

## **SUBSTANCE ABUSE AND ALCOHOL DEPENDENCE AS CORRELATES OF SUICIDE IDEATION AMONG UNDERGRADUATES**

**Alex Igundunasse\* and Segun Medubi**

Department of Psychology, University of Lagos

\*Corresponding Author: aigundunasse@gmail.com

### **ABSTRACT**

This study examined substance abuse and alcohol dependence as correlates of suicide ideation among undergraduates in a university setting. A sample obtained through convenience sampling, comprised 150 participants who were largely undergraduates. The administered questionnaire contained the Modified Scale for Suicidal Ideation (MSSI), Alcohol Use Disorder Identification Test (AUDIT) and the Substance Abuse Scale (SAS). The results showed that there was a positive correlation between substance abuse and suicide ideation. It was also found that a positive correlation existed between alcohol dependence and suicide ideation. Nevertheless, there was no significant difference on suicide ideation score for male participants when compared to females. In conclusion, the findings were suggested that substance abuse and alcohol dependence were found to be most predictive factor for suicide ideation among the sample. The implications of these findings are further discussed and areas for further research suggested.

**Keywords:** Alcohol dependence, Substance abuse, Suicide ideation, Undergraduates

#### **Background to the study**

Recent research suggests that suicide behaviour is one of the major causes of death in the world (Martin, Dykxhoorn, Affi & Coleman, 2016). Nigeria as a country is not left out of this development and it is even said to be increasing (Adewuya, Ola, Coker, Atilola, Zachariah, Olugbile, *et al.*, 2016). Suicidal behavior often leads to suicide and this can be induced by suicide ideation (Nock, Millner, Joiner,

Gutierrez, Han, Hwang, *et al.*, 2018). At certain points in our lives we may have thought of taking our own lives in reaction to the situation at hand. Suicide ideation can be either active or passive. It is active when a series of steps or plans are taken to follow through. Suicide behavior always occurs in response to an event that one sees as overwhelming (Cheng, Chen, Lee, Yip & Yip, 2018)), such as the loss of a

special one, a fatal accident or financial curtailment as the case may be.

Robert (2008) categorized suicidal behavior into four: suicidal attempts, self-destructive acts, completed suicide and suicidal ideation. Robert suggests that suicidal attempts include suicidal action where the victim survived. But a self-destructive act is a behavior that may not lead to instant death but progressively leads to death with a long period such as drug abuse. While, completed suicide behavior is a behavior that actually results in the death of the victim and suicide ideation involves all visible communication and behavior such as the expression of the wishes to die in most cases. The concept of suicide ideation is the subject of the present study and its relation to substance abuse and drug abuse.

A pedestrian observer of undergraduates may observe that substance abuse and alcohol dependence are prevalent among undergraduates (Reyes-Portillo, Lake, Kleinman & Gould, 2018). According to Mba, (2010), alcohol dependence is a state of poisoning by excessive alcohol consumption. Robert (2008) argued that alcohol dependence is associated with hopelessness for prompting suicidal ideation. He opined that drunkenness might increase the feelings of pain, depression and a false sense of estimation and judgement.

Gender has been also one of the variables that are consistent with suicidal ideation (Evans, Hawton,

Rodham, & Deeks, 2005; Swahn & Bossarte, 2007)) reported that suicidal ideation is more common in adolescent girls than boys. Furthermore, Studies by Canetto (2002); Sefa-Dedeh & Canetto, (1999) showed that suicide ideation may be gender-linked. Chronic tension, marital conflict, inadequate communication, role conflicts are statistically reported to be associated with suicidal ideations more in women Pillary and Van der Veen (2001).

### **Statement of the Problem**

It is common knowledge that due to the lack of data on suicidal ideation among undergraduate students, it will only be plausible to suggest that this phenomenon does exist among these undergraduates. Mba (2010) believes that a culmination of several factors leads to these developments. For example, poor social welfare and lack of emotional support are important. In addition, lack of academic equipment and facilities, inadequate distribution of air, poorly built classrooms may easily distract students during lectures and all others are prevalent in the Nigerian educational sector. All and more could lead to suicidal behaviors, which comprises of suicide ideation. The fact still remains that the prevalence of suicidal rate cuts across age and work categories. Information on suicide and suicidal rate in Nigeria are disseminated through social media and newspapers but to the best of our knowledge, there is very little knowledge on this subject matter and how it relates to

undergraduates in a systematic study. This study seeks to fill this gap.

