

PEER INFLUENCE AND SELF-ESTEEM AS PREDICTORS OF SUBSTANCE ABUSE AMONG SECONDARY SCHOOL ADOLESCENTS IN NIGERIA

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Abstract

This study examined the relationship between peer influence and self-esteem on substance abuse among senior secondary school adolescents in Ovia North-East, a Local Government Area of Edo State, Nigeria. Three research questions were raised with their corresponding hypotheses formulated and tested at 0.05 alpha level of significance. This research adopted the correlational survey research design. The population comprised 11,985 students in both public and private senior secondary schools in Ovia North-East, a Local Government Area of Edo State. Simple random sampling was used and a sample of 450 students were selected. The research instrument was a questionnaire entitled 'Substance abuse, Peer influence and Self-esteem Questionnaire'. Adapted from the 'Drug Use Questionnaire' (DAST-20) by Harvey A. Skinner (1982); 'Peer Influence, Aggressive behaviour and Attitude to Vandalism Survey Scale', and 'Parenting Styles and Self-Esteem Questionnaire'. The data was analysed using linear regression. The findings revealed that both peer influence and self-esteem are significant predictors of substance abuse among senior secondary school adolescents. It is therefore recommended that secondary schools have a working counselling centre and professional counsellors who can offer group and individual counselling sessions for victims of substance abuse.

Keywords: *Adolescents; Peer Influence; Predictors; Self Esteem; Substance Abuse*

INTRODUCTION

Almost one out of every 20 adults in the world aged between 15 and 64 years are confirmed drug abusers. This results in over 29 million people worldwide suffering from drug abuse disorders (United Nations Office on Drugs and Crime, 2018). The United Nations Office on Drugs and Crime (United Nations Office on Drugs and Crime, 2012) estimates that in 2010, between 15.5 and 38.6 million people worldwide were problem drug users. The UN estimates that there are 28 million drug users in Africa and the rate of con-

sumption of illegal drugs is on the rise (Gowing et al., 2015). Substance abuse is now recognized as a significant public health problem worldwide (Akindipe and Aina, 2021; Anyanwu et al., 2017). It is not a new phenomenon but one that is growing at an alarming rate in nearly every country in the world, including Nigeria (Obiechina and Isiguzo, 2016). Nigeria also ranked as the highest consumer of cannabis and amphetamines in Africa (United Nations Office of Drugs and Crime, 2011). A study using a representative sample of Nigerian adults reported that a high proportion (58%) use alcohol, followed by tobacco

(17%), sedatives (14%), cannabis (3%), with other substances constituting the remaining 8% (Gureje et al., 2007). The majority of Nigerian youths abuse one form of substance or another, which they now depend on for carrying out their daily activities, albeit social, educational, or political activities (Gobir et al., 2017).

Today, substance abuse is a general problem in Nigeria, especially in areas where there is no adequate supervision. The researchers are of the opinion that students involved in drugs and substance abuse are affected socially, academically, and psychologically, while those who become addicts often become delinquents and join gangs, leading to their expulsion from school. Some drop out of school due to poor grades, others end up in hospital wards for rehabilitation, are convicted and incarcerated for crimes, or end up with mental problems.

Substance abuse refers to the harmful or hazardous use of psychoactive substances, which when ingested affect mental functions. These substances may include alcohol, tobacco, hallucinogens (alpha-methyltryptamine, ketamine, phencyclidine, D-lysergic acid), and illicit drugs (cocaine, heroin, marijuana, rohypnol) (Duru et al., 2017; WHO, 2014). Substance abuse is also considered a major contributor to suicide, homicide, poisoning, sexual assault, and the spread of infectious disease among the youth around the world (Salas-Wright et al., 2017). According to Danjuma et al. (2015), youths make use of pit toilet/soak away fumes (bio generic gas), gun powder, lizard dung (especially the whitish part), goskolo (a concoction of unimaginary harm), gadagi (a substance resembling tea leaves), robin blue powder cocktails, and pharmaceutical products such as Rohypnol, Codeine, Tramadol, and cough syrup mixed with soft drinks. These products are steadily increasing, and among youths are becoming more popular than alcohol.

