



SELF EFFICACY, ADDICTIVE BEHAVIOUR AND PERSONALITY TRAITS AS PREDICTORS OF GAMBLING BEHAVIOUR AMONG YOUNG ADULT IN IBADAN, OYO STATE

*Falowo, Sunday Peter

Balogun, Shyngle K.

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Authors' Affiliation

Department of Psychology

Ladoke Akintola University of
Technology (LAUTECH)

Ogbomoso, Nigeria

Department of Psychology
University of Ibadan
Ibadan, Nigeria

*Corresponding author:
spfalowo@lautech.edu.ng
+2348134782322

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ABSTRACT

Some studies on gambling behaviour were mostly conducted in western countries and limited to adolescents. It was against this background, that this study investigated the influence of self efficacy, personality factors and addictive behaviour on gambling behaviour among young adults in Ido Local Government area of Ibadan, Oyo State, Nigeria. Social Learning Theory and Big Five Model of Personality served as the framework for this study. The study adopted a survey design. Two hundred participants were accidentally selected among young adults in Ido Local Government area of Ibadan. The age of participants was 21.4 SD= 5.1 Data was collected using 63- items structured questionnaire with four scales: demographic variables, The Gambling Behaviour Scale (GBS) ($\alpha = 0.81$), General Self Efficacy Scale ($\alpha = 0.87$), Addictive Behaviour Scale ($\alpha = 0.74$), and Personality Scale ($\alpha = 0.78$). Hypotheses were tested using multiple regression, and t-test. Finding shows that there was significant relationship among gambling behaviour and self-efficacy($r = -.300, p < .01$), addictive behaviour($r = .244, p < .01$), extroversion($r = -.236, p < .01$), Agreeableness($r = -.250, p < .01$), Conscientiousness($r = -.233, p < .01$), Neuroticism($r = -.277, p < .01$), and openness to experience($r = -.298, p < .01$). Result indicated that respondents low on self-efficacy ($\bar{X} = 71.56, S.D = 13.72$) significantly reported high scores gambling compared to respondents high on self-efficacy ($\bar{X} = 61.91, S.D = 10.14$). Respondents low on self-efficacy significantly reported higher on gambling behaviour ($t(4.39) = 146, p < .05$) than those high on self-efficacy. Result shows that there is no significant difference between respondents that reported low addictive behaviour ($\bar{X} = 59.83, S.D = 17.82$) and respondents that reported high addictive behaviour ($\bar{X} = 63.78, S.D = 10.62$) on gambling behaviour ($t(4.39) = 146, p > .05$). Result shows that there exists no significant gender difference on gambling behaviour [$t(173) = ; P > .05$]. The study concludes that personality, self-efficacy, addictive behaviour significantly determined gambling behaviour. It is recommended that personality, self-efficacy, addictive behaviour should be considered as predictors of gambling behaviour among young adults.

Introduction

Gambling as a social phenomenon has been in existence for thousands of years in human history. The earliest record of gambling appears in ancient Romans, recounting stories of peasants and emperors gambling with dice, and huge gambling debts and the fights that broke out over them. Since the last two decades, Nigeria has been witnessing unprecedented rise as well as sophistication in gambling activities. Hardly any day passes without Nigerians engaging in gambling activities as they happen in the different parts of the country. The new gambling wave cuts across all sections of the society, involving men, women and children. The changes in the patterns of gambling are drawing the attention of the popular Medias as well as economists, psychologists, sociologists and criminologists. Most of the early studies of gambling concentrated on two or three main areas: offline lottery, pool and slot. In recent times, inquiry into gambling has broadened to include such other gaming as online lottery, promo, pool, sport betting and casino slots (Omanchi & Okpamen, 2018).

Gambling involves the staking of an item of value, such as money or property, on an outcome that is determined in part by chance (Binde, 2005). In some cases, this element of chance is an inevitable feature of the activity itself due to incomplete knowledge (e.g., racing, sports-betting) or due to the random nature of the outcomes (e.g., lotteries, gaming machines, Naira bet, bet Niger, lotto or baba jebu games). Some forms of speculation (e.g., stock-market trading) may also be considered forms of gambling depending on how people make decisions, although the market is not, by its nature, designed to generate chance-determined or random outcomes. Gambling for most people is a highly enjoyable social activity that does not negatively impact their lives, but for some individuals it can become compulsive and addictive.

In the 21st century gambling is a socially accepted form of entertainment and opportunities to gamble continue to increase in Nigeria. Lotteries, Baba ijobu, bingo, sports betting such as; naira bet, golden bet, winners bet, horse racing at polo center in Ibadan along Eleyele, card, table tennis, scramble, snooker, pool, dice games, and stocks commodities are some of the varied forms of gambling activities that are more common in Ibadan and Nigeria at large. With the advancement of computer technology, Internet gambling now includes online sport betting, stocks, commodities, card games and

roulette. The Internet provides continuous around-the-clock access to gambling activities many via offshore venues that supply minimal to consumer protection laws that are enforced within state geographical areas and/or across nations. It further provides ready access by persons of all ages, including minors, via the use of a credit card, and discourages a break in play, as well as lacking the visual turning over or loss of money.