### **Purpose of the study**

This main purpose of the study is to examine substance abuse and alcohol dependence as a correlate of suicide ideation among undergraduate students and this can be achieved by the following:

1. To examine the prevalence of suicidal ideation among undergraduate's students
2. To examine the relationship between substance abuse and suicide ideation among undergraduate
3. To investigate the relationship between alcohol dependence and suicidal ideation among undergraduates
4. To examine gender differences on suicidal ideation among undergraduates

### **Theoretical framework**

Suicide ideation precedes suicide. According to Tsai, Lucas Sania, Kim and Kavachi (2014), suicidal ideation is an intra-psychic conflict and claimed a majority of the pain that suicidal people experience results from the unresolved conflict between the id, ego, and superego. Current literature on the concept of suicide and suicidal behavior in Nigeria is culturally limiting. Marecek (2001) suggested that suicidal thoughts incorporate a form of crisis which could be social like heartbreaks, dealing with disappointments from

someone or economic, school-related, family and work to name a few.

Sigmund Freud's in his formative work, "Beyond the Pleasure Principle", cited in Higgins (1997) abstracted the internal forces that encourage self-destruction. He suggested that the death and life drives were contrasting basic instincts. The life instinct was focused at reducing the tautness associated with subsistence needs. However, the death drive was focused at removing the tautness of life itself in an individual. Freud contended that the common goal of all creatures is to return to the dormancy of the inanimate world and that recurrence and coercion forms the foundation of all self-defeating behaviors. There has been good effort to demonstrate empirical evidence for psychodynamic constructions of suicide (Fowler, Hilsenroth, Groat, Biel, Biedermann & Ackerman, 2012). However, overall, the major inadequacy of psychodynamic theories is that they are mostly inappropriate for empirical testing. Other criticisms of psychodynamic theory center on the idea of self-destructiveness as an essential biological need of the human behaviour.

### **Empirical Review**

Jenna, (2014) examined the impact of substance use variables, educational factors, and depressive symptoms on suicidal ideation in a community-based sample of young adults. The finding revealed that suicidal ideation

diminishes given the right situation. The finding also showed significant association between suicidal ideation and depressive symptoms (Schaffer & Stanley, 2008). Mostly, the results suggest that short-term increases in marijuana use, heavy drinking and depressive symptoms may signal episodic increases in suicidal ideation, and there were unique findings based on educational status (Kaplow, Gipson, Horwitz, Burch & King, 2013). Studies on substance abuse in relations to suicidal ideation and attempt among young individuals revealed that substance abuse serves as a risk factor in suicidal attempt and ideation (Brent, Baugher, Bridge, Chen & Chiappetta 1999;). On the other hand, Alcohol dependence has been largely known as a positive prognosticator of suicidal ideation and suicidal behavior. In addition, the association between alcohol and suicide has been studied in many ways; for example, early age of alcohol initiation (see Wu, Hoven, Liu, Cohen, Fuller, & Shaffer, 2011) have all been related with suicidal ideations and behaviors. Based on the literature, the following research questions have emerged:

### **Research Questions**

1. Will there be a relationship between substance abuse and suicidal ideation among undergraduates?
2. Will there be a relationship between alcohol dependence and

suicidal ideation among undergraduates?

3. Will female students score higher on suicidal ideation when compared with male students?

### **Hypotheses**

1. There will be a significant positive relationship between substance abuse and suicidal ideation among undergraduate students
2. There will be a significant positive relationship between alcohol dependence and suicidal ideation among undergraduate students
3. Female students will significantly score higher on suicidal ideation when compared with male students

### **METHOD**

#### **Participants**

The sample for the study comprises 150 participants with 72 males (48%) and 78 females (52%). A convenience sampling technique was used to select participants for this study. Participants were all undergraduate students of the University of Lagos and the institution was the chosen due to proximity. This approach was used because it was the most plausible under the given research context.

