

Associations between Personality Traits, Self-Esteem and Psychoactive Substance Use among Commercial Bus Drivers in Lagos Nigeria

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ABSTRACT

Psychoactive substance use (PSU) is a common occurrence among commercial bus drivers in Lagos, Nigeria. This could result from desires to stay awake throughout lengthy travels, hard working hours, increase productivity, unfavorable working circumstances and sales of alcoholic beverages in motor parks and its environs. This study investigates some psychosocial predictors of psychoactive substance use among commercial bus drivers in Lagos state. A multi-stage sampling technique was used to select 471 participants comprising of males only. Respondents' mean age was 40.7 years. Data were collected using Index of Self-Esteem (ISE), Drug Use Disorder Identification Test (DUDIT) and Big Five Inventory. A 68.5% prevalence of PSU was reported by participants. Agreeableness ($\beta = -.106$; t = -2.16, p < .05), conscientiousness ($\beta = -.15$; t =-2.96, p < .01), and openness to experience ($\beta = -.15$; t = -2.58, p < .01) significantly and independently predicted PSU while extraversion ($\beta = -.09$; t = -1.63, p > .05), and neuroticism ($\beta = -.08$; p = >.05) do not significantly and independently predict PSU among the participants. Self-esteem significantly and independently predicted PSU among the participants. Age does not significantly predict PSU among the participants. Significant difference in the PSU was found among the respondents based on their educational qualifications and marital status. Authors concluded that personality traits (Openness to experiences, consciousness, extroversion, agreeableness and Neuroticism) and self-esteem are significant independent predictors of PSU among commercial bus drivers in Lagos, Nigeria. Therefore, implementing educational interventions that focus on the risks of substance abuse and healthy coping mechanisms can be beneficial.

Keywords: Psychoactive substance use, personality traits, self-esteem, commercial bus drivers, Lagos, Nigeria.

INTRODUCTION

Psychoactive substance Use (PSU) is a global issue that poses a threat to society due to its harmful consequences (UNODC, 2018; Smith & Jones, 2023; Onisile et al., 2020; Akinnawo et al., 2021; Olasubomi et al., 2024). Depending on the area and demographics, the prevalence of using psychoactive substances varies greatly (Brown & Lee, 2022). A United Nations Office and Drug Control (UNODC, 2018) study revealed a 14.4% prevalence of psychoactive substance use (PSU) among the Nigerian population. Also, the extent of PSU in Nigeria was comparatively high when compared with the 5.6 per cent 2016 global prevalence of any drug use among the adult population (UNODC 2018). Also, Nigerian studies show a wide spread of PSU across different ages, genders, sex, socio-economic classes and professions (Yunusa et al., 2017; UNODC, 2018; Akpunne, Akinnawo



et al., 2024; Akpunne, Ogunsemi et al., 2024). A high prevalence of PSU among drivers of commercial vehicles in Nigeria has been reported. For instance, Abiona et al., (2006) found a 67.3% PSU in a sub-urban community south-western Nigeria, Aniebu and Okonkwo (2008), reported an 85.4% prevalence among taxi drivers in Enugu, south-eastern Nigeria, while Iroanya et al., (2018) found a 75.1% PSU among commercial drivers in Lagos, South-western Nigeria, and Okpataku, (2015) reported a 76% in Kaduna, North-central Nigeria.

Research findings on reasons for PSU among commercial drivers include use of coffee and kola nuts to stay awake at night, cigarette and cannabis use to stay alert and energized throughout the day, alcohol consumption as a way to relax, opioids to reduce pain during their busy, stressful work schedules and to increase productivity (Oridota et al., 2013; Yunusa et al., 2017; Dini et al., 2019). It is common to observe public display and sale of alcoholic beverages within and around motor parks in Nigeria, Aside from these there often is the hawking of sachet alcohols and cigarettes on major roads especially during heavy traffic. These unfortunate practices give commercial drivers ample access to alcohol and other psychoactive substances even while driving. Sometimes some psychoactive concoctions are sold to unsuspecting buyers (drivers) as herbal medications as cure for malaria fever, low back aches (*"jedi-jedi"*), general body weakness and body pain (Oshodi &, Aina 2007; Kehinde &, Adegoke 2012). Intoxications and other adverse influences of these psychoactive substances use among commercial drivers have been documented (Akinniyi et al., 2019; Egwuatu et al., 2020).