Self-efficacy is one of psychological factor having influence on gambling. Self-efficacy is the extent or strength of one's belief in one's own ability to complete tasks and reach goals Ormrod (2006). Self-efficacy affects every area of human endeavor. By determining the beliefs a person holds regarding his or her power to affect situations, it strongly influences both the power a person actually has to face challenges competently and the choices a person is most likely to make. These effects are particularly apparent, and compelling, with regard to behaviors affecting health (Luszczynska & Schwarzer, 2005). Self-efficacy is typically defined as a judgment of one's ability to organize and execute a particular type of performance. More specifically, it is a belief about whether one can produce certain actions. In other words, self-efficacy is exercising control over one's life. Bandura, (1997) assert that high efficacy beliefs are also related to the expansion of satisfying social relations that bring about life satisfaction to an individual.

Other than self-efficacy is addictive behaviour. An individual can become addicted to anything. This has led to the assertion that there are similarities between psychological dependence such as compulsive gambling, sex, exercise or eating and physical dependence to various psycho-active substances such as alcohol and heroin. Addictive behaviours could be derived from their physiological, psychological and psychosocial experiences in growth and developmental process. These experiences ignite behavioural reactions which might result in addiction. Engs (1996) defined addictive behaviour as "an activity, substance, object, or behaviour that has become the major focus of a person's life to the exclusion of other activities, or that has begun to harm the individuals or others physically, mentally or socially. Furthermore, Jonathan and Ogide (2016) defined addictive behaviour as compelling involvement in a behaviour that directly or indirectly modifies the internal milieu as indicated by changes in neuro-chemical and neuronal

activities in such a way as to produce immediate reinforcement but whose long term effect are personally or medically harmful or highly disadvantageous socially". This indicates strength of behaviour and compulsion as critical criterion for addictive behaviour.

Personality traits have recurrently been a variable of interest in studies pertaining to gambling problems. Personality is concerned with individual's characteristic pattern of thinking, feeling, and acting across time and situations. It is concerned with whether a person is happy or sad, energetic or apathetic, smart or dull, emotionally stable or unstable and is expressed through its influence on the body, conscious mental life and through individual's social behaviour (Mayer, 2005). For this research broad traits known as the five-factor model (FFM) '(Costa & McCrae, 1992) suggests human personality comprises five higher-order, trait-like dimensions or "domains": (a) extraversion (a tendency to experience positive affect); (b) neuroticism (a tendency to experience negative affect); (c) agreeableness (a tendency to be friendly, trustworthy, and prosocial); (d) openness (a tendency to be reflective, imaginative, and intellectually curious); and (e) conscientiousness (a tendency to be self-disciplined, organized, and constrain immediate impulses in favor of long-term' is used as the personality traits.

Literature Review

Empirical explanation for problem gambling has indicated that there is only weak correlation on the relationship between gender and gambling behaviour. The findings of Loughan (1996) reported that women engage in problem gambling to fight off stress and while men engage in gambling to make extra money, in other words, men are more vulnerable to problem gambling than female but the difference is very weak. Gambling for many people are perceived as a source of fun which people engage in to boost their morale and to catch fun, in other word, both men and women tend to engage in this form of recreational activity. One consistent finding in the literature is that males are more likely to gamble than females (Wenzel, 2009 & Parker, 2002). This sex difference is also evident in youth gambling. For example, Olason et al. (2010) found that of their 1,537 adolescent primary and secondary school students, boys gambled more frequently and more regularly than girls.

A U.S. national survey conducted among adolescents discovered that those in the lowest SES group were the least likely to have gambled within the past year. Among those who gambled, however, those of the lowest SES gambled most frequently with the highest rates of at-risk/problem gambling while those in the highest SES gambled least frequently with the lowest rates of at-risk/problem gambling. A possible explanation for lower SES adolescents gambling more excessively may be due to their perception of gambling as a practical mean of improving their financial status (Welte et al., 2008).

Delfabbro, King, Lambos, and Puglies (2009) found that of Grade 8 to 12 South Australian school students, boys were more likely to gamble on card games, on racing, on sporting events, on lotteries, on Keno, on the Internet; whereas girls were more likely to have played bingo. Similarly, Derevensky, Gupta, Messerlian, and Gillespie, (2010) found that of Canadian secondary school adolescents, males preferred sports or game related wagering, whereas females tended to report purchasing lottery scratch tickets, wagering on cards, and playing bingo. Finally, Olason et al. (2010) found that of adolescent school students, boys were more likely than girls to gamble on the Internet.

Eboh (2015) based on the review of empirical literature; socioeconomic status has been reported to be related to gambling behaviour. People from low socioeconomic status have been reported to be vulnerable to gambling than their counterparts from high socioeconomic status. The reason for this being that, gambling is perceived as a source of income to people that belong to low socioeconomic background than those from high socioeconomic background. Therefore, gamblers from poor family background are also more vulnerable to gambling addiction than their counterpart from High socioeconomic status. Furthermore, those people from low socioeconomic backgrounds who can afford to gamble risk the problem of getting addicted to gambling which may have detrimental effect to their work and family life. Jamie, Eric, Agata and Phil (2004) conducted a study on gambling and problem gambling among older adults in Ontario. The result shows that socio-demographic factors of age, income, marital status, and religious affinity were related to gambling behaviour.

