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Research Article

Optimistic Bias, Fear of Missing Out, and Drug Use among Undergraduates By

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Abstract

Drug use among undergraduates has been identified as one of the most significant concerns due to its impact on physical health, academic performance, and social relationships. This study examined optimistic bias and fear of missing out as factors associated with drug use among undergraduates. Four hundred and eleven participants comprising 207 males and 204 females selected from a population of students in Akwa Ibom State University, Ikot Akpaden, Mkpat Enin Local Government Area participated in the study. Participants were selected using convenience sampling technique. The ages of participants ranged between 16 to 39 years, and their mean age was 22.93 years. The study was survey, and the design of the study was a cross-sectional design. Optimistic Bias Scale, Fear of Missing Out Scale, and Drug Abuse Screening Test were the instruments used in the study. Data was analysed using Chi-square. The result of the study revealed that there was no significant association between optimistic bias and drug use. The result of the study also revealed a significant association between fear of missing out and drug use ($X^2 = 55.85$, $P < .01$). It was concluded that fear of missing out is an important factor that is associated with drug use among undergraduates. It was also recommended that awareness campaigns be carried out on campuses to educate students on how the fear of missing out can lead to unhealthy comparisons, social pressures, and experimentation with drugs.

Keywords: optimistic bias; fear of missing out; drug use; undergraduates

Introduction

Drug use among undergraduates in Nigeria has been identified as one of the most significant concerns in recent times. Studies across Nigeria reveals a high prevalence of drug use among undergraduates. For example, Akwara et al. (2018), reported a lifetime prevalence rate of 24.5% for recreational drug use among university students, Ademola et al. (2021), found a moderate to high use of drugs of 35.1% for alcohol, 15.7 % for marijuana, 15.3% for heroine, 13.8% for tobacco, and 10.2% for cocaine among students in tertiary institutions in Ekiti State. Also, the National Drug Law Enforcement Agency (NDLEA), reported that in Oyo State, 4 out of every 10 undergraduate are involved in drug use (Nigerian Observer, 2025). According to World Health Organization (2024) drug use occurs when psychoactive substances including legal, illicit, or prescribed drugs that affect mood, perception, cognition or behaviour are consumed. Drug use also refers to the use of drugs for reasons other than medical reasons, or the intended purpose (American Psychiatric Association, (APA, 2013). Drug use is associated with a decrease in grades, absenteeism, and an increased risk of dropping out of school (James et al., 2016). Other consequences of drug use include impaired judgment, risk of accidents, addiction, damage of organs, depression and anxiety (Oshodi et al., 2010). Also, there is a relationship between drug use and risky sexual behaviour, violence and being involved in criminal activities (Fuljoss, 2022). Social Cognitive Theory developed by Bandura (1986) provides the theoretical basis for this study. Social cognitive theory postulates that human behaviour is shaped by reciprocal determinism. According to this theory, behaviour is determined by the interaction between personal factors (cognitions, beliefs, emotions), behaviour (actions, habits, choices), and environmental influences (social norms, peer pressure, media, culture). This theory states that optimistic bias is a cognitive distortion influenced by observational learning. When students observe that their peers engage in risky behaviours without experiencing negative consequences, it reinforces the belief that they are less susceptible to harm (Weinstein, 1987). This theory further explains that when undergraduates see their peers deriving pleasure from social