Substance abuse, commonly referred to as substance use disorder (SUD), is a medical illness that is typified by the use of psychoactive substances, such as alcohol and illicit drugs, in a dangerous or hazardous manner (Johnson & Smith, 2021). It has an impact on a person's brain and behaviour, making it difficult for them to stop using these substances even when doing so has negative effects (Davis & Miller, 2020). Psychoactive substance abuse is a substantial contributor to avoidable death and is one of the main causes of individual violence; claim Adebayo and Oladipo (2023). It has been one of the leading causes of car accidents globally, with consequences for social functions, health, physical deformity, loss of property, loss of employment, loss of self-worth, and death (Adebayo & Oladipo, 2023). Substance abuse is becoming a global issue that is wreaking havoc on society and public health in many nations. Drug abuse is defined as the use of any drug that results in harm to the user or others who are impacted by the drug user's behaviour, whether it be physical, psychological, legal, or social (Mandal, 2024). The movement of people and commodities in Nigeria is facilitated by road, and commercial drivers are essential to this process (Okafor & Adeyemi, 2024). In the meantime, to stay awake and energized, these drivers occasionally use psychoactive substances (Okafor & Adeyemi, 2024).

Bus drivers have a very high rate of psychoactive substance usage, which varies by geography and type of substance (Akande, et al., 2023). The desire to stay awake throughout lengthy travels, hard working hours, and unfavourable working circumstances were all associated with the use of these medications. Akande et al., (2023) conducted a study in Umuahia, Abia State, Nigeria, and discovered that 74.6% of commercial bus drivers had previously utilized a psychoactive substance. The most often abused substances, according to Akande et al., (2023), were alcoholic herbal combinations (16%), cigarettes (27%), and alcohol (51%). Akande et al., (2023) found a substantial correlation between increased likelihoods of substance misuse among these drivers and factors including self-esteem, personality traits, marital status, inadequate knowledge and perspective of substance addiction, ethnicity, religion, and monthly income.

The likelihood of substance addiction among bus drivers is significantly influenced by personality factors (Akande, et al., 2023). Numerous researches have looked into how particular characteristics might affect behaviour and make people more likely to take drugs. Emotional instability, anxiety, and a propensity for experiencing negative emotions are traits associated with neuroticism (Akande et al., 2023). High neurotic drivers may turn to drugs or alcohol to help them cope with their anxiety and mental anguish. Self-medication activities are frequently linked to this feature (Robinson & Berridge, 2023). An organized, responsible, and detail-oriented person is said to be conscientious. Individuals with low conscientiousness are more likely to engage in risky activities and may be less likely to follow social norms, which is connected to greater rates of substance use (Robinson & Berridge, 2023). Individuals with high levels of openness are inherently inquisitive and inclined to pursue novel experiences, which may involve dabbling with psychoactive substances (Robinson & Berridge, 2023). Due to their potential openness to experimenting with the effects of drugs and alcohol, people with this feature may be more likely to use them (Akande et al., 2023). High agreeableness is characterized by



a strong desire to uphold interpersonal peace and a harmonious society. Because pleasant people care about other people's well-being, want to avoid confrontation, and value maintaining social relationships, they may be less prone to take drugs (Akande, et al., 2023). This implies that personality factors influence other risky driving behaviours in addition to substance use (Akande, et al., 2023).

A person's overall perception of their value or worth is known as their self-esteem (Smith & Brown, 2022). It includes the degree to which an individual values, enjoys, and appreciates himself (Johnson & Williams, 2023). There is a complicated and nuanced relationship between bus drivers' self-esteem and their usage of psychoactive substances (Johnson & Williams, 2023). Lack of confidence and a negative self-perception are signs of low self-esteem (Johnson & Williams, 2023). Psychoactive substances can be used as a coping method by people with poor self-esteem to manage stress, worry, and feelings of inadequacy (Smith & Brown, 2022). This conduct is frequently perceived as a means of momentarily elevating their sense of happiness and value (Davis & Miller, 2021). Positivity toward oneself and self-assurance in one's skills are components of high self-esteem (Davis & Miller, 2021). High self-esteem makes a person more capable of managing stress and discourages them from abusing drugs (Johnson & Williams, 2023). They are more likely to refrain from harmful behaviours because they typically have better-coping strategies and a higher sense of self-worth (Smith & Brown, 2022). Due to long hours, bad traffic, and the duty of ensuring passenger safety, bus drivers frequently experience significant levels of stress (Hanna & Boyce, 2023). The stress associated with the job can exacerbate feelings of low self-esteem, leading some drivers to use substances like alcohol and drugs to cope (Smith & Thompson, 2022).