#### **Instruments**

The questionnaires consisted in part the personal background section and three

standardized instruments. The first was the Modified Scale for Suicidal Ideation developed by Miller, Morman, Bishop, and Dow (1986). It was used to measure the extent to which participants were bordered with the thought of ending their life. This is a 12-item Likert scale, with responses ranging from "strongly agree" to "strongly disagree" for all items. The scale had a Cronbach's alpha reliability coefficient of .89. The second scale referred to as AUDIT was used to measure the extent of alcohol use. The Alcohol Use Disorders Identification Test (AUDIT) is a 10-item screening tool developed by the World Health Organization (WHO) to assess alcohol consumption, drinking behaviors, and alcohol-related problems. It was validated in a study drawing on patients from six countries. The scale had a Cronbach alpha reliability coefficient of .79. The third scale known as the Substance Abuse Scale was developed by Skinner (1982), modified and adopted in this study for data collection on student's substance abuse. The scale contains 20 items and it employed the use of a 5-point Likert scale ranging from SD (Strongly Disagree) to SA (Strongly Agree). The internal consistency coefficient of the

instrument was reported by the author to be .92.

### **Procedure**

The researchers in this study met with prospective respondent's in classrooms, hostel and library in the University of Lagos, Akoka campus. To be eligible to complete the questionnaire, it was sought from the prospective participants if they had experienced the use of alcohol in social, recreational or whatever circumstance for a period exceeding six months. It was also sought from the prospective participants if they have had any form of suicidal thought any point in time. If the answer was in the affirmative and after establishing some measure of rapport, the prospective participants were then asked to complete the questionnaire. Participants were assured of confidentiality and anonymity throughout the research process. Data handling and processing was done in conformity with the requirements of America Psychological Association (APA) style.

### **Design**

It is a descriptive survey research where data was gathered using the correlational design.

## **Results**

**Table 1: Mean and Standard Deviation of suicide ideation, substance abuse and alcohol dependence by gender.**

<b>Description</b>	<b>Number</b>	<b>Variables</b>	<b>Suicide ideation</b>		<b>Substance abuse</b>		<b>Alcohol dependence</b>	
			<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
<b>Gender</b>	72	Male	18.63	1.97	29.52	3.28	17.23	1.74
	78	Female	19.33	1.89	30.43	3.14	17.55	2.05

Table 1 shows the mean and standard deviation of suicide ideation, substance abuse and alcohol dependence based on gender. On suicide ideation, the result revealed female participants scored higher ( $M= 19.33$ ;  $SD=1.89$ ) than male participants ( $M= 18.63$ ;  $SD= 1.97$ ). On substance abuse, female participants recorded a higher mean score ( $M= 30.43$ ;  $SD=3.14$ ) than their male counterparts (29.52;  $SD=43.28$ ).

**Table 2.**

***Correlation analysis between substance abuse and suicide ideation.***

<b>Variables</b>	<b>Mean</b>	<b>SD</b>	<b>R</b>	<b>p</b>
1. suicide ideation	19.00	1.95	.239*	p<.05
2. Substance abuse	30.00	3.23		

Result is significant at  $p<0.05$

Table 2 shows the summary of correlation analysis between substance abuse and suicide ideation. Result shows significant “r” value of 0.239\* ( $p<0.05$ ). This result established the fact that there is a significant positive relationship between substance abuse and suicide ideation. Thus, hypothesis

Likewise, on alcohol dependence, there was no difference between male and female participants, male ( $M= 17.23$ ;  $SD= 1.74$ ) and female ( $M= 17.55$ ;  $SD= 2.05$ ).

**Hypothesis 1:** There will be a significant positive relationship between substance abuse and suicidal ideation among undergraduates

one, which state that there will be a significant positive relationship between substance abuse and suicide ideation is accepted. In order to determine the prediction of substance abuse on suicide ideation, regression analysis was calculated. The result is presented in Table 2.1.

**Table 2.1**

***Summary of Regression analysis showing the contribution of substance abuse to the prediction of suicide ideation.***

Variable	B	Beta	t	Sig.	R	R <sup>2</sup>	F-ratio	p
Substance abuse	.144	.239	.989	.05	.239	.057	.935	P<0.05

The result indicated that substance abuse significantly contributed to the variance in individual suicide ideation ( $\text{Beta} = .239$ ,  $t = 2.989$  at  $p < 0.05$ ). Independently, the variable yielded a significant coefficient of regression  $R^2 = .057$  ( $p < 0.05$ ). This shows that substance abuse accounted for 5.7% of

the observed variance in individual suicide ideation.