Related Studies

Self-efficacy and Gambling Behaviour

Lee and Jeong, (2017) conducted a study to investigate the effects of life and game self-efficacy of players of online games on the psychosocial factors of depression, loneliness, and aggression, exploring these relationships via an integrated path model using multidimensional factors of each construct. With survey data from 1,227 Korean online gamers, we examined how coping and social aspects of life and game self-efficacy affect these psychosocial factors. The results highlighted the important role of life self-efficacy, which significantly and negatively affected loneliness and depression; however, the results showed positive associations of game self-efficacy with these factors. Life self-efficacy had greater positive effects on depression and loneliness when mediated by preferred game playing. These findings provide novel contributions to research on the relationship between life and game self-efficacy, as therapeutic prerequisite factors in online game playing, and players' psychosocial factors.

Shirinkam (2016) conducted a study on 395 female and male university students of SardarJangal University, Rasht, Iran. Instruments comprise Internet Addiction Test, and Self-Control Scale (Tangney, 2004), which were administered by all participants. Findings of regression analysis showed that self-control has significant negative relation with internet addiction and male students gained higher scores in internet addiction than females. Moreover, no significant difference was found among students of different university majors in internet addiction scores.

Koh, Tang and Gan, (2018) conducted a study to investigate the effects of demographic (age and gender), psychosocial (self-efficacy, social support and life stress), and affective (anxiety) factors on Online Social Networking (OSN) addiction among college students in China and the United States. A convenience sample of 2160 college students (1026 males, 1133 females) aged between 18-25 years old were recruited from China (N = 1035) and the United States (N=1125). These students completed questionnaires on life stress, anxiety, self-efficacy, social support and online social networking activities. Results showed that 24.5% of the college students in China and 12.1% in the United States were addicted to online social networking. For both countries, OSN addicts reported more life stress and

higher anxiety than non-addicts. Only US addicts reported lower self-efficacy and less social support than non-addicts in US. Multivariate analyses also showed that OSN addiction was related to female gender, low self-efficacy, life stress and anxiety among college students in the United States. For college students in China, OSN addiction was associated with life stress and anxiety only.

Matthew (2018) conducted a study to extend this model to behavioural addictions, namely frequent gambling behaviour. It was hypothesized that impulsive processes favouring gambling (positive implicit gambling cognition) would predict frequent gambling, but only if the capacity to self-regulate was low. A treatment-seeking sample of 57 adults with problem gambling (Mage = 45.20 years, 54% men) completed two Single Category Implicit Association Tests, one reflecting tension-reduction, and the other enhancement, implicit gambling cognition. Participants also completed self-report measures of past week gambling frequency and the Gambling Abstinence Self-Efficacy Scale, which provided a measure of the self-regulatory capacity to abstain from gambling when emotionally aroused. Controlling for age and gender, consistent with hypotheses, implicit tension reduction gambling cognition positively predicted gambling frequency at low but not at high self-efficacy for gambling abstinence when feeling emotionally bad. However, self-efficacy for gambling abstinence when feeling emotionally good was not supported as a moderator of the effect of implicit enhancement gambling cognition on gambling frequency.

Goh, Jones and Copello, (2019) conducted a study to examine impact of increased online gaming play time on psychological wellbeing was examined focusing on the Multiplayer Online Battle Arena (MOBA) game genre. This relationship was explored with respect to motivators for playing and resilience factors. A cross-sectional, online questionnaire design was employed with participants (N = 165) to examine the relationship between weekly average hours played and psychological wellbeing. Five previously reported motivators for playing were tested as mediating variables. In addition, exploratory analyses were conducted to determine the moderating effects of self-esteem and self-efficacy on 'escapist' gaming and psychological wellbeing. Results revealed a significant correlation with higher levels of play time associated with poorer psychological wellbeing. This relationship was partially mediated

by 'escapist' motivation. Self-esteem was found to moderate the negative impact of 'escapist' gaming on psychological wellbeing.

Addictive Behaviour and Gambling Behaviour

Enwereuzor, Ugwu and Ugwu (2016) conducted a study to examine role of smartphone addiction in the gambling passion-schoolwork engagement relation. A cross-sectional design was adopted. Male undergraduates ($N = 278$) of a large public university in Nigeria who engage in Internet gambling participated in the study. They completed self-report measures of gambling passion, smartphone addiction, and schoolwork engagement. Results showed that harmonious gambling passion was not related to smartphone addiction whereas it was positively related to schoolwork engagement. Obsessive gambling passion had positive and negative relations with smartphone addiction and schoolwork engagement, respectively. Smartphone addiction was negatively related to schoolwork engagement and mediated only the obsessive gambling passion-schoolwork engagement relation but not that between harmonious gambling passion and schoolwork engagement.