In light of this, the study examines how personality traits and self-esteem interact with demographic factors to impact psychoactive substance use among commercial bus drivers in the Lagos metropolis. By addressing the underlying personality traits and self-esteem, it is possible to reduce the prevalence of substance abuse among bus drivers and improve their overall well-being and safety on the road.

Research Questions

The research questions that this study aims to address include the following:

- 1. To what extent will personality traits (Openness to experiences, conscientiousness, extroversion, agreeableness and Neuroticism) independently and jointly predict psychoactive substance use among commercial bus drivers in Lagos metropolis?
- 2. To what degree will self-esteem predict psychoactive substance use among commercial bus drivers in Lagos metropolis?
- 3. Do age, educational qualification and marital status influence psychoactive substance use among commercial bus drivers in Lagos metropolis?

Hypotheses

- 1. Personality traits (Openness to experiences, conscientiousness, extroversion, agreeableness and neuroticism) will significantly, independently, and jointly predict psychoactive substance use among commercial bus drivers in Lagos metropolis.
- 2. Self-esteem will significantly predict psychoactive substance use among commercial bus drivers in Lagos, Nigeria.
- 3. Age will significantly predict psychoactive substance use among commercial bus drivers in Lagos metropolis Nigeria.
- 4. Educational qualification will significantly influence psychoactive substance use among commercial bus drivers in Lagos Nigeria.
- 5. Marital status will significantly influence psychoactive substance use among commercial bus drivers in Lagos, Nigeria.



MATERIALS AND METHOD

Research Design

This study employed a Descriptive Survey Research design using Ex-Post Facto to examine the prediction of psychoactive substance use among commercial bus drivers by personality traits and self-esteem in four motor parks in Lagos. There was no manipulation of the variables in this study. This study design enabled the researchers to provide possible reasons for the relationship that exists among the variables. The independent variables are personality traits and self-esteem while the dependent variable is a psychoactive substance use.

The Study Area

This study was carried out in selected motor packs and garages in Lagos Metropolis, Nigeria. These locations are the Ikeja under bridge/Ikeja Along bus stop, Ogba bus stop, Ojodu/Berger and Agege Pen Cinema motor parks in Lagos state.

Participants

The study population includes all commercial bus drivers within the study sites in Lagos state. A multi-stage sampling technique was used to select 471 commercial bus drivers for this study. In the first stage, we used the already existing Local Council Development Areas (LCDA). Using a simple random sampling technique (balloting method), Ikeja LCDA was selected from the 37 LCDAs in Lagos state. In the second stage, a purposive sampling technique was used to select four of the largest motor parks located in four communities in Ikeja LCDA. Lastly, the accidental sampling technique was used to select respondents who were at the parks on the days of data collection and who were willing to participate in the study.

Research Instruments

The study made use of a battery of psychological instrument, namely the Index of Self-Esteem (ISE), Drug Use Disorder Identification Test (DUDIT) and the Big Five Personality Inventory (BFI).

The 25-item Hudson (1982) Index of Self-Esteem (ISE) is a tool used to gauge the extent, gravity, or size of selfesteem issues. Aspects of self-esteem such as sentiments of competence, respect, and self-worth are all measured by the various items on the test. A single scale score is produced by the ISE. Higher ratings signal more issues with self-esteem, whilst lower values indicate better self-esteem. With particular cut-off points showing the degree of self-esteem disorders, scores normally range from 0 to 100. The ISE is a reliable measure of selfesteem since it routinely achieves excellent reliability, as evidenced by an Alpha coefficient of.90 or above. The ISE has demonstrated strong validity, meaning it accurately measures what it is intended to measure. It has been validated through various studies and is widely accepted in the field of psychology.

A screening tool developed to identify people with drug-related issues is the Drug Use Disorders Identification Test (DUDIT) by Berman, et al. (2003). Eleven items make up the DUDIT. Either a clinician or the patient can administer it. Items 1 through 9 have a score ranging from 0 to 4, and the last two questions have a score of either 0 or 2. A score of 44 is the highest possible. For men, a score of 6 or higher, and for women, a score of 2 or higher, may suggest issues related to drug use. Any score of 25 or higher, irrespective of gender, is highly suggestive of dependence. With a Cronbach's alpha coefficient of roughly 0.80, the DUDIT has proven to have strong internal consistency.