Inadequate positive family relationships often lead to peer pressure playing a large role in an adolescent's psychological development. This makes them more vulnerable to try novel, previously prohibited and sometimes illicit experiences (Abikoye et al., 2014). A study by Ongwae (2016) established that most students take drugs due to peer pressure. Osman et al. (2016) investigated the prevalence and factors

related to substance abuse in 500 students of a higher education institution. A questionnaire was used for data collection and analysed. The study showed an overall prevalence of substance abuse of 31%. It identified 'curiosity' as the major factor which influences substance use, while peer pressure was identified as the main source of obtaining the substance. Pyrkosch et al. (2022) investigated the causes and effects of drug abuse in learners at senior high schools in Russia, with a sample of 13 head teachers, 104 instructors, and 780 learners. The results showed that learners misuse drugs because of easy availability, peer pressure, and to ease tension. Students that abuse drugs perform poorly academically, regularly miss out classes, lack discipline, and take or destroy school residential property.

Ekeng and Jacks (2019) conducted a study in India to investigate the influence of street trading/drug abuse and alcoholism on students' academic performance. A total of 2,500 street children and children involved in street trading were selected from three provinces. The results revealed that more than 70% of children involved in street hawking were also involved in alcoholism and drug abuse and perform poorly academically. The researcher also noted that most children who are into drug and substance use are either influenced by friends or do so to gain the courage for daily survival. Rowe (2012) conducted a study on substance and drug abuse among the learners in senior high schools in France. The research examined the impact of substances and drug abuse on social conduct and academic performance amongst the learners (and the mitigating measures). 102 learners and 15 main informants were involved in the study. The findings revealed that cannabis, miraa, alcohol, and cigarettes are the most overused substances by high school learners, and that peer pressure and poverty are a recipe for drug and drug abuse among learners.

Bahrami and Bahrami (2015a, b) described self-esteem as the degree to which a person values him/herself. This summation is based on the emotions, beliefs, feelings, and self-evaluation. It also refers to the overall emotional placement for self. Self-esteem is crucial in students' lives: those with high self-esteem are more likely to persist in the face of difficulties and are better equipped to cope with challenges that arise in their per-

sonal lives, unlike those with low self-esteem (Anyamene et al., 2016). Students' inability to cope and manage academic challenges and the quality of peer relationships seems to be affected by their level of self-esteem (Kanafani, 2014). Low self-esteem also leads to an adolescent isolating from his or her peers and having very little or no interaction with anyone else; giving them a lot of time for activities like substance abuse (Bartsch et al., 2017). In fact, low self-esteem is the most common justification of substance abuse as observed from statements made by clients referred for counselling in treatment centre (Wilkerson et al., 2017).

Farzad et al. (2014) investigated the predictive tendency to substance abuse on the basis of self-esteem and components of emotional intelligence. The finding revealed that there is a negative significant correlation between a tendency for substance abuse and self-esteem. In the same vein, in their study on socio-psychological factors, Dimas et al. (2021) studied substance use among senior secondary school students in the Federal Capital Territory (FCT) and Nasarawa State in Nigeria, using a cross-sectional research design in recruiting participants. Their results indicated no significant relationship between substance use and self-esteem. Studies such as those by Withya et al. (2007) have found significant negative correlations between self-esteem and substance abuse among adolescents (Zhou et al., 2018).

Objective of the study

The main objective is to examine the relationship between peer influence and self-esteem on substance abuse among senior secondary school adolescents in Ovia North-East, a Local Government Area of Edo State, Nigeria.

Research goals

1. Is peer influence a predictor of substance abuse among senior secondary school adolescents in Ovia North-East Local Government Area?
2. Is self-esteem a predictor of substance abuse among senior secondary school adolescents in Ovia North-East Local Government Area?
3. Are peer influence and self-esteem predictors of substance abuse among senior secondary school adolescents in Ovia North-East Local Government Area?

Sub-goals

1. Peer influence is not a significant predictor of substance abuse among senior secondary school adolescents in Ovia North-East Local Government Area.
2. Self-esteem is not a significant predictor of substance abuse among senior secondary school adolescents in Ovia North-East Local Government Area.
3. Peer influence and self-esteem are not significant predictors of substance abuse among senior secondary school adolescents in Ovia North-East Local Government Area.

MATERIALS AND METHODS

The researchers adopted a correlational survey design for the study. One dependent variable: substance abuse among senior secondary school adolescents, and the independent variables peer influence and self-esteem were included in the study.

Participants

The study population consisted of 11,985 students in both public and private senior secondary schools in Ovia North-East Local Government Area of Edo State. There were 6,060 students in public senior secondary schools in Ovia North-East Local Government Area of Edo State, from all 28 public senior secondary schools in Ovia North-East Local Government Area, comprising a total of 2,903 boys and 3,157 girls who enrolled in the 2021/2022 academic year. There were 5,925 students in private senior secondary schools, consisting of 3,015 boys and 2,910 girls from all 37 private senior secondary schools in Ovia North-East Local Government Area who enrolled for the 2021/2022 academic year – as shown in Table 1 and Appendix A, B.

