Socialscientia | Regular | Volume 7 Number 3 | September 2022 [ISSN 2636-5979] Socialscientia Journal of the Social Sciences and Humanities

Email: socialscientiajournal@gmail.com Online access: https://journals.aphriapub.com/index.php/SS/

Gambling and Alcohol Misuse among Workers in Anambra State: A Predictive Study

Collins I. NNAEBUE, Ifenna D. EZEANYA, Nneka I. NWANGWU & Emeka A. NWANKWO

Department of Psychology, Nnamdi Azikiwe University, Awka NIGERIA

Abstract

The study investigated gambling as predictor of alcohol misuse among workers in Anambra State. Two hundred and twenty-six (226) workers served as participants for the study. They were drawn from Enugu Electricity Distribution Company (EEDC) and Ministry of Works in Awka, Nnewi, and Onitsha city, Anambra State. The participants comprise of 91(40.3%) male and 135(59.7%) female. The participants' ages range from 24 to 56 with mean age of 35.22 and standard deviation of 8.53. Purposive sampling technique was used to select the organizations, while accidental sampling technique was used to select the participants. Two Instruments were used: Alcohol Use Disorders Identification Test (AUDIT), and Victorian Gambling Screen. Correlational design and Multiple Linear Regressions Statistics were used to analyze the data collected. The study results showed that gambling dimensions like enjoyment and harm to others did not predict alcohol misuse. Conversely, harm to self significantly predict alcohol misuse. The study detailed recommendations. **Keywords: Alcohol Misuse, Gambling, and Workers**.

Introduction

Globally, alcohol misuse is recognized as a global threat with serious effects on workers' health, security, socio-economic status and cultural welfare (World drug report, 2013). However, its misuse by workers has been traced to workplace culture and acceptance of misuse of substances, workplace alienation, availability of alcohol, lack of existence and enforcement of workplace alcohol misuse policies (Frone, & Brown, 2016; Roman, & Blum, 2018). This tends to pose some challenges for most workers negatively (Grundberg, *et al.*, 1999; Mangione et al., 1999; Lehman & Simpson, 1992). And threatens public safety, impair workers performance, absenteeism, loss of production, threaten the workers safety and often increase obsession for gambling that occasionally snowball into organizational lost productivity, injuries, and an increase in health insurance claims (Ames & Bennett, 2017; Edvardsen *et al.*, 2015; Goplerud *et al.*, 2017).

Socialscientia I Regular I Volume 7 Number 3 I September 2022 [ISSN 2636-5979] Sadly, alcohol misuse and gambling may have in many cases functions as an underlying workers personality problem such as behaviour syndrome and workplace conduct disorder, predictably marked by factors such as impulsivity, and low agreeableness (Vitaro, Brendgen, & Ladouceur, 2017): Maybe due to obsession of winning money to relieve tension, stress and emotional distress (Clarke, Tse, Abbott, Townsend, Kingi, & Manaia, 2007; Platz & Millar, 2001). Ironically, several studies have looked at alcohol misuse in various populations in Nigeria, but have failed to link gambling and alcohol misuse together to the researchers' best of knowledge. Consequently, this study investigated the predictive effect of gambling on alcohol misuse among workers in Anambra State.

Alcohol misuse is termed to be a psychiatric problem that involves the continuous use of alcoholic beverages with disregard to its attached negative consequences. It is also termed as alcoholism. Alcoholics can be categorized as either being anti-social alcoholics or anxiety-ridden alcoholics. The latter stay without drinking for long but are usually not able to set controls for themselves when they begin drinking: The adolescent generation of the United Kingdom's were ranked as the heaviest drinkers according to an international survey. According to the American Medical Association (2009), alcohol misuse is a disease that supports classification of both physical and mental aspects. It is believed that the Social environment which includes stress, age, family, gender and mental health determine the risk level for the condition. Alcoholism produces changes in the structure of the brain and chemistry. These changes sustain the alcoholic person" compulsive inability to change their habit and also result to alcohol withdrawal effects once the person stops.