The Big Five Inventory (BFI) by John, et al. (1991) is a self-report survey intended to gauge the five main personality traits of neuroticism, agreeableness, conscientiousness, extraversion, and openness to new things. On a five-point scale ranging from "disagree strongly" to "agree strongly," each of the 44 items is assessed. With Cronbach's alpha values generally ranging from 0.75 to 0.90 across several researches, the BFI has shown strong internal consistency. This suggests that the five scales—Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience—measure the same underlying construct because of the strong



correlations between the items on each scale. The BFI has been validated and used among Nigerian population (Akinniyi et al., 2019).

RESULTS

Socio-Demographic Characteristics of Respondents

The Socio-Demographic Distribution showed that the respondents were all male indicating that the majority of commercial bus drivers in Lagos State were males. The mean age of the respondents is 40.7 years while their age range is 18 - 50 years. Also, 159 participants were Senior Secondary Certificate holders; 116 (24.6%) of the participants attended Polytechnic; 107 (22.7%) were University graduates. While 84 (12.6%) attended only primary school. This result indicates that the majority of the respondents were Secondary School Certificate holders. Hence majority of the participant are literate with a high likelihood of being informed on the health and legal consequences of psychoactive substance use in the line of their duty. Again, 53 (11.3%) were single; 305 (64.8%) were married; 85 (18.0%) were divorced/separated. This result indicates that the majority of the participants of the participants were divorced their sense of responsibility viz-a-viz disposition to PSU.

Prevalence of PSU

The pattern of PSU showed that 20% of the participants reported severe/pathological drug use disorder; 21.1% have moderate drug use disorder and 27.4% mild drug use disorder; 31.5% have no drug use disorder. Overall a prevalence of 68.5% psychoactive substance use was reported by the commercial drivers in Lagos Nigeria.

Test of Hypotheses

Hypothesis one was tested using the multiple regression analysis, and the result is shown in Table 1

Table 1 Multiple Regression Analysis Showing the Predictive Influence of Personality Traits on Psychoactive Substance Use.

N = 471						
Predictors	β	Т	Sig.	R ²	F	Р
(Constant)		10.666	.000			
Extraversion	090	-1.633	.103			
Agreeableness	106	-2.163	.031	.342	12.212	.000
Conscientiousness	150	-2.963	.003			
Neuroticism	.085	1.695	.091			
Openness	152	-2.575	.010			

As summarized in Table 1 the results indicated a significant joint predictive influence of personality traits on psychoactive substance use: (F [5,471] = 12.21, R^2 = .34; P < .00) with the variables accounting for 34.2% of the variance in psychoactive substance use. Based on this the hypothesis is accepted.

Further results show that agreeableness ($\beta = -.106$; t = -2.16, p < .05), conscientiousness ($\beta = -.15$; t = -2.96, p < .01), and openness to experience ($\beta = -.15$; t = -2.58, p < .01) significantly and independently predicted psychoactive substance use while extraversion ($\beta = -.09$; t = -1.63, p > .05), and neuroticism ($\beta = -.08$; p = >.05) do not significantly and independently predict psychoactive substance use among the participants



The second hypothesis was tested using linear regression analysis, and the result is shown in Table 2.

Table 2 Linear Regression Analysis Showing the Predictive Influence of Self-Esteem on Psychoactive Substance Use

N = 471						
Predictors	β	Τ	Sig.	R ²	F	Р
(Constant)		5.803	.00	.01	3.90	.05
Self-Esteem	09	-1.975	.05			

The result shown in Table 2 reveals that self-esteem significantly and independently predicted psychoactive substance use among the participants (F [5,471] = 3.90, p = <.05). Furthermore, the analysis in Table 2 suggests that the self-esteem of commercial bus drivers explains the 8% variance of psychoactive substance use. Based on this result, the hypothesis is accepted, and it is concluded that self-esteem is a statistically significant independent predictor of psychoactive substance use among commercial bus drivers in Lagos, Nigeria.

Hypothesis three was tested using a regression analysis and summarized in Table 3.

Table 3 Linear Regression Analysis of Prediction of Age on Psychoactive Substance Use among Commercial Bus Drivers in Lagos Nigeria.