Lee, Choi, and Shin, (2012) conducted a study to compare the trait impulsivity of those suffering from Internet addiction with that of individuals suffering from pathological gambling. Twenty-seven patients diagnosed with Internet addiction (age: 24.78 – 4.37 years), 27 patients diagnosed with pathological gambling (age: 25.67 – 3.97 years), and 27 healthy controls (age: 25.33 – 2.79 years) were enrolled in this study. All patients were men seeking treatment. Trait impulsivity and the severity of the Internet addiction and pathological gambling were measured by the Barratt Impulsiveness Scale-11, the Young's Internet Addiction Test, and the South Oaks Gambling Screen, respectively. The Beck Depression Inventory and the Beck Anxiety Inventory were also administered to all subjects. Results show that those suffering from Internet addiction showed increased levels of trait impulsivity which were comparable to those of patients diagnosed with pathological gambling.

In a study conducted, McBride and Derevensky (2016) to examine gambling and video game playing represent two leisure activities in which adolescents and young adults participate. There are psychological and behavioural parallels between some forms of gambling (e.g., slot machines, video

lottery terminals, electronic gambling machines) and some types of video games (e.g., arcade games). Both activities operate on behavioural principles of variable reinforcement schedules in order to reward and prolong play and use exciting and stimulating sound and light effects within game play. Additionally, both activities have similar negative effects associated with excessive play (e.g., poor academic performance, moodiness, loss of interest in activities previously enjoyed, and interpersonal conflict). Thus, there is concern that children and adolescents who are attracted to video games, for both psychological rewards and the challenge, may be at greater risk to gamble. The study examined the gambling and video game playing behaviour among 1,229 adolescents and young adults. Results indicate that gamblers, relative to non-gamblers, were more likely to play video games. Video game players were more likely than non-players to gamble. Both social and problem gamblers had higher rates of video game playing than did non-gamblers, and addicted gamers had higher rates of gambling than did social and non-gamers.

Macey and Hamari (2018) conducted a study to investigate relationships between a range of gambling activities and the consumption of video games in general, and the newly emergent phenomenon of sports in particular. In addition, these practices are considered in relation to established measures assessing game addiction and problematic gambling. The study employs Partial Least Squares modeling to investigate data gathered via an international online survey ($N = 613$). Video game addiction was found to be negatively associated with offline gambling, online gambling, and problem gambling. Video game consumption had only small, positive association with video game-related gambling and problem gambling.

Personality and Gambling Behaviour

A meta-analysis of 44 studies ($N = 7455$) found that pathological gamblers were lower in conscientiousness and agreeableness, higher on neuroticism, and had roughly the same levels of extraversion compared to healthy controls (MacLaren, Fugelsang, Harrigan, & Dixon, 2011b). This meta-analysis provides an important summary of personality differences between treatment-seeking problem gamblers and healthy controls. However, studies included in this meta-analysis are limited by selection bias.

For example, persons seeking treatment for mental disorders tend to be higher in neuroticism and lower

in both conscientiousness and extraversion (Goodwin, Hoven, Lyons, & Stein, 2002). Moreover, gamblers seeking treatment may represent only a small proportion of problem gamblers, as most problem gamblers do not seek treatment (Slutske, 2006). Beyond this, the hierarchical structure of personality (Markon, Kruger, & Watson, 2005) means that personality domains in the FFM are not fully orthogonal. Multiple regression might help tease apart the unique contributions of the FFM components when predicting gambling beyond what was shown in MacLaren et al. (2011b). Finally, though there is not necessarily a strong theoretical rationale for its inclusion, MacLaren et al.'s (2011b) meta-analysis did not examine openness, which is a potential limitation in method.

A mixed pattern of results has been found using community and student samples when all FFM domains have been entered as simultaneous predictors of gambling outcomes. Buckle, Dwyer, Duffy, Brown, and Pickett (2013) found that openness and agreeableness were negatively correlated with problem gambling in a university student sample. In a sample of undergraduates, MacLaren, Best, Dixon, and Harrigan (2011a) determined that the impulsivity facet of neuroticism was positively associated with gambling problems, whereas facets of agreeableness and conscientiousness were instead negatively associated with gambling problems. In a community sample, Miller et al. (2013) established that only high neuroticism and low openness predicted gambling problems after controlling for other FFM personality domains. Thus, when all five personality domain scores are entered simultaneously to predict gambling outcomes in community and student samples, the pattern of results appears less clear than in designs comparing treatment-seeking problem gamblers to healthy controls (MacLaren et al., 2011).

Saini (2016) conducted a study on relationship of facebook and game addictive behaviour with personality characteristics among medical students. This was a cross sectional observational study, carried out on 140 medical students. All the students were taken randomly. Assessment of socio-demographic details was done with the help of semi-structured performa, Bergen Facebook addiction scale, game addiction scale and big five inventory were used to see facebook and game addictive behavior and personality traits. Statistical

analysis used for comparison of dichotomous variables chi-square test. Correlation and Linear regression was applied to see association. Data analysis was done with the help of statistical software SPSS 23. Results revealed that agreeableness and extraversion displayed significant associations with FB Total. And neuroticism and agreeableness displayed significant associations with game addictive behavior.