People affected with alcoholism may not be in position to identify this habit. According to Gelder, Mayou and Geddes (2005) ease in accessing alcohol is one of the main contributing factors among people engaged in its abuse. According to the National Council on Alcohol and Drug dependence, alcoholism is a chronic disease influenced and enhanced by factors that are genetic, psychological or environmental. Lack of control, over indulgence with alcohol, continuous use of alcohol without considering its effects and distorted thought patterns characterize this disease.

Abuse of alcohol has a number of negative impacts on workplace which include compromised safety in the workplace with accidents resulting to either injury or death especially in environments with heavy machinery. Strained relationship between coworkers, clients and customers are also recorded. Alcohol also impacts on behaviour of an employee affected by alcohol by unruly behaviour, lack of etiquette and displaying unprofessional conduct towards customers. The alcoholic" workmate may also be resentful for taking up duties and responsibilities for those affected by alcoholism or having, residual hangovers as a result of alcohol. Employee productivity will also be affected as a result of lateness and absenteeism. Low quality and quantity of work as a

Socialscientia I Regular I Volume 7 Number 3 I September 2022 [ISSN 2636-5979] result of poor decision making, stalling of operations and co-workers having to cover for alcohol-affected employees are also as a result of alcohol abuse. Cost effects are also attributed to alcohol abuse including staff compensation and employer liabilities, skill loss and costs of replacement and training new employees due to the affected employees being laid off or staff turnover. The cost of rehabilitative interventions is a burden to the organization in the long term.

According to NACADA Survey (2014) on alcohol and drug abuse situation among employees in the public sector, the main causes of alcohol abuse in the workplace include; Workplace Culture: Genedr mix of a workplace determine its tolerance of drinking. Several researches indicate that male-dominated occupations are associated with heavy drinking cultures where workers use drinking to enhance solidarity hence recording high rates of alcohol related problems. Workplace Alienation: Duties that are termed to be isolating, boring or stressful may result to employees drinking. Employee's habitual drinking can also be linked to job simplicity, autonomy, minimal supervision or having no influence or authority in the workplace harassment of employees both physically; sexually and verbally. Availability and ease in accessing the drink may affect the habit of alcohol use in the workplace. Having rules and regulations that restrict accessibility of the drink to the employees may control their alcohol use at workplace.

Effects of Alcohol abuse on Work Performance: Alcoholism has causes significant social and economic effects to the workplace. This is mainly due to reduced productivity. Lost productivity is counted as the main social cost of alcohol abuse (Saar, 2009). Lunchtime or drinking heavily after work is some of the productivity losses experienced by organization. However, a small percentage of this loss is attributed to workplace drinking. Additionally, the regular drinkers account for approximately 10% of the workforce problems as their drinking habits result to reduction in productivity (Henderson, Hutcheson & Davies, 1996). Moderate drinking may end up as an addictive habit which may result to productivity losses. This argument is as raised by Bacharach, Bamberger, and Biron (2010) and Frone, (2006).Employees who report to work drunk or nursing hangovers will not be productive at the workplace compromising the business output and overworking their colleagues who may have to perform their duties and cover up their tardiness. This may cause resentment, lower morale among colleagues and affect productivity at the workplace.

Absenteeism and Presenteeism: After a heavy drinking episode, hangovers may result to employees calling in sick or reporting late. Bacharach et al., (2010) assets that high alcohol consumption levels also relate to increased number of sick days taken by employees. Since, the organization as a whole feels the whole impact including the employees with increased work load due to absent colleagues as a result of alcoholism (Dale & Livingston, 2010). Drinking before reporting to work may result to lower

Socialscientia I Regular I Volume 7 Number 3 I September 2022 [ISSN 2636-5979] employee productivity. This sometimes referred to as "presenteeism." It is close to impossible to quantify the effect of hampered staff productivity in relation to drinking although it is strongly argued that reduced staff productivity has a greater impact compared to the economic effect as a result of employees not reporting to work (Goetzel et al., 2004).

Accidents and injuries: Premature deaths and poor health among the majority of the population in the working age is attributed mostly to alcohol misuse. The deaths and poor health as a result of alcohol abuse significantly impact the employer's costs that results from lost productivity and additional resources used in recruiting and training replacements. According to World Health Organization (2011), the illnesses related to alcohol further impact the organizational cost on healthcare, compensations, legal fees and insurance. Working under the influence of alcohol places the user and other employees at risk of injury in the work environment especially among employees who work with huge machines. (Frone, 2006, 2009). Henderson et al., (1996) estimated that up to 20%–25% of accidents in the workplace are alcohol related. Adverse accidents that are alcohol related can also affect the organization's reputation and finances in compensation costs.