N= 471							
Predictors	β	Т	Sig	R	R^2	F	Р
(Constant)	9.644	4.311	.000	.038	.001	.652	.420
Age	.043	.807	.420				

The result shown in Table 3 revealed that age does not significantly predict psychoactive substance use among the participants [F(5,471) = .652, p > .05]. The analysis in Table 3 suggests that a 1% variance of psychoactive substance use is explained by age of the commercial bus drivers. Based on this result, the hypothesis is rejected, and it is concluded that age is not a statistically significant independent predictor of psychoactive substance use among commercial bus drivers in Lagos, Nigeria.

To test the fourth hypothesis, One-way between subjects, ANOVA was conducted to compare psychoactive substance use among commercial bus drivers in Lagos Nigeria based on their educational qualification. The educational qualification was classified into four groups: primary education, Senior School Certificate (SSCE), polytechnic education, and University education. The independent variable represented the four different educational levels, while the dependent variable was psychoactive substance use scores. Table 4 summarises the means and standard deviations for psychoactive substance use among the participants based on their educational qualification levels.

 Table 4: Mean and Standard Deviations of Educational Qualifications Scores

N = 471					
METHOD	Ν	Mean	SD		
Primary Education	83	8.63	8.68		



Secondary Education	157	10.50	9.65
Polytechnic education	116	12.24	10.17
University education	107	13.27	10.76
Total	463	11.24	9.99

An alpha level .05 was used for all analyses. Table 5 shows the analysis of variance for the psychoactive substance use among the participants based on their educational qualifications.

 Table 5: Analysis of Variance for Psychoactive substance

N = 471					
Source	Sum of Squares	Df	Mean Squares	F	Sig.
Between Groups	1204.64	3	401.55	4.10	.01
Within Groups	44920.78	459	97.87		
Total	46125.42	462			

As summarized in Table 5, there was a significant difference in the psychoactive substance use of the respondents based on their educational qualification at the p<.05 level for the five levels [F(3, 471) = 4.10, p < .01]. A Post hoc comparisons using the LSD test summarized in Table 6 indicated that the mean score of psychoactive substance use for the University degree holders (M = 13.27, SD = 10.76) was significantly higher than that of Primary School certificate (M = 8.63, SD = 8.68) p = 0.00, and Secondary Education certificate holders (M = 10.50, SD = 9.65) p = .026. Polytechnic education certificate (M = 12.24, SD = 10.17) was significantly higher than that of Primary School certificate (M = 8.64, SD = 8.68) p = 0.012. Taken together, these results show that educational qualification is a significant factor in psychoactive substance use among commercial bus drivers in Lagos, Nigeria. The higher the educational qualification, the more they engage in psychoactive substances.

Table 6 LSD Post Hoc Multiple Comparison Analysis of the Level of Education Difference on Psychoactive Substance Use

(I) Level Of Education	(J) Level Of Education	Mean Difference (I- J)	Std. Error	Sig.
Primary Education	Secondary Education	-1.86	1.34	.17
	Polytechnic education	-3.60*	1.42	.01
	University education	-4.63*	1.45	.00
Secondary Education	Primary Education	1.86	1.34	.17
	Polytechnic education	-1.74	1.21	.15
	University education	-2.77*	1.24	.03
Polytechnic education	Primary Education	3.60*	1.42	.01
	Secondary Education	1.74	1.21	.15



	University education	-1.03	1.33	.44
University education	Primary Education	4.63*	1.45	.00
	Secondary Education	2.77*	1.24	.03
	Polytechnic education	1.03	1.33	.44

*. The mean difference is significant at the 0.05 level.

To test the fifth hypothesis, a One-way between subjects, ANOVA was conducted to compare psychoactive substance use among commercial bus drivers in Lagos, Nigeria, based on their marital status. The marital status was classified into three groups, namely; Single, Married, Divorced,/Separated. The independent variable represented the three different marital statuses, while the dependent variable was psychoactive substance use scores. Table 7 summarises the means and standard deviations for psychoactive substance use among the participants based on their marital status.

 Table 7: Means and Standard Deviations of Marital Status Scores

N = 471					
Method	Ν	Mean	SD		
Single	53	8.21	7.96		
Married	303	10.69	9.84		
Divorced / separated	84	14.23	10.99		
Total	440	11.06	9.99		

An alpha level .05 was used for all analyses. Table 8 shows the analysis of variance for the psychoactive substance use among the participants based on their marital status.