Jeong and Lee (2015) conducted a study to examine whether big five personality traits affect game addiction with control of psychological, social, and demographic factors. Specifically, using data from a survey of 789 game users in Korea, we conducted a regression analysis to see the associations of psychological (loneliness/depression), social (activities with family/friends), self-efficacy (game/general), gaming (daily gaming time/perception), demographic (age/gender), and personality traits (extraversion, neuroticism conscientiousness, agreeableness, & openness) with the degree of game addiction. Results showed that neuroticism increase game addiction with no effect of extraversion on the addiction. General self-efficacy negatively affected game addiction, whereas game self-efficacy increased the degree of game addiction. Loneliness enhanced game addiction while depression showed a negative effect on the addiction.

Sundqvist and Wennberg (2015) conducted a study aimed at examining the association between risk gambling and personality in a representative Swedish population. A random Swedish sample was screened for risk gambling using the Lie/Bet questionnaire. The study sample consisted of those screening positive on Lie/Bet and completing a postal questionnaire about gambling and personality (measured with the NODS-PERC and the HP5i respectively). Risk gambling was positively correlated with Negative Affectivity (a facet of Neuroticism) and Impulsivity (an inversely related facet of Conscientiousness), but all associations were weak. When taking age and gender into account, there were no differences in personality across game preference groups, though preferred game correlated with level of risk gambling. Risk gamblers scored lower than the population norm data with respect to Negative Affectivity, but risk gambling men scored higher on Impulsivity.

Sahraian, Hedayati, Mani and Hedayati (2016) conducted a study to examine the relationship

between internet addictions and different aspects of personality in medical students. In this cross-sectional study the purpose was to assess all 687 medical students of medical faculty of Shiraz University of Medical Sciences. 364 students showed their contention for participating in the study by filling the consent form. Finally 278 valid questionnaires were collected. They responded to the demographic questions in the questionnaire such as age, sex, marital status, student accommodation, entrance year to university, student residence place and also internet addiction test was performed and NEO five-factor inventory short form (NEO-FFI) was filled. Results: 55% of participants show internet addiction, with distribution of 51.4% mild, 2.9% moderate and 0.4% severe addiction. Internet addiction and personality traits of extraversion (The correlation coefficient = -0.118, $P = 0.05$), agreeableness and conscientiousness showed significant negative correlation, but its correlation with neuroticism was significantly positive. Internet addiction scores among students in semester five and eleven prior to the comprehensive basic science test and comprehensive pre-internship test were higher than the other academic years.

Lottery gambling was associated with the Big Five personality dimensions of high extraversion and low agreeableness in one study (Balabanis, 2002), and with none of the Big Five personality dimensions in another (Mowen et al., 2009). Given that there are at least 11 different types of regulated gambling activities studying each in isolation could easily lead to an overwhelming array of findings to synthesize. More importantly, this approach ignores the fact that most people who gamble do not restrict themselves to a single activity (Holtgraves, 2009; LaPlante, Nelson, LaBrie, & Shaffer, 2011). For example, in a sample of 790 participants from the general population, gambling versatility was significantly associated with impulsivity and sensation seeking (McDaniel & Zuckerman, 2003).

Statement of problems

Gambling itself is not the biggest problem. But when gambling supersedes one's psychological states of mind and turns to be uncontrolled compulsive behavioural demonstration in regular basis, the natures of gambling are seen or notified as a degrading addiction in human beings Elster and Skog (1999). Gambling has high personal and social costs that have only recently received attention. The ramifications of problem gambling

are also widespread. The financial demands a problem gambler faces can destroy family relationships and careers. Society frequently bears the financial burden, including increased rates of personal bankruptcy.

Apart from that, gambling addiction constituted many other social and health problems in their lives such as divorce, social and financial crime, anxiety, poverty, alcohol and drugs, depression and mental illness, unemployment. Furthermore, consumption of alcohol and drugs, use of prostitution, loss of trust among family and friends are also common problems amongst respondents of this study. For example, the American Psychiatric Association only first defined it to be a medically diagnosable health problem in 1980 in the 3rd version of the Diagnostic and Statistical Manual (3rd ed.; DSM-III; American Psychiatric Association, 1980; Korn & Shaffer, 1999). When gambling behaviour results in behavioural, emotional, relationship or financial problems, it may develop into a diagnosable condition known as problem or pathological gambling. The Diagnostic and Statistical Manual for Mental Disorders (4th ed., text rev.; DSM-IV-TR) classifies problem and pathological gambling as an impulse control disorder (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000).

Few researchers such as Oyeibisi, Alao and Popoola (2012), Gupta and Derevensky (2000) and Wiber and Potenza, (2006) have all carried out empirical research on the concept of gambling. However findings of some of this work lack generalization to the population other than which sampling was selected. For instance, the study of Wiber and Potenza, (2006) was able to establish significant effect of gender on gambling behaviour, they further claim that the findings of their study should be interpreted with caution as they suggest more research should be carried out to establish the reliability of their findings. Therefore, this study examines self-efficacy, addictive behaviour and personality on gambling behaviour among young adults in Ido Local Government in Ibadan Oyo state, Nigeria.