experiences, they view exclusion as an obstacle to belonging. This social pressure drives them to model these behaviours exhibited by their peers in order to be accepted (Przbylski et al., 2013). It is important to investigate drug use among undergraduates because undergraduate years are an important stage of development where individuals transition from adolescence to adulthood. This phase is also characterised by an increase in independence, experimentation, and peer influence. Furthermore, in spite of the various interventions, there is a high prevalence of drug use among undergraduates. In addition, there exists a dearth in literature, as most of the studies that have been conducted to examine these variables have been carried out in high income countries. It therefore becomes imperative to study drug use among undergraduates in Nigeria, specifically in Akwa Ibom State to provide evidence based insights that will inform policy, strengthen health services on campuses, promote academic and social success to protect the future of undergraduates. This background necessitated the investigation of optimistic bias and fear of missing out as factors associated with drug use among undergraduates. Studies have implicated optimistic bias in drug use among undergraduates. Owen et al. (2024), defined optimistic bias as the cognitive tendency for individuals to underestimate the likelihood of negative events happening to them compared to others, and to overestimate the likelihood of positive events happening to them. Morrison et al. (2016), found that young adults with high optimistic bias believe that they are less susceptible to the harmful effects of drug use compared to their peers. This biased belief diminishes the efficacy of health warnings, and increases the likelihood of experimentation and continued drug use (Morrison et al., 2016). In addition, Morris et al (2024), revealed that optimistic bias prevents individuals from recognizing personal health risks, thereby resulting in these individuals continuing with risky patterns of consumption. Furthermore, Balneaves et al. (2024), found an association between optimistic bias and a higher prevalence of drug use. Fear of missing out is another variable that has been implicated in drug use. Fear of missing out has been defined as a condition whereby individuals are worried and anxious that others are engaging in rewarding from which they are absent (Sabir & Jaban, 2023). Crawford et al. (2024), revealed that fear of missing out increases the frequency and quantity of alcohol consumption. Also, Baiocci et al. (2023) found that students with higher fear of missing out are more likely to engage in risky drinking. Furthermore, Gansner et al. (2025) found a relationship between fear of missing out and the consumption of cannabis. In addition, Mckee et al (2025), revealed that higher fear of missing out is associated with higher cannabis use among college students.

This study is therefore aimed at investigating optimistic bias and fear of missing out as factors associated with drug use among undergraduates. It was hypothesized that:

1. Optimistic bias will be associated with drug use among undergraduates

2. Fear of missing out will be associated with drug use among undergraduates

Method

Design

The study was survey, and the design of the study was a cross-sectional design

Participant

Participant comprised four hundred and eleven (411) undergraduates selected from a population of students at Akwa Ibom State University, Ikot Akpaden. Participants consisted of 207 males, and 204 females. The ages of participants ranged between 16 to 39 years, and their mean age was 22.93 years. Participants were drawn using convenience sampling technique.

Setting

The study was conducted in Akwa Ibom State University (AKSU), Akwa Ibom State. Akwa Ibom State is located in the South-South geopolitical zone of Nigeria, lying between latitudes 4 32'N and 5 33'N, and longitude 7 25'E and 8 25'E. The state is bounded by Cross River State to the East, Abia and Rivers State to the West, and the Atlantic Ocean to the South. Akwa Ibom State University (AKSU) was establishes in 2010. It has several faculties including the Faculty of Engineering, Faculty of Natural and Applied Sciences, Faculty of Agriculture, Faculty of Arts, Faculty of Education, Faculty of Social Sciences, and the Faculty of Management Sciences. The University operates two campuses, namely the Main Campus at Ikot Akpaden in Mpat Enin Local Government Area, and Obio Akpa Campus in Oruk Anam Local Government Area. Ikot Akpaden was the setting for the study.

Instrument

The instrument was divided into four sections namely Section A, Section B, Section C, and Section D.

Section A: Section A contained demographic information such as age, gender, year of study ad department.

Section B: Section B contained the Optimistic Bias Scale developed by Ahn (2012). This instrument is a 2-item instrument designed to measure the tendency for individuals to believe that they are more likely to experience positive outcomes compared to others. The scale has a 7-point Likert type response format ranging from1 = far less likely, 2 = less likely. 3 = somewhat less likely, 4 = unlikely, 5 = somewhat more likely, 6 = more likely, 7 = far more likely. All the items on the instrument were scored reversely. Scores range from 2-14. The norm of the instrument is 9.98. Scores less than 9.98 indicate low optimistic bias, while scores higher than 9.98 indicate high optimistic bias. Ahn (2012) reported a Cronbach alpha of 0.75. A split half reliability of 0.64 was obtained after the pilot study. The scale has construct validity when correlated with related constructs like risk perception and personal susceptibility.

Section C: Section C contained the Fear of Missing Out Scale developed by Przbylski et al (2013). The fear of missing out scale is a 10-item instrument designed to measure an individual's fear of missing out in rewarding experiences others might be having. The instrument has a 5-point Likert response type format ranging from 1 = Not at all true of me, 2 = Slightly true of me, 3 = Moderately true of me, 4 = Very true of me, 5 = Absolutely true of me. Scores range from 10-50. The norm of the instrument is 22.76. Scores less than 22.76 indicate low fear of missing out, while scores from 22.76 and above indicate high fear of missing out. Przbylski et al. (2013), reported a Cronbach alpha of 0.89. A split half reliability of 0.51 was obtained after the pilot study. The instrument correlates with social media use and psychological need satisfaction.