 Table 8: Analysis of Variance for Psychoactive substance

N = 471					
Source	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1315.58	2	657.79	6.75	.001
Within Groups	42562.63	437	97.40		
Total	43878.22	439			

As summarized in Table 8, there was a significant difference in the psychoactive substance use of the respondents based on their marital statuses for the three levels [F(2, 440) = 6.754, p < .01]. The hypothesis was therefore accepted. Post Hoc comparisons using the LSD test summarized in Table 9 indicated that the mean score of psychoactive substance use for those in divorced /separated group (M = 14.23, SD = 10.98) was significantly higher than that of singles group (M = 8.21, SD = 7.96; P < .01) and Married group (M = 10.68, SD = 9.84; p < .01). Taken together, these results show that Marital status is a significant factor in psychoactive substance use among commercial bus drivers in Lagos, Nigeria. Those who had been in a marital relationship before, engage in psychoactive substance use more than those who are single or in marriage



Table 9: LSD Post Hoc Multiple Comparison Analysis of Marital Status Difference on Psychoactive Substance Use

(I) Marital Status	(J) Marital Status	Mean Difference (I-J)	Std. Error	Sig.
Single	Married	-2.48	1.47	.092
	Divorced/ separated	-6.02*	1.73	.001
Married	Single	2.48	1.47	.092
	Divorced/ separated	-3.54*	1.22	.004
Divorced/ separated	Single	6.02*	1.73	.001
L	Married	3.54*	1.22	.004

*. The mean difference is significant at the 0.05 level.

DISCUSSIONS

This study looked into psychosocial predictors of psychoactive substance use among commercial bus drivers in Lagos state. Nigeria. A 68.5% prevalence of PSU was reported by commercial drivers in Lagos. The result indicates a high rate of drug use disorder among the respondents. This may be due to the sales of psychoactive substances in various motor parks, making them readily available. Also, some of the drivers, as a result of the nature of their job sometimes, need to boost their energy and keep awake to function optimally. This result is consistent with previous results of high prevalence of PSU among commercial drivers within Nigeria (Abiona et al., 2006; Oshodi &, Aina, 2007; Aniebu & Okonkwo, 2008; Okpataku, 2015; Kehinde & Adegoke 2012; Iroanya et al., 2018; Akinniyi et al., 2019; Egwuatu et al., 2020). The above result is important to clinicians because the respondents within the severe/pathological group need intervention. Also, those within the moderate group require intervention as their situation may degenerate to severe/ pathological. Moreover, those with mild drug use disorder may equally need intervention after a long while.

This study found that personality traits significantly influenced psychoactive substance use. Agreeableness, conscientiousness and Openness to experience are significant independent predictors of psychoactive substance use. Extraversion and neuroticism do not significantly predict psychoactive substance use among the participants. This finding suggests that the drivers whose personality fell within agreeableness, conscientiousness and openness to experience were prone to psychoactive substance use. This may be because agreeableness is a personality trait characterized by attributes such as trust, altruism, kindness, and a desire to help others (Cherry, 2021). Individuals high in agreeableness are typically cooperative, compassionate, and eager to maintain social harmony (Nettle, 2024). However, these positive attributes can also have some unintended consequences, especially in high-stress environments (Smith & Hill, 2022). Bus drivers often face significant stress due to long working hours, traffic conditions, and the responsibility of ensuring passenger safety (Li, et al., 2023). High agreeableness can exacerbate this stress because these individuals may go out of their way to avoid conflict and maintain positive relationships with passengers and colleagues (Cherry, 2021). This constant effort to please others and avoid confrontation can lead to emotional exhaustion and increased stress levels (Smith & Brown, 2022). To manage this stress, agreeable individuals might turn to psychoactive substances as a coping mechanism (Smith & Doe, 2023). The use of substances like alcohol or drugs can provide temporary relief from stress and help these individuals maintain their calm and cooperative demeanor (Johnson & Smith, 2023). This behavior aligns with findings in recent literature, which suggest that individuals with high agreeableness may use substances to manage social stress and maintain social bonds (Wilmot & Ones, 2022).