Objective of the study

- (1). To examine the association between self-efficacy, addictive behaviour and personality and gambling behaviour among young adults.
- (2). To explore the influence of self-efficacy on gambling behaviours among adults.

- (3). To assess the influence of addictive behaviour on gambling behaviours among adults.
- (4). To examine gender differences on gambling behaviours among adults.

Hypotheses

1. There will be an association among self-efficacy, addictive behaviour, personality and gambling behaviour among young adults.
2. Participants with high score on self-efficacy will report significantly higher on gambling behaviour than those with low score on self-efficacy
3. Participants with high score on addictive behaviour will have significantly higher on gambling behaviour than those with low score on addictive behaviour
4. Male participants will report significantly higher on gambling behaviour compared to their female counterparts.

Methods

Design

This study adopted the survey research design. The design was chosen because the researcher did not manipulate any variable in the study. The independent variables for this study are self-efficacy, addictive behaviour and personality while the dependent variable is gambling behaviour.

Setting

The study was carried out in Ibadan, the capital and most populous city of Oyo State, in Nigeria. It is third-largest city in Nigeria after Lagos and Kano, with a total population of 3,649,000 as of 2021, and over 6 million people within metropolitan area. Ibadan is located in south-western Nigeria, 128 kilometres (80 mi) inland northeast of Lagos and 530 kilometres (330 mi) southwest of Abuja, the federal capital, and is a prominent transit point between the coastal region and the areas in the hinterland of the country. The principal inhabitants of the city are the Yoruba people, as well as various communities (notably Igbo, Hausa, and Efik) from other parts of the country.

Sampling Technique

Multi-stage sampling technique was adopted for this study. The researcher purposively selected four urban areas in Ibadan to carry out the study namely: Mokola, Challenge, Iwo-Road and Apata. The rationale behind the selection was based on the fact that the above mentioned areas have a large number

of gambling spots and centers and they are more populated compared to other areas in Ibadan, in the selection of participants for the study, an accidental sampling techniques was used.

Procedure for Data Collection

The researcher sought for permission from appropriate authority to carry out this study. After the permission has been granted, the participants were informed of the purpose of this study, and its seriousness. Direction on how to complete the questionnaires was given and they were encouraged to be truthful as possible in their responses with the assurance that their questionnaires would not be personally identified. Through the use of questionnaire, necessary data were collected to aid the findings of this research work.

Instruments

A structured questionnaire was used to collect the relevant data for the study. The questionnaire consisted of standard adopted scales with adequate psychometric properties. The questionnaire was five sections: Section A-socio-demographic data, Section B- self efficacy scale, Section C- addictive behaviour scale, Section D- personality scale, and section E- gambling behaviour scale.

Section A: Socio-Demographic

This consisted of Socio-demographic characteristics of respondents which included age, gender, Tribe, educational qualification and religion.

Section B: Self-Efficacy

Self-efficacy was measured with General Self-General Self-Efficacy (GSE) scale was developed by Jerusalem and Schwarzer (1995). This scale is applicable for general adult population and also for adolescents but not applicable below the age of 12 years. It has 10 items with four point scale with the response categories i.e. (1) not at all true, (2) hardly true, (3) moderately true and (4) exactly true. For scoring, all the ten items are added to yield the final composite score with a range from 10-40. High score means that general self-efficacy is high (Aypay, 2009). The alpha value of the scale was determined to be .84 in the content of the study conducted by Firdevs (2012).

Section C: Addictive Behaviour

Addictive behaviour was measured with the 7-item Game Addiction Scale (GAS) which is one such short measure. This scale was specifically

developed by Lemmens, Valkenburg, and Peter, (2011) to assess gaming and was conceptually based on the criteria for pathological gambling in the fourth edition of the DSM (DSM-IV). Each item on the GAS is preceded by the statement “During the last six months, how often...” and is scored on a 5-point Likert scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = very often). High reliabilities for the Game addiction scale with Cronbach alpha of .82 to .87 were reported in the original validation study Lemmens, Valkenburg, and Peter, (2009).

Section D: Personality Traits

Personality was measured with the use of 10 item inventory that measures an individual on the Big Five Factors (dimensions) of personality and was adapted from Rammstedt and John, (2007). Each of the factors is then further divided into personality facets (Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness). Participants' response will be scored and coded on 5 point scale ranging from 1=strongly disagree to 5=strongly agree on all items. Oladele O (2017) reported Cronbach's alpha of 0.94 in his study.

Section E: Gambling Behaviour

Gambling behaviour was measured with the use of Gambling Attitudes and Beliefs Survey (GABS)

(Breen and Zuckerman 1999) The English-Version and Scoring of the GABS is a 23-item self-report questionnaire which assesses irrational beliefs and attitudes about gambling (Breen and Zuckerman 1999). Participants are asked to use a four-point Likert scale (from ‘strongly agree’ to ‘strongly disagree’) to indicate the extent to which they agree with each item. The French version of the GABS consisted of the 35 items proposed by Breen and Zuckerman translated into French. In order to confirm this translation, a professional translated it back into English. For even greater validity, two bilingual psychiatrist/psychologist, who are experts in gambling, proofread the French version. They suggested some adjustments and introducing a definition of what a gambling game is (as the French language does not have a specific word for ‘gambling’). A copy of the French version of the GABS is included in section. Respondents response will be scored and coded on 4 point scale Ranging from strongly agree = 4, agree = 3, disagree = 2 and strongly disagree = 1 on all items. Internal consistencies for each dimension of the GABS-23 were 0.70.