Section D: Section D contained the Drug Abuse Screening Test (DAST-28) developed by Skinner (1982). The drug abuse screening test is a 28-item instrument designed to assess drug use behavior. DAST-28 contains a YES/NO response format with each YES response scored 1, and a NO

response scored 0. Items 4, 5, and 7 are scored reversely, while other items are scored directly. Scores range from 0-28 with higher scores indicating high drug use. Skinner (1982) reported a Cronbach alpha of 0.95. A Cronbach alpha of 0.85 was obtained after the pilot study. The Drug Abuse Screening Test (DAST-28) correlates strongly with clinical diagnoses of drug abuse.

Procedure

The study was conducted in two phases. The first phase of the study was the pilot study. A pilot study was conducted to establish the reliability of the instruments using Nigerian sample. Fifty undergraduates selected from the Department of Psychology, Sociology and Anthropology, Communication Arts, and Guidance and Counseling. After the pilot study, all the instruments were found to be reliable. After the pilot study, the following statement of reliability was obtained: A split half reliability of 0.64 was obtained for the optimistic bias scale; a split half reliability of 0.51 was obtained for the fear of missing out scale; and a Cronbach alpha of 0.84 was obtained for the drug abuse screening test. The second phase of the study was the main study. The main study was conducted at Akwa Ibom State University, Ikot Akpaden, Mkpat Enin Local Government Area of Akwa Ibom State. Before the main study, a letter of was obtained from the Department of Psychology, University of Uyo. The letter was presented to the Faculty Officers of the various departments from which participants were drawn. Participants were approached in their lecture halls, and the purpose of the study explained. Informed consent was obtained from participants verbally. Participants were informed that they had the right to withdraw from the study at any point in time during the study. Four hundred and fifty copies of questionnaire were administered. Before responding to the items on the copies of questionnaire, participants were instructed to read the questions carefully and respond to them with sincerity. Respondents were informed of their confidentiality. Out of the four hundred and fifty copies of questionnaire administered, thirty nine copies were discarded because they were not completely filled. Only four hundred and eleven copies were used for data analysis.

Statistics

Chi-square was used to test the hypotheses formulated in the study.

Result

Variable	Drug Use (%)			Chi-Square (df)	p-value
	No Substance Abuse	Substance Use Problem	Substance Abuse Problem		
Optimistic Bias					
Low	51 (30.18)	25 (14.79)	93 (55.03)	0.42 (2)	>.05
High	80 (33.06)	36 (14.88)	126 (52.07)		
Fear of Missing Out					
Very Low	4 (36.36)	0 (0.00)	7(63.64)		
Low	61 (57.01)	11 (10.28)	35(32.71)		
Moderate	59 (23.6)	48 (19.20)	143(57.2)	55.85 (8)	<.01
High	7 (20.0)	2 (5.71)	26(74.29)		
Very High	0 (0.00)	0 (0.00)	8 (100.00)		

Table 1: Cross-Tabulation of Optimistic Bias, FOMO and Drug Use

Hypothesis One

Hypothesis stated that optimistic bias will be associated with drug use among undergraduates. This hypothesis was tested using chi-square and the result presented in Table 1 above. Table 1 above reveals no significant association between optimistic bias and drug use among undergraduates ($\chi 2 = 0.42$; $p > .05$). The hypothesis was not confirmed, hence hypothesis 1 was rejected.

Hypothesis Two

Hypothesis 2 stated that fear of missing out will be associated with drug use among undergraduates. This hypothesis was tested using chi-square, and the result presented in Table 1 above. Table 1 above also reveals a significant association between fear of missing out and drug use among undergraduates ($\chi 2 = 55.85$; $p < .01$). From Table 1 above, it can be observed that the severity of drug use increases as the fear of missing out increases. Hypothesis 2 was confirmed, and therefore.