Effects of harmful drinking on colleagues: Aside from the drinkers, alcohol misuse may be harmful leading to significant lost productivity among employees who are not drinkers. The no-drinkers have to work extra hours in order to cover for the co-workers whose performance at work has been hampered by heavy drinking. This may also increase their risk of injury. Alcohol abusing employees may have strained relationships with co-workers. They are usually argumentative and/or short-tempered. The work place environment may affect employees who are non-drinkers in three other ways; by ease of assessing alcohol in the workplace during working hours or breaks. The extent to which members of an individual's workplace social network use alcohol or work while impaired by alcohol .The extent to which members of an individual's working under the influence of alcohol at work.

Another study indicated that employees who are addicted to alcohol have a higher chance of viewing lower levels of some workplace alcohol social controls against drinking. Employees who were problem-drinkers were also found to be more likely than abstainers and non-problem-drinkers to report higher levels of certain forms of social availability of alcohol at the workplace (Berger, 2009). Ease of access of drinks in Canada's working environment resulted to issues in relation to abuse of the alcohol (Hodgins, Williams, & Munro, 2009) more specifically a day after when the employees are out of work. The employee may choose to segregate themselves and this may be revealed through having debts with his colleagues at work or other external parties.

Gambling: Gambling is the act of playing a game or taking a risky action for money or a desired outcome (e.g., a prize): It is defined as staking of money on the outcome of games

Socialscientia I Regular I Volume 7 Number 3 I September 2022 [ISSN 2636-5979] or events involving chance or skill (Slade & McConville, 2003). It is the exchange of property (usually money but sometimes other property including slaves, ears and fingers) on the outcome of an event largely, if not solely, determined by chance (Allcock, 2000). Gambling is of various pattern which are wagering and betting which involve placing a bet or wager on the outcome of an event such as a sporting event or race; gaming which involve placing bets on games that are constrained by mathematically predetermined rules and theoretical returns of players (gaming machines and casino table games) and lottery style games such as Cross-Lotto, Powerball, Pools, scratch tickets and keno, all of which award prizes based on the selection of winning symbol or number combinations.

Evidence suggested that problem and non-problem gamblers have similar motivations to gamble but the motivational strength differs for problem gamblers and alcohol misuse workers. In particular, winning money (chasing losses) and relieving tension, stress and emotional distress are implicated in promoting continued gambling and alcohol misuse (Clarke, Tse, Abbott, Townsend, Kingi, & Manaia, 2007; Platz & Millar, 2001). However, there are many reasons why people gamble. These may be broadly classified under two non-mutually exclusive types of motivation: the desire for positively reinforcing subjective excitement and arousal; and the desire for the negatively reinforcing relief or escape from stress or negative emotional states. Both social and monetary reward expectancies facilitate gambling and capacity to enhance or regulate positive affect (Shead & Hodgins, 2009). By its very nature, gambling represents an opportunity to win money, and subject to the potential size of the prize, to change one's lifestyle. The prospect of winning large prizes (expectancies of reward) generates excitement by allowing participants to dream and fantasise about the impact that such a windfall would have on their work, finances, leisure, and capacity to support immediate family members. Smaller wins are also exciting since these provide a gain to the player and enable further gambling in pursuit of larger wins.

However, there is a substantial body of literature on risk factors that are associated with both gambling and alcohol misuse among workers. Winters and Anderson (2016) noted that the likelihood of gambling involvement increased with alcohol misuse, and that the risk factors for alcohol misuse and gambling overlap significantly with predictable markers such as sexual abuse, depression, and maladaptive behaviours of workers. Importantly, gambling and alcohol misuse are in many cases functions of an underlying workers behavioural disorder such as problem behaviour syndrome and conduct disorder, predictably marked by factors such as impulsivity, low supervision, and deviant friends (Vitaro, Brendgen, & Ladouceur, 2017). Thus, Spunt, Lesieur, Liberty, and Hun (2016) observed that workers with alcohol misuse are more likely to use alcohol before or while gambling to enhance performance and also to assuage the pain of losing and enhance the joy of winning. Therefore, seemingly, one attraction of alcohol is the predictability of pleasure, as opposed to the uncertainty associated with gambling.