Sample and sampling technique

The multistage sampling technique was adopted for this study. *Stage 1:* 3 public senior secondary schools and 3 private senior secondary schools in Ovia North-East Local Government Area were selected by the researcher, using simple random sampling technique. A list of 65 schools were written on a piece of paper, folded in a bag, and 3 schools were randomly selected from both the public and pri-

Table 1 – Total number of students in public and private senior secondary schools in Ovia North-East LGA of Edo State

School type	Total number of schools	Total number of boys	Total number of girls	Grand total
Public	28	2903	3157	6060
Private	37	3015	2910	5925
Total	65	5918	6,067	11985

Source: State Ministry of Education, Department of Planning and Statistics, Benin City, Edo State – Nigeria.

vate senior secondary schools for this study. *Stage 2:* A proportional sample of 75 students were drawn from each school, making a total

sample of 450 senior secondary students – as shown in Table 2 and Appendix A, B.

Table 2 – Public and private senior secondary schools selected as sample for the study

S/N	Name of schools	School type	Number of students
1	Army Day Secondary School, Isihior	Public	75
2	Okada Grammar School, Okada	Public	75
3	Ekosodin Secondary School, Ekosodin	Public	75
4	Wisdom Gate International College, Iduowina	Private	75
5	Excellence Group of School, Isihior	Private	75
6	Jubilee Academy Group of Schools, Isihior	Private	75
Total			450

Instrument

The study instrument was a questionnaire entitled 'Substance abuse, Peer Influence and Self-Esteem Scale'. Adapted from the 'Drug Use Questionnaire' (DAST-20) by Harvey A. Skinner (1982); 'Peer Influence, Aggressive Behaviour and Attitude to Vandalism Survey Scale', (PIAGAVSS) and 'Parenting Styles and Self-Esteem Questionnaire' (PSSEQ). From the Drug Use Questionnaire, the researcher adapted 11 items (items 1, 2, 3, 4, 5, 6, 9, 12, 15, 16 and 17). These items constituted the substance abuse scale. From the Peer Influence, Aggressive Behaviour and Attitude to Vandalism Scale, 7 items were adopted (item 1, 2, 3, 6, 7, 8 and 9) to form items 23–31 of the peer influence scale. From the parenting styles and self-esteem questionnaire, 9 items were adopted (items 1, 2, 3, 4, 5, 6, 7, 8 and 10) to form items 23–31 of the self-esteem scale. 7 items were generated by the researcher, making a total of 34 items. Items 1 to 11 elicit

information about substance abuse; items 12 to 22 elicit information about peer influence; and items 23 to 34 elicit information about self-esteem. Finally, the researchers specifically selected items from the three aforementioned instruments deemed necessary – and that were presumed to be of interest to the research questions raised.

RESULTS

Sub-goal one

Peer influence is not a significant predictor of substance abuse among senior secondary school adolescents in Ovia North-East Local Government Area of Edo State.

Table 3 shows R -value of 0.551 and R^2 -value of the prediction is 0.304 (30.4%). This means that the predicting variable of peer influence accounts for 30.4% of the variance in students' substance abuse. The table also

reveals an *F*-value of 195.567 and a *P*-value of 0.000; testing at alpha level of 0.05, the *P*-value is less than that alpha level so the null hypothesis which states that “peer influence is not a significant predictor of substance abuse

among senior secondary school adolescents” is rejected. Therefore, peer influence significantly predicts substance abuse among senior secondary school students.

Table 3 – Linear regression of peer influence and substance abuse among senior secondary school adolescents

Model	Sum of squares	Df	Mean square	<i>F</i>	Sig. (<i>P</i> -value)
Regression	3430.821	1	3430.821	195.567	0.000
Residual	7859.259	448	17.543		
Total	11290.080	448			

R = 0.551; *R*² = 0.304; Adjusted *R* Square = 0.302; Standard error = 4.18844.

Sub-goal two

Self-esteem is not a significant predictor of substance abuse among senior secondary school adolescents in the Ovia North-East Local Government Area of Edo State.

Table 4 shows *R*-value of 0.147 and *R*²-value of the prediction is 0.22 (2.2%). This means that the predicting variable of self-esteem accounts for 2.2% of the variance in substance abuse of students. The table also reveals an

F-value of 9.852 and a *P*-value of 0.002; testing at an alpha level of 0.05, the *P*-value is less than the alpha level so the null hypothesis that states “self-esteem is not a significant predictor of substance abuse among senior secondary school adolescents” is rejected. Therefore, self-esteem significantly predicts substance abuse among senior secondary school students.