Results

Hypothesis One

Hypothesis one states that there will be significant association among self-efficacy, addictive behaviour, personality and gambling behaviour among young adults. This was tested using Zero order correlation. The results are presented in Table 4.1

Table 1: Summary of Zero order correlation showing relationship among self-efficacy, addictive behaviour, personality traits (OCEAN) and gambling behaviour

Variables	Mean	SD	1	2	3	4	5	6
7	8							

Gambling behaviour	63.39	12.14	1	-.300**	.244**	-.236**	-.250**	-.233**
Self-efficacy	25.27	6.44						
Addictive behaviour	17.16	5.51						1
Extraversion	5.66	2.38						
Agreeableness	5.85	1.92						
Conscientiousness	5.58							1.86
Neuroticism	5.82							2.07
Openness to Expe.	5.93	2.24						1

Table 1 presents result on association among self-efficacy, addictive behaviour, extraversion, neuroticism, agreeableness, conscientiousness, openness and gambling behaviour among young adults in Ibadan, Oyo state. From Table 1, it is shown that there was significant inverse relationship between gambling behaviour and self-efficacy($r = -.300$, $p < .01$). This shows that decrease in self-efficacy tend to be associated with decrease in gambling behaviour among young adults. There was significant positive relationship between gambling behaviour and addictive behaviour($r = .244$, $p < .01$). This shows that increase in addictive behaviour tend to be associated with increase in gambling behaviour among young adults. There was significant inverse relationship between gambling behaviour and extroversion($r = -.236$, $p < .01$). This shows that decrease in extroversion tend to be associated with decrees in gambling behaviour among young adults. There was significant inverse relationship between gambling behaviour and Agreeableness($r = -.250$, $p < .01$). This shows that decrease in Agreeableness tend to be associated with decrease in gambling behaviour among young adults. There was significant inverse relationship between gambling behaviour and Conscientiousness($r = -.233$, $p < .01$). This shows that decrease in Conscientiousness tend to be associated with decrease in gambling behaviour among young adults. There was significant inverse relationship between gambling behaviour and Neuroticism($r = -.277$, $p < .01$). This shows that decrease in Neuroticism tend to be associated with decrease in gambling behaviour among young adults. There was significant inverse relationship between gambling behaviour and openness to experience($r = -.298$, $p < .01$). This shows that decrease in openness to experience tend to be associated with decrease in gambling behaviour among young adults. The hypothesis was confirmed.

Hypothesis Two

Hypothesis two states that participants with low score on self-efficacy scale will report significantly higher gambling behaviour than those with high score on self-efficacy scale. This hypothesis was tested using the t-test for independent and the result presented in Table 2.

Table 2: Summary of t-test for the independent sample showing influence of self-efficacy on gambling behaviour

	Self-efficacy	N	$\bar{X}$	SD	t	df	P
Gambling Behaviour	Low	32	71.56	13.72	4.39	146	<0.05
	High	116	61.91	10.14			

Table 4.2 presents result on influence of self-efficacy on gambling behaviour among young adults in Ibadan, Oyo state. From Table 4.2, it is shown that respondents low on self-efficacy ($\bar{X} = 71.56$, S.D= 13.72) significantly reported high scores gambling compared to respondents high on self-efficacy ($\bar{X} = 61.91$, S.D =10.14). Respondents low on self-efficacy significantly reported higher on gambling behaviour ($t(4.39) = 146$, $p < .05$) than those high on self-efficacy.

This implies that self-efficacy significantly influences gambling behaviour. The hypothesis is thus accepted.

Hypothesis Three

Hypothesis three states that Participants with high score on addictive behaviour scale will have significantly higher gambling behaviour than those with low score on addictive behaviour scale. This hypothesis was tested using the t-test for independent and the result presented in Table 3.

Table 3: Summary of t-test for the independent sample showing influence of addictive behaviour on gambling behaviour

	Addictive Behaviour	N	$\bar{X}$	SD	t	df	P
Gambling Behaviour	Low	29	59.83	17.82	-1.56	152	>0.05
	High	125	63.78	10.62			

The results in Table 3 shows that there is no significant difference between respondents that reported low addictive behaviour ($\bar{X}$ =59.83, S.D= 17.82) and respondents that reported high addictive behaviour ($\bar{X}$ =63.78, S.D =10.62) on gambling behaviour ($t(4.39) = 146, p>.05$). This negate the stated hypothesis, hence stated hypothesis was rejected.

Hypothesis Four

Hypothesis four states that male participants will report significantly higher gambling behaviour compared to their female counterparts. This was tested using t-test for independent samples and the result is presented on Table 4.