Socialscientia | Regular | Volume 7 Number 3 | September 2022 [ISSN 2636-5979]

Method

Participants Two hundred and twenty-six (226) workers served as participants for the study. They were drawn from Enugu Electricity Distribution Company (EEDC) and Ministry of Works in Awka, Nnewi, and Onitsha city, Anambra State. The participants comprise of 91(40.3%) male and 135(59.7%) female. The participants' ages range from 24 to 56 with mean age of 35.22 and standard deviation of 8.53. Marital status data showed that 107(47.3%) were single, 89 (39.4%) were married, 15(6.6%) were separated, and 15(6.6%) were divorced. Educational level data showed that 76(33.6%) have Master's of Science (M. Sc), 75(33.2%) have Bachelor's of Science (B. Sc), 15(6.6%) have Higher National Diploma (HND), 30(13.3%) have Ordinary National Diploma (OND), and 30(13.3%) have Senior Secondary School Certificate. Years of employment data revealed that 121(53.5) have worked for one to nine years, 75(33.2%) have worked for ten to nineteen years, and 30(13.3%) have worked for twenty to thirty years. Employment status revealed that 90(39.8) were administrative staff, 91(40.3%) were management staff, and 45(19.9%) were technical staff. Purposive sampling technique was used to select the organizations, while accidental sampling technique was used to select the participants because their selection was based on availability, accessibility and willingness to participate.

Instruments Two Instruments were used: Alcohol Use Disorders Identification Test (AUDIT) by Saunders, Aasland, Babor, De La Fuente, and Grant (1993), and The Victorian Gambling Screen by Wenzel, McMillen, Marshall, & Ahmed (2014).

Alcohol Use Disorders Identification Test (AUDIT) Alcohol Use Disorders Identification Test (AUDIT) by Saunders, Aasland, Babor, De La Fuente, and Grant (1993): A 13 items scale designed to measure obsessive drinking and specifically for hazardous and harmful alcohol consumption before dependence, physical disease or major life problems. Scores for several scales within the questionnaire were calculated according to a frequency rating (from Never=1, Monthly or less =2, Two to four a month=3, Two to three a week=4, Four or more a week=5) for individual items. The scale has Cronbach alpha of 0.80 in Australia, 0.90 in Bulgaria, 0.97 in Kenya, 0.98 in Mexico, 0.94 in Norway, and 0.88 in United State of America. The researcher conducted pilot test, using 76 workers from ministry of works, Anambra State and Cronbach alpha of 0.88 was reported.

Victorian Gambling Screen The Victorian Gambling Screen by Wenzel, McMillen, Marshall, & Ahmed (2014): Contained 20 items designed to assess betting to win and enjoy without thinking of how it harm one's life or others. All items of this scale were measured on a five-point scale (0 = never, 1 = rarely, 2 = sometimes, 3 = often, 4 = always). Scores were obtained by summing up item responses and thus could range from 0 to 60. The VGS have very high degrees of internal consistency of 0.92 for the general scale, which reflects their coherence and uni-dimensionality as well as their reliability of measurement. The subscale has internal constancies of 0.82, 0.89 and 0.94 respectively for enjoyment, self-harm and friend harm. In this study, the researcher reported Cronbach alpha of 0.77 for enjoyment

Socialscientia | Regular | Volume 7 Number 3 | September 2022 [ISSN 2636-5979] of gambling, 0.93 for harm to self, and 0.70 for harm to others, while for the overall scale 0.93.

Procedure A letter of introduction from the Department of Psychology was submitted to each of the organizations selected, seeking for permission to use the organization as study settings. The letter also contained the topic of this study. Immediately the permission was granted, the researcher visited the participants and familiarized with each of them as well made known his intention of carrying out the study in their respective organization. Thereafter, the researcher discussed the details of the study with each of the participants. Meanwhile, another research assistant was employed for this study. The following was the inclusion criteria for this study: (1) The worker must be present; (2) He/She must be a registered worker of that organization; (2) He/She must be willing to participate voluntarily in the study. On the whole, 226 questionnaires were distributed. The data collected was subjected to version 23 of Statistical Package for Social Sciences (SPSS).