Table 4 – Linear regression of self-esteem and substance abuse among senior secondary school adolescents

Model	Sum of squares	Df	Mean square	<i>F</i>	Sig. (<i>P</i> -value)
Regression	242.938	1	242.938	9.852	0.002
Residual	11047.142	448	24.659		
Total	11290.080	448			

R = 0.147; *R*² = 0.022; Adjusted *R* Square = 0.019; Standard error = 4.96576.

Sub-goal three

Peer influence and self-esteem are not significant predictors of substance abuse among senior secondary school adolescents in Ovia North-East Local Government Area of Edo State.

Table 5 shows a *R*-value of 0.554 and *R*²-value of 0.307 (30.7%) of variance in student substance abuse. This means that the predicting variables of peer influence and self-esteem account for 30.7% variance in stu-

dent substance abuse. The table also reveals an *F*-value of 98.871 and a *P*-value of 0.000; testing at an alpha level of 0.05, the *P*-value is less than the alpha level so the null hypothesis which states that “peer influence and self-esteem are not significant predictors of substance abuse among senior secondary school adolescents” is rejected. Therefore, peer influence and self-esteem significantly predict substance abuse among senior secondary school students.

Table 5 – Linear regression of peer influence, self-esteem, and substance abuse among senior secondary school adolescents

Model	Sum of squares	Df	Mean square	F	Sig. (P-value)
Regression	3462.663	2	1731.332	98.871	0.000
Residual	7827.417	447	17.511		
Total	11290.080	449			

$R = 0.554$; $R^2 = 0.307$; Adjusted R Square = 0.304; Standard error = 4.18461.

DISCUSSION

The findings revealed that peer influence significantly predicts substance abuse among senior secondary school students. This means that peer influence directly or indirectly predicts substance abuse among senior secondary school students. The finding lends credence to Ongwae (2016), who established that most students are driven to taking drugs by peer pressure. Osman et al. (2016) also found that substance abuse leads to theft and health problems, while peer pressure was identified as the main source of obtaining the substance. Subsequently, Pyrkosch et al. (2022) also established that learners misuse drugs due to ease of availability, peer pressure, and to ease tension. Ekeng and Jacks (2019) also corroborated these findings, with the researchers noting that most of the children are either influenced by their friends, or taking drugs/alcohol to build more courage for their daily survival. As practicing counsellors, the researchers are also of the view that peer pressure has a significant role in becoming accustomed to substance and drug abuse.

The findings also revealed that self-esteem significantly predicts substance abuse among senior secondary school students. This corroborates earlier studies by Bartsch et al. (2017) who found that low self-esteem leads to adolescents isolating from peers and having very little or no interaction with anyone else. This gives them time during which they may decide to become involved in activities like substance abuse. In fact, low self-esteem is the most common justification of substance abuse, as cited by the clients referred for counselling in treatment centre (Wilkerson et al., 2017).

These findings contradict the earlier studies by Chen et al. (2017), Dimas et al. (2021), and Zhou et al. (2018), who all found significant negative correlations between self-esteem and substance abuse among adolescents.

Finally, both peer influence and self-esteem significantly predict substance abuse among senior secondary school students. This assertion corroborates the findings from Ongwae (2016), Osman et al. (2016), Ekeng and Jacks (2019), and Pyrkosch et al. (2022). The researchers corroborated the finding that children are either influenced by their friends or start taking drugs/alcohol to build more courage for their daily survival. It also lends credence to the findings of Bartsch et al. (2017) and Wilkerson et al. (2017), who observed that low self-esteem leads to an adolescent isolating from his/her peers and having very little or no interaction with anyone else. During the increased time they have available, they may decide to become involved in activities like substance abuse.

CONCLUSION

The study has provided meaningful insight into the relationship between peer influence, self-esteem, and substance abuse among senior secondary school adolescents in Ovia North-East Local Government Area of Edo State, Nigeria. It has been concluded that peer influence, self-esteem, and the interaction of both peer influence and self-esteem significantly predicts substance abuse among senior secondary school students in Ovia North-East Local Government Area of Edo State, Nigeria.

Recommendations

Based on the findings of the study, we make the following recommendations:

1. Seminars should be organized for students on how to build and maintain healthy self-esteem, how to resist negative peer pressure, abstain from substance abuse, and be more focused and productive academically.
2. Secondary schools should ensure that they have a working counselling center and professional counsellors who can offer

group and individual counselling sessions for victims of substance abuse.