Table 4: Summary of t-test for Independent Samples Showing Gender Differences on gambling behaviour

	Gender	N	$\bar{X}$	SD	t	df	P
Gambling Behaviour	Male	123	63.16	12.08	-.38	173	>.05
	Female	52	63.94	12.38			

Table 4 presents results on gender difference on gambling behaviour among young adults. It is shown that there exists no significant gender difference on gambling behaviour [$t(173) = ; P>.05$]. This negates the stated hypothesis, hence stated hypothesis was rejected.

Discussion

Hypothesis one which stated there will be significant association among self-efficacy, addictive behaviour, personality and gambling behaviour among young adults was confirmed. Result indicated that significant inverse relationship among gambling behaviour and self-efficacy, extroversion, agreeableness, conscientiousness, neuroticism, openness to experience, but positive relationship between gambling behaviour and addictive behaviour. Result of the study was consistent with previous findings; Ghergulescu, Moldovan and Muntean (2013) observed that the player's self-efficacy changes in time during the game-play; this implies that self-efficacy have

significant relationship with gambling behaviour. Also, Macey and Hamari (2018) found that video game consumption had only small, positive association with video game-related gambling and problem gambling. Also, Buckle, Dwyer, Duffy, Brown, and Pickett (2013) found that openness and agreeableness were negatively correlated with problem gambling in a university student sample. In a sample of undergraduates, MacLaren, Best, Dixon, and Harrigan (2011a) determined that the impulsivity facet of neuroticism was positively associated with gambling problems, whereas facets of agreeableness and conscientiousness were instead negatively associated with gambling problems. In a community sample, Miller et al.

(2013) established that only high neuroticism and low openness predicted gambling problems after controlling for other FFM personality domains.

Hypothesis two which stated that participants with low score on self-efficacy scale will report significantly higher gambling behaviour than those with high score on self-efficacy scale was confirmed. Result shows that respondents low on self-efficacy significantly reported high scores gambling compared to respondents high on self-efficacy; this implies that respondents low on self-efficacy significantly reported higher on gambling behaviour than those high on self-efficacy. Result of this study is consistent with previous findings; Hodgins, Peden and Makarchuk (2004) found that higher self-efficacy was related to fewer days of gambling over a 12-month period. Orvis, Orvis, Belanich and Mullin (2015) reported that computer self efficacy and prior videogame experience were predictive of several learner outcomes such that trainees with greater computer self-efficacy and prior videogame experience reported less difficulty using the game interface and greater team cohesion, training satisfaction, and training motivation.

Hypothesis three which stated that Participants with high score on addictive behaviour scale will have significantly higher gambling behaviour than those with low score on addictive behaviour scale was rejected. Result shows that there exists no significant difference between respondents that reported low addictive behaviour and respondents that reported high addictive behaviour on gambling behaviour. Result of this study is consistent with previous findings; Enwereuzor, Ugwu and Ugwu (2016) found that harmonious gambling passion was not related to smartphone addiction whereas it was positively related to schoolwork engagement. They reported that though obsessive gambling passion had positive and negative relations with smartphone addiction and schoolwork engagement, respectively.

Hypothesis four which stated that male participants will report significantly higher gambling behaviour compared to their female counterparts was rejected. Result shows that there exists no significant gender difference on gambling behaviour. Result of this study is not consistent with previous findings; Husky et al. (2015) found that women were less likely to engage in multiple gambling activities in comparison to men, while men are three times more likely to experience problems with gambling as compared to women. Tsitsika et al. (2011) reported

that more males engage in gambling than females. Males have more gambling problems than females and spend more time on gambling (Chiu & Storm, 2010; Clark & Walker, 2009). They also appear to be more preoccupied with thoughts about gambling (Splevins et al., 2010). Similarly, Ellenbogen, Derevensky, and Gupta (2007) not only found that male adolescent problem gamblers were more likely to report being preoccupied with gambling, they needed to engage in more frequent gambling to achieve the same level of excitement and chased losses.

Conclusion

This study examines self-efficacy, addictive behaviour and personality as predictors of gambling behaviour among young adult in Ido local government, Ibadan Oyo state. In line with the findings of this study, the following conclusions were drawn. The study confirmed significant inverse relationship among gambling behaviour and self-efficacy, extroversion, agreeableness, conscientiousness, neuroticism, openness to experience, but positive relationship between gambling behaviour and addictive behaviour. Result shows that respondents low on self-efficacy significantly reported high scores gambling compared to respondents high on self-efficacy; this implies that respondents low on self-efficacy significantly reported higher on gambling behaviour than those high on self-efficacy. Result shows that there exists no significant difference between respondents that reported low addictive behaviour and respondents that reported high addictive behaviour on gambling behaviour. Final result shows that there exists no significant gender difference on gambling behaviour; this implies that gender differences have no relation with gambling behaviour.

Recommendations

Based on the findings of the study, it is recommended that clinical psychologists and others mental health professional are explored to help developed a better behavioural and cognitive intervention to this maladaptive behaviour exhibits by some young adults whom had become addictive to gambling. Also, because of the enormous numbers of youths who engaged in gambling in Ibadan, nothing but job scarcity. Government are hereby advised to create more job opportunity in others sectors that legalizing gambling as a business without caring about how individual acquire the resources “in kind or cash” using for gambling with one and other.

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