to becoming an addiction presenting the stages of addiction such as

Tolerance, whereby over time, some individuals may develop a tolerance to the excitement of online gambling, leading them to seek higher stakes or riskier forms of gambling to achieve the same level of excitement;

withdrawal symptoms in an attempt by individuals to try to cut back or quit online gambling, they might experience restlessness and irritability, which can motivate them to continue Hing, Sproson Brook and Brading (2017), thus leading to inability to control or quit gambling despite negative consequences.

Online gambling becomes a problem when it progresses along these stages, resulting in addiction, negative financial, social, and mental health consequences, and a loss of control over one's gambling behaviour. These factors highlight the importance of responsible gambling practices and interventions to prevent and address problematic online gambling.

RECOMMENDATIONS

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

Awareness campaigns and educational programs within the university are needed to inform students about the potential risks associated with online gambling. Counselling Services could be established or enhanced specifically tailored to address gambling-related issues and mental health concerns. These services should be easily accessible and confidential to encourage students to seek help when needed. Support Groups or peer-led initiatives for students who may be experiencing problems related to online gambling could be encouraged too. These groups can provide a safe space for sharing experiences and seeking assistance from peers who have overcome similar challenges.

The study focused on online gambling and mental health without delving into other potential factors that could influence mental well-being, such as substance use, social support, or lifestyle factors, further studies are encouraged to delve into these other factors to explore their influences on gambling behaviour.

THE LIMITATIONS OF THE STUDY

The data collected is based on self-reporting through questionnaire, which can be subject to social desirability bias. Participants may underreport their gambling activities or mental health issues due to stigma or personal reasons. Also, the study relied on participants who were willing to respond to an online survey. This may introduce sampling bias as those who chose to participate may have different gambling behaviours or mental health statuses compared to those who chose not to participate.

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