3. Government and non-government organizations should organize periodic sensitization and awareness programs on the dangers of substance abuse to secondary school adolescents through various media platforms.

Ethical aspects and conflict of interest

The authors have no conflict of interest to declare.

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APPENDIX A

Population of Public Senior Secondary School students who enrolled for 2021/2022 academic session in Ovia North East LGA of Edo State

Public schools	SS1			SS2			SS3			Grand total
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
A1	95	128	223	88	123	211	62	64	126	560
A2	179	199	378	117	121	238	67	70	137	753
A3	18	12	30	21	26	47	28	28	58	163
A4	17	20	37	8	12	20	10	8	18	75
A5	16	28	44	18	30	48	60	30	90	182
A6	68	59	127	75	75	150	39	53	92	369
A7	40	38	78	46	41	87	36	60	96	261
A8	51	79	130	88	90	178	60	66	127	434
A9	-	-	0	-	-	0	-	-	0	0
A10	10	10	20	15	10	25	10	12	22	67
A11	14	26	40	18	27	45	12	21	33	118
A12	-	-	0	-	-	0	-	-	0	0
A13	5	7	12	11	11	22	38	55	93	127
A14	19	21	40	17	18	35	36	28	66	129
A15	7	8	15	19	10	29	29	41	70	104
A16	150	140	290	120	145	265	108	107	215	770
A17	4	2	6	7	12	19	15	26	41	66
A18	30	41	71	68	70	138	65	83	148	362
A19	22	26	48	21	29	50	28	30	58	156
A20	-	-	0	-	-	0	-	-	0	0
A21	1	1	2	1	-	1	28	30	58	61
A22	20	25	45	22	18	40	10	15	25	97
A23	53	47	100	35	34	69	26	20	46	215
A24	12	18	30	24	26	50	35	45	80	160
A25	20	25	45	22	18	40	20	20	40	125
A26	43	20	63	45	32	77	70	89	159	299
A27	45	23	68	25	20	45	64	70	134	247
A28	13	17	30	18	25	45	32	55	87	160
Total	952	1024	1972	949	1022	1972	993	1136	2116	6060

APPENDIX B

Population of Private Senior Secondary School students who enrolled in 2021/2022 academic session in Ovia North East LGA of Edo State

Private schools	SS1			SS2			SS3			Grand total
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
B1	13	10	23	2	4	6	-	-	0	66
B2	18	12	30	7	13	20	-	2	2	67
B3	20	34	54	17	29	46	2	10	12	155
B4	26	17	43	18	25	43	13	13	26	57
B5	19	21	40	20	33	53	20	15	35	150
B6	7	5	12	6	6	12	1	3	4	52
B7	-	-	0	-	-	0	-	-	0	6
B8	21	16	37	14	25	39	20	3	23	122
B9	4	4	8	6	6	12	-	-	0	31
B10	22	29	51	19	31	50	41	22	63	126
B11	4	5	9	-	-	0	-	-	0	19
B12	21	29	50	22	31	53	41	42	83	146
B13	21	41	62	13	25	38	28	22	50	90
B14	42	38	80	32	35	67	40	31	71	279
B15	22	20	42	18	12	30	15	12	27	101
B16	3	4	7	3	3	6	-	-	0	23
B17	14	11	25	11	14	25	28	22	50	101
B18	10	11	21	9	5	14	7	5	12	73
B19	2	2	4	3	1	4	5	3	8	17
B20	6	3	9	14	12	26	28	32	60	69
B21	8	4	12	10	2	12	15	12	27	51
B22	14	10	24	10	8	18	13	15	28	61
B23	21	20	41	-	-	0	-	-	0	107
B24	27	20	47	15	16	31	40	38	78	188
B25	3	6	9	8	5	13	7	4	11	34
B26	15	9	24	17	18	35	14	12	26	76
B27	8	13	21	12	15	27	10	18	28	53
B28	-	-	0	-	-	0	-	-	0	61
B29	22	20	42	28	20	48	17	16	32	117
B30	8	6	14	6	5	11	9	7	16	69
B31	21	18	39	14	13	27	16	16	32	84
B32	3	4	7	-	-	0	-	-	0	33
B33	5	5	10	6	4	10	7	3	10	39
B34	10	5	15	10	11	21	8	8	26	47
B35	-	-	0	-	-	0	-	-	0	74
B36	-	-	0	-	-	0	-	-	0	48
B37	15	16	31	18	18	36	30	20	50	123
Total	476	467	943	390	443	833	475	406	881	5925