Design and Statistics The study adopted correlational design because the study evaluated the predictive role of personality traits and gambling on alcohol misuse. Similarly, cross-sectional design was use because the age bracket of the participants cuts across different age sets. On the statistic, Multiple Linear Regressions Statistics was use to analyze the data collected. The choice of this statistic is that two predictive variables were tested on one criterion variables.

Result

Multiple Linear Regressions Statistics of Gambling on Alcohol Misuse

Model	Mean	Std. D	β	Т	Sig.	
Alcohol Misuse	26.98	5.43	27	-1.03	.304	
Enjoyment	5.79	2.08	.59	1.48	.140	
Harm to Self	29.21	9.97	.20	4.25	.000	
Harm to Others	6.66	2.09	27	-1.03	.304	

Gambling like enjoyment did not significantly predicted alcohol misuse at F (5, 222), β =-.27, t= -1.03, p<.05. Harm to self significantly predicted alcohol misuse at F (5, 222), β =.59, t= -1.48, p>.05. Harm to others did not significantly predicted alcohol misuse at F (5, 222), β =.20, t= 4.25, p<.05.

Discussion

This study examined personality traits and gambling as predictors of alcohol misuse among workers in Anambra State. The study showed that gambling dimensions like enjoyment and harm to others did not significantly predicted alcohol misuse, while harm

Socialscientia I Regular I Volume 7 Number 3 I September 2022 [ISSN 2636-5979] to self significantly predict alcohol misuse. This correlated with the observation of Ford, and Håkansson (2020) that problem gambling and male gender, education level, daily tobacco use, moderate psychological distress, problematic shopping, and problem gaming. It also supported the findings of Zhai, et al., (2020) that stated that gambling in males and females was associated with lifetime use of any drugs, marijuana, cocaine, inhalants, heroin, methamphetamines, ecstasy, synthetic marijuana, non-medical pain-relievers, and injected drugs, in addition to past-30-days cigarette smoking, alcohol and heavy alcohol drinking, and marijuana use. This suggested that suggest informative distinctions between shared and unique attributes related were problematic drinking and gambling (Tackett *et al.*, 2017).

This proves that gambling as a learned behaviour, can be learned through imitation, either of an admired figure or from one's peers (Bandura, 1977). Since, gambling behaviour is acquired through the traditional mechanisms of operant and classical conditioning (Dickerson, 1997; Sharpe & Tarrier, 1993). Once the gambler experiences the thrill of winning, which acts as a positive reinforcement of the behaviour, it increases the likelihood the gambler will return to gamble again. Gamblers learn winning will be intermittent, but it will occur, and so they learn to continue gambling despite repeated losses (Sharpe & Tarrier, 1993; Walker, 1992). It emphasizes the role of reinforcement in alcohol misuse which states that people mostly look at maximizing reward and minimizing punishment; people continue doing specific things because historically, they have been rewarded for them (Wise & Rompre, 1989). This is based on the fact that, alcohol and substances activate the brain reinforcement system and thereby act as rewards biologically. For when alcohol or substance when taken once induces a reinforcement process which triggers a future chance of an increase in the alcohol taking behaviour and engagement in gambling. Hence, Sanchis and Spanagel (2006) argued that reinforcement happens to one of the major factor in understanding the biological substrates of alcohol misuse and gambling.

Recommendations

The following recommendations were established: (a) Campaign against misuse of alcohol should be intensifying: This could be done either through radio, television, seminar, workshop and so on in order to enlighten workers and general populace on danger of misuse of alcohol and how it inspire gambling and affects workers' productivity and performance. (b) There is need for alcoholism and gambling test for workers in various organizations. With that, treatment and invention will be derived that will aid to reduce misuse of alcohol and gambling among workers. (c) Workers who are gamblers and alcoholic should seek for solution for their

Socialscientia | Regular | Volume 7 Number 3 | September 2022 [ISSN 2636-5979] addiction. This will recreate and reform their personality that are already affected by alcohol misuse and possibly gambling.