Discussion

The first result of the study revealed that optimistic bias was not associated with drug use among undergraduates. This finding contradicts the findings of Balneaves et al. (2024), who found an association between optimistic bias and a higher prevalence of drug use. The findings of this study is also inconsistent with the findings of Morris et al. (2024), who revealed that optimistic bias prevents individuals from recognizing personal health risks, thereby resulting in these individuals continuing with risky patterns of consumption. Furthermore, the findings of this study contradicts the findings of Morrison et al. (2016), who found that optimistic bias reduces the efficacy of health warnings, and increases the likelihood of experimentation and continued drug use. A plausible explanation for this result is that cultural factors such as moral norms and religious values may be more significant than cognitive biases in influencing drug use among undergraduates. The second result of the study revealed a significant association between fear of missing out and drug use among undergraduates. This finding is consistent with the findings of Gansner et al. (2025), who found a relationship between fear of missing out and cannabis consumption. The findings of this study is also in line with the findings of Mckee et al. (2025), who found that a higher fear of missing out is associated with higher drug use.

Conclusion

This study examined optimistic bias and fear of missing out as factors associated with drug use among undergraduates. A total of 411 students participated in the study. Results revealed that optimistic bias was not associated with drug use among undergraduates. Result also showed that

fear of missing out was associated with drug use among undergraduates. It was concluded that fear of missing out increases the use of drug use among undergraduates.

It was therefore recommended that awareness campaigns be carried out on campuses to educate students on how the fear of missing out results in unhealthy comparisons, social pressures, and experimentation with drugs.

References

1. Ademola, O.A, Adesuyi, B.A. & Fajemirokun, A. (2021). Substance use in tertiary institutions: A baseline study in Ekiti State, Nigeria. *Journal of Health Research and Practice*;17(3); 221-230.
2. Ahn, A. (2012). Consumers' optimistic bias and responses to risk disclosure in direct-to consumer prescription drug advertising: The moderating role of subjective health literacy. *Unpublished Doctoral Dissertation*. University of Tennessee; Knoxville.
3. Akwara, E. C., Ogunmola, J.O. & Busari, O.A. (2018). Recreational drug use among university students in Nigeria: Prevalence and associated factors. *Journal of Public Health in Africa*; 11(1); 723.
4. American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). *American Psychiatric Publishing*.
5. Balneaves, L.G., Brown, A., Green, M., Prosk, E., et. al. (2024). Canadian use of cannabis for therapeutic purposes since legalization of recreational cannabis: A cross-sectional analysis by medical authorization status. *BMC Medicine*; 22; Article 150.
6. Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. *Englewood Cliffs*, NJ: Prentice Hall.
7. Crawford, J., Jones, A., Rose, A. & Cooke, A. (2024). I can't believe I missed that! How the fear of missing out impacts on alcohol behaviours. *Drug and Alcohol Dependence*; 258; 111273.
8. Mckee, P.C., Budnick, C.J., Waiters, K.S. & Antonios, I. (2022). College student fear of missing out (FOMO) and maladaptive behavior. *PLOS ONE*; 17(0); e0274698.
9. https://www.tandfonline.com/doi/abs/10.1080/08870446.2024.2316681
10. Nigerian Observer (2025, June 26). 4 in 10 undergraduates involved in drug use. https.//nigerianobservernews.com/2025/0614-in-10-undergraduates-involved-in-drug-use.
11. Oshodi, O.Y., Aina, O.F. & Onagole, A.T. (2010). Substance use among secondary school students in an urban setting in Nigeria: Prevalence and associated factors. *Journal of Psychiatry*, 13(1), 52-57.
12. Owen, M., Flowerday, S.V. & van der Schyff, K. (2024). Optimistic bias in susceptibility to phishing attacks: An empirical study. *Information and Computer Security*; 35(5); 656-675.
13. Przybylski, A.K., Murayama, K., DeHaan. C.R. & Gladwell, V. (2013). Motivational, emotional, and behavioural correlates of fear of missing out. *Computers in Human behaviour*; 29(4); 1841-1848.
14. Sabir, A.S. & Jabeen, S. (2023). Fear of missing out in university students: A psychometric study. *Annals of King Edward Medical University*; 29(2); 91-97.
15. Skinner, H.A. (1982). The Drug Abuse Screening Test. *Addictive Behaviours*; 7(4); 363-371.
16. Weinstein, N.D. (1987). Unrealistic optimism about susceptibility to health problems. *Journal of Behavioural Medicine*; 10(5); 481-500.
17. World Health Organisation (2024). Lexicon of alcohol and drug terms.*WHO*.

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