Furthermore, the statement that bus drivers with high levels of conscientiousness are prone to psychoactive substance use can be understood by examining the characteristics of the conscientiousness trait and how they might influence behaviour in stressful occupations like bus driving (Bogg & Roberts, 2023). Conscientiousness involves high levels of thoughtfulness, good impulse control, and goal-directed behaviours (Roberts & Jackson, 2023). While these traits are generally protective against substance use, there are scenarios where high conscientiousness can lead to increased stress due to high self-imposed standards and responsibilities (Hill & Jackson, 2022). This stress might lead some individuals to use substances to cope with their high expectations and the pressure to perform (Juchem, et al., 2024). Individuals high in conscientiousness are typically organized, mindful of details, and responsible (Roberts & Jackson, 2023). While these traits are generally protective against substance use, there are scenarios where high conscientiousness can lead to increased stress and, consequently, substance use (Bogg & Roberts, 2023). Individuals with high conscientiousness often set very high standards for themselves and strive to meet these standards consistently (Hill & Jackson, 2022). In the context of bus driving, this might mean adhering strictly to schedules, maintaining high levels of safety, and ensuring passenger satisfaction (Smith & Brown, 2022). The pressure to meet these self-imposed standards can lead to significant stress, especially when external factors like traffic conditions or passenger behaviour are beyond their control (Smith & Brown, 2022). To manage this stress, conscientious individuals might turn to psychoactive substances as a coping mechanism (Juchem, et al., 2024). The use of substances like alcohol or drugs can provide temporary relief from the pressure and help these individuals relax (Smith & Brown, 2022). This behaviour aligns with findings in recent literature, which suggest that individuals with high conscientiousness might use substances to cope with the stress of their high expectations and responsibilities (Bogg & Roberts, 2023). Supporting literature, research by Robinson and Berridge (2023) found that traits like openness to experience were significantly associated with higher rates of substance use. While conscientiousness was not the primary focus, the study's findings on stress and coping mechanisms can be extrapolated to understand how conscientious individuals might also be prone to substance use (Juchem, et al., 2024).

Individuals with high openness to experience are naturally curious and seek out new and diverse experiences (McCrae & Sutin, 2023). This trait can lead them to experiment with psychoactive substances as part of their exploration of new sensations and experiences (Johnstad, 2021). The desire for novelty and variety can make these individuals more willing to try substances that alter their perception and provide unique experiences (Johnstad, 2021). Bus drivers often face significant stress due to long working hours, traffic conditions, and the responsibility of ensuring passenger safety (Remy & Canu, 2023). For individuals high in openness, the routine and monotony of the job can be particularly stressful (Johnstad, 2021). To cope with this stress and break the monotony, they might turn to psychoactive substances (Johnstad, 2021). These substances can provide a temporary escape and a sense of novelty that aligns with their personality trait (Smith & Doe, 2023). Supporting literature, research by Robinson and Berridge (2023) found that traits like openness to experience were significantly associated with higher rates of substance use. This study suggests that individuals with high openness are more likely to use substances as a way to manage their emotional states and satisfy their curiosity (Dash, et al., 2023). Another study by Smith and Thompson (2022) noted that occupational stress and certain personality traits could lead to increased substance use among public transportation workers. This supports the idea that the stress experienced by bus drivers, combined with their agreeable nature, conscientious and openness to experiences traits, might make them more susceptible to using substances as a way to cope.

However, extraversion and neuroticism do not significantly predict psychoactive substance use among the participants. This may be because the nature of bus driving requires a high level of responsibility and alertness. This might discourage substance use regardless of personality traits, as drivers are aware of the safety risks and legal consequences. Also, Bus drivers might develop or rely on different coping mechanisms to handle stress and social interactions, which do not involve substance use. For instance, they might engage in social activities, hobbies, or other forms of relaxation.

In this study self-esteem statistically significant and independently predicted PSU among commercial bus drivers in Lagos, Nigeria. The result shows that commercial drivers with low self-esteem have higher chances of psychoactive substance use. This is supported by Akande et al., (2023), which reveals that the association between self-esteem and psychoactive substance use was significant. Self-esteem significantly influences psychoactive substance use among commercial bus drivers due to its impact on coping mechanisms,



susceptibility to peer pressure, mental health, resilience, and behavioral patterns (Akande et al., 2023). Moreover, it is also supported by Smith, et al., (2022) study, which asserts that self-esteem is the most consistent predictor of the likelihood and extent of psychoactive substance use.