References

Allcock, C. (2000). A background to problem gambling. Australasian Psychiatry, 8(3), 253-255.

- Ames, G.M., & Bennett, J.B. (2011). Prevention interventions of alcohol problems in the workplace. Alcohol Res Health, 34(2), 175-187
- Bandura, A. (1977). Social learning theories. Englewood Cliffs, NJ: Prentice Hall.
- Brown, R.I. (1987). Classical and operant paradigms in the management of gambling addictions. *Behaviour Psychology*, 15, 111-122.
- Clarke, D., Tse, S., Abbott, M.W., Townsend, S., Kingi, P., & Manaia, W. (2007). Reasons for starting and continuing gambling in a mixed ethnic community sample of pathological and non-problem gamblers. *International Gambling Studies*, 7(3), 299-313.
- Dubey, C., Arora, M., Gupta, S., & Kumar, B. (2016). Five factor correlates: A comparison of substance abusers and non-substance abusers. *Journal of Indian Academy Applied Psychology* 36(1):107-114.
- Ebile, J.C., & Pela, D.A. (2017). Some aspects of drug use among students in Benin City Nigeria. *Drug Alcohol Dependent* 8(4):265-270.
- Edvardsen, H.M., Moan, I.S., Christophersen, A.S., & Gjerde, H. (2015). Use of alcohol and drugs by employees in selected business areas in Norway: a study using oral fluid testing and questionnaires. *Journal of Occupational Medicine Toxicology* 2(10), 46-57.
- Frone, M.R., (2006). Prevalence and distribution of illicit drug use in the workforce and in the workplace: Findings and implications from a U.S. national survey, *Journal of Applied Psychology*: 91(4), 856–869.
- Frone, M. R., (2006). Prevalence and distribution of alcohol use and impairment in the workplace: A U.S. national survey. *Journal of Studies of Alcohol*: 67, 147–156.
- Frone, M.R. (2009). Does a Permissive Workplace Substance Use Climate Affect Employees Who Do Not Use Alcohol and Drugs at Work? A U.S. National Study *Psychology of Addictive Behaviours*, 23(2):386-390.
- Frone, M., & Brown, A. (2016). Workplace Substance- Use Norms as Predictors of Employee Substance Use and Impairment: A Survey of U.S Workers. *Journal Studies of Alcohol and Drugs*, 71(4), 526 – 534.
- Goplerud, E., Hodge, S., & Benham, T.A (2017). Substance use cost calculator for US employers with an emphasis on prescription pain medication misuse. *Journal of Occupation Environmental Medicine* 59(11), 1063-1071.
- Grigsby, T. J., Forster, M., Unger, J. B., & Sussman, S. (2016). Predictors of alcohol-related negative consequences in adolescents: A systematic review of the literature and implications for future research. *Journal of Adolescence*, *48*, 18–35.
- Grunberg, L., Moore, S., Anderson-Connolly, R., & Greenberg, E. (1999). Employee attitudes towards work-site alcohol testing. *Journal of Occupational and Environmental Medicine*, *38*, 1041-1046.
- Konchellah, R.M. (2016). Effects of alcohol abuse on employee performance and absenteeism in Kenya Ports Authority. A Research Project Submitted to the Faculty of Arts Department of Psychology in Partial Fulfillment of the Requirement for The Award of The Degree Of Master Of Psychology (Organizational Psychology) University Of Nairobi.

Socialscientia | Regular | Volume 7 Number 3 | September 2022 [ISSN 2636-5979]

- Lehman, W.E.K., & Simpson, D.D. (1992). Employee substance use and on-the-job behaviours. *Journal* of Applied Psychology, 77(3), 309-321.
- Lesieur, H.R. & Rosenthal, R.J. (1991). Pathological gambling: A review of the literature. (Prepared for the American Psychiatric Association Task Force on DSM-IV. Committee on Disorders of Impulse Control not Elsewhere Classified). *Journal of Gambling Studies*, 7, 5-39.
- Malouff, J.M., Thorsteinsson, E.B., Rooke, S.E., & Schutte, N.S. (2007). Alcohol involvement and the Five-Factor Model of personality: A meta-analysis. *Journal of Drug Education*, 37, 277–294.
- Mangione, T. W., Howland, J., Amick, B., Cote, J., Lee, M., & Bell, N. (1999). Employee drinking practices and work performance. *Journal of Studies on Alcohol*, 60, 261-271.
- Onyishi, I.E., & Ugwu, F.O. (2012). Stress, alcohol use and work engagement among university workers in Nigeria. *African Journal of Drug and Alcohol Studies*, 11(2), 1-13.
- Platz, L., & Millar, M. (2001). Gambling in the context of other recreation activity: A quantitative comparison of casual and pathological student gamblers. *Journal of Leisure Research*, 33(4), 383-395.
- Rankin, H., Stockwell, T., & Hodgson, R. (2012). Personality and alcohol dependence. *Personal Individual Difference* 3(2):145-151. Roman, P.M., & Blum, T.C. (2018). <u>The workplace and alcohol problem prevention</u>. *Alcohol Research Health*, 26(1):49-57
- Saunders, J.B., Aasland, O.G., Babor, T.F., De La Fuente, J.R., & Grant, M. (1993). Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption—II. Addiction (1993) 88, 791-804.
- Spunt, B., Lesieur, H., Liberty, H. J., & Hunt, D. (2016). Pathological gamblers in methadone treatment: a comparison between men and women. *Journal of Gambling Studies*, vol. 12(4), 431– 449.
- Tackett, J.L., Krieger, H., Neighbors, C., Rinker, D., Rodriguez, L., & Edward, G. (2017). Comorbidity of alcohol and gambling problems in emerging adults: A bifactor model conceptualization. *Journal of Gambling Studies*, 33(1): 131–147.
- Theodoros G., & Olga T. (2014). Social learning conceptualization for substance abuse: Implications for therapeutic interventions. *The European Journal of Counselling Psychology*, 3(1), 69–88.
- Trieu, N.N., Uthis, P., & Suktrakul, S. (2020). Alcohol dependence and the psychological factors leading to a relapse: A hospital-based study in Vietnam. *Journal of Health Research*, 35(2), 1-11.
- Vitaro, F., Brendgen, M., Ladouceur, R., & Tremblay, R.E. (2017). Gambling, delinquency, and drug use during adolescence: mutual influences and common risk factors," *Journal of Gambling Studies*, 17(3), 171–190.Walker, M.B. (1992). *The psychology of gambling*. Pergamon, NY.
- Wang, P. (2016). What is gambling disorder? Retrieved from <u>https://www.psychiatry</u>.org/patients families/gambling-disorder/what-is-gambling-disorder
- Wenzel, M., McMillen, J., Marshall, D., & Ahmed, E. (2014). Validation of the Victorian Gambling Screen. Prepared for the Gambling Research Panel by The Centre for Gambling Research Australian National University.
- Winters, K. C., & Anderson, N. (2018). Gambling involvement and drug use among adolescents. *Journal of Gambling Studies*, 16(23), 175–198.
- Zhai, Z.W., Duenas, G.L., Wampler, J., & Potenza, M.N. (2020). Gambling, substance use and violence in male and female adolescents. *Journal of Gambling Studies* 3(6), 1301–1324.

Socialscientia | Regular | Volume 7 Number 3 | September 2022 [ISSN 2636-5979]

Biographical Note

Collins Ifeanacho NNAEBUE, is an Industrial/Organizational psychologist and a Lecturer in the Department of Psychology, Nnamdi Azikiwe University Awka NIGERIA. E-mail: ci.nnaebue@unizik.edu.ng.

Ifenna Damian EZEANYA, is an Industrial/Organizational psychologist and a Lecturer in the Department of Psychology, Nnamdi Azikiwe University Awka NIGERIA. E-mail: id.ezeanya@unizik.edu.ng

Nneka Ifedichinma NWANGWU, is an Industrial/Organizational psychologist and a lecturer in the Department of Psychology, Nnamdi Azikiwe University Awka NIGERIA. E-mail: nwangwunneka@gmail.com.

Emeka Anthony NWANKWO, is a Ph.D student in the Department of Psychology, Nnamdi Azikiwe University Awka NIGERIA. E-mail: <u>nea.en32@gmail.com</u>