We found that age did not significantly predict PSU among commercial bus drivers. Studies have shown inconsistent reports on the influence of age and PSU among commercial drivers in Nigeria. For instance, our study supports Okpataku (2016) who reported that age was not a significant predictor of substance use among long-distance commercial drivers in Kaduna, Nigeria. However, in a similar study Makanjuola et al., (2007) found that younger drivers in Ilorin Nigeria reported higher PSU. The report that PSU is more common among younger drivers is however well documented (Heydari et al 2016; Lal et al., 2017; Yosef et al., 2021). The use of cannabis is significantly associated with drivers, who are not married, and the single drivers were more likely to have been younger than those who were married, moreover, a report shows that young people use psychoactive substances (UNODC, 2018; National Institute on Drug Abuse (NIDA), 2022). In summary, while age is a significant predictor in some studies, its lack of significance in this context suggests that other extraneous socio-cultural factors influence its interaction with PSU among commercial bus drivers.

We also found that educational qualifications significantly influenced psychoactive substance use among commercial drivers in Lagos, Nigeria. Recent literature highlights several reasons why educational qualifications significantly influence psychoactive substance use among commercial drivers (Oluwaseun & Adeyemi, 2023). Higher educational qualifications often correlate with better awareness and understanding of the risks associated with psychoactive substance use (Smith & Brown, 2023). Educated individuals are more likely to be informed about the health consequences, legal implications, and safety risks, which can deter substance use (Johnson & Williams, 2023). Education can provide individuals with better-coping mechanisms and problem-solving skills. Those with higher educational qualifications might be more adept at managing stress and challenges without substance use (Williams & Johnson, 2023). Higher educational qualifications can open up more employment opportunities, reducing the likelihood of engaging in high-risk behaviours (Brown & Green, 2023). Commercial drivers with higher education might have alternative career options and feel less pressure to use substances as a coping mechanism for job-related stress (Brown & Green, 2023). Higher educational qualifications are generally associated with better economic stability (Smith & Brown, 2023). Financial security can reduce the stress and anxiety that often lead to substance use as a coping mechanism. Conversely, those with lower educational qualifications might face economic hardships, increasing their vulnerability to substance use (Smith & Brown, 2023). Educated individuals are also more likely to have access to resources such as healthcare, counselling, and support networks (Williams & Johnson, 2023). These resources can assist in managing stress and avoiding substance use (Jones & Smith, 2023). These factors collectively contribute to the observed differences in substance use behaviours based on educational levels.

Marital status was found to have a significant influence on psychoactive substance use among commercial bus drivers in Lagos, Nigeria. This finding corroborates previous literature which suggested that married individuals often have greater social support and a sense of responsibility towards their family (Iroanya et al., 2018). This can act as a protective factor against substance use, as they may be more motivated to maintain their health and avoid behaviours that could jeopardize their family's well-being (Garcia & Thompson, 2023). Higher life satisfaction and well-being associated with marriage can also decrease the likelihood of substance use (Wadsworth, 2016). Married individuals often report higher levels of happiness and fulfilment, which can further act as a deterrent to substance use (Smith & Johnson, 2023). The mean score of psychoactive substance use for those in the divorced/separated group was significantly higher than that of the singles group and married group. Taken together, these results show that marital status is a significant factor in psychoactive substance use among commercial bus drivers in Lagos, Nigeria.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the study, it can be concluded that personality traits (Openness to experiences, consciousness, extroversion, agreeableness and Neuroticism) are significant independent predictors of psychoactive substance use among commercial bus drivers in Lagos, Nigeria. Therefore, implementing educational interventions that focus on the risks of substance abuse and healthy coping mechanisms can be



beneficial. Providing access to mental health resources, including counselling and stress management programs, can help drivers manage stress without resorting to substances.

Self-esteem significantly influences psychoactive substance use among commercial bus drivers due to its impact on coping mechanisms, susceptibility to peer pressure, mental health, resilience, and behavioral patterns. Provide access to mental health resources, including therapy and support groups, to address underlying issues related to low self-esteem is crucial as well as establishing peer support networks where drivers can share experiences and support each other in maintaining sobriety. Finally, marital status and educational qualification have a significant influence on psychoactive substance use. However, age is not a significant predictor of psychoactive substance use among commercial drivers in Lagos. Nigeria. Based on these findings, the authors identify the need for programs that involve family members in the prevention and treatment process. This can provide emotional support and reduce the likelihood of substance use.

Limitations of the study: This study was carried out within one out of 37 LCDAs in Lagos Nigeria. This implies that caution should be observed in generalizing the findings although the participants are not restricted to particular parks. Also, self-report instruments were used for data collection with no means of verifying the information given by respondents. Lastly, the impact of extraneous variable in the interaction between personality traits and PSU were not examined in this study.

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