**Hypothesis 2:** There will be a significant positive relationship between alcohol dependence and suicidal ideation among undergraduate's students

**Table 3.**

*Correlational analysis between alcohol dependence and suicide ideation.*

Variables	Mean	SD	R	p
3. suicide ideation	19.00	1.95	.161*	p<.05
4. Alcoholism	17.40	1.91		

Result is significant at  $p < 0.05$

Table 3 shows the summary of correlation analysis between alcohol dependence and suicide ideation. Result shows significant "r" value of 0.161\* ( $p < 0.05$ ). This result established the fact that there is a significant positive relationship between alcohol dependence and suicide ideation. Therefore, the

hypothesis which stated that will be a significant positive relationship between alcohol dependence and suicide ideation was accepted. In order to determine the prediction of alcohol dependence on suicide ideation, regression analysis was computed. The result is presented in Table 3.1

**Table 3.1.**

*Summary of Regression analysis showing the contribution of alcohol dependence to the prediction of suicide ideation.*

Variable	B	Beta	t	Sig.	R	R <sup>2</sup>	F-ratio	p
Alcoholism	.165	.161	.989	.05	.161	.026	.955	p<0.05

The result indicated that alcohol dependence significantly contributes to the variance in student's suicide ideation (Beta= .161, t= 1.989, p<0.05). Independently, the variable yielded significant coefficient of regression R<sup>2</sup> = .026 (p<0.05). This shows that

alcohol dependence accounted for 2.6% of the observed variance in student suicide ideation.

**Hypothesis 3:** Female students significantly score higher on suicidal ideation compared to male students

**Table 4.**

*Descriptive statistics and t-test on the difference between male and female suicide ideation.*

Variable	Gender	N	Mean	SD	Df	T	p
Suicide ideation	Male	72	18.63	1.97	148	-2.200	>0.05
	Female	78	19.33	1.89			

p<0.05

From the table above, the mean score of the two groups shows that female participants scored higher on suicide ideation compared to male participants, mean of female participants is 19.33 and male participants is 18.63. This difference is statistically not significant at df =148, t= -2.200, p<0.05. The hypothesis which state that Female students significantly score higher on suicidal ideation compared to male students is thereby rejected.

## Discussion

The focus of this study was to examine substance abuse and alcohol

dependence as correlates of suicide ideation among undergraduate. The first research hypothesis was about the relationship between substance abuse and suicide ideation. The findings revealed that substance abuse correlated positively with suicide ideation. This meant that the more an individual abuses substance, the more the thought of killing oneself-increases. The finding is related to the work of Jenna (2014), which reported a significant association between suicidal ideation and depressive symptoms. The result suggested that short-term rises in heavy drinking, marijuana use, and depressive

symptoms might signal intermittent intensifications in suicidal ideation. Similarly, substance abuse serves as a risk factor in a suicidal attempt and ideation (Brent, Baugher, Bridge, Chen & Chiappetta, 1999). The finding also agrees with the work of Reyes-Portillo et al., (2018) who investigated the relationship among a socioeconomically diverse community sample of adolescents and alcohol dependence, as hypothesised in the second hypothesis. They reported that alcohol dependence comorbid with mood disorder conveyed an extraordinarily high risk for suicide. This finding supports earlier findings of Arria, et al., (2009) have all been connected with suicidal ideations and related behaviours.

The finding also revealed that there no significant difference between male and female on alcohol dependence. This meant that suicide ideation is not gender specific. Both male and female do engage in it also there is a pedestrian notion that males are more susceptible to alcohol dependence. However, the factors that predispose an individual to suicide ideation includes substance abuse and alcohol dependence as indicated in the finding of this study. The finding also agrees with Kaplow, et al., (2013) who observed that substance use or dependence was independently connected with an amplified risk of a suicide attempt in cases regarding males but not much on females. Similarly, Shaffer et al. (1996) had

found that substance abuse was prognostic only in males who had largely died by suicide. Based on the finding, we can conclude that the higher the level of substance abuse, the higher the likelihood of the suicidal ideation occurrence among undergraduates.

### **Implication of the study**

These findings have implications for all and sundry especially for the health of the growing young population. For psychologist and health professionals working with young people, the findings infer that examining the level of substance abuse and alcohol dependence is very important while assessing the suicidal risk among them. The findings are also relevant for suicide prevention workshops. Furthermore, anticipatory work can include offering more support to undergraduate about the benefits and dangers of drug misuse and heavy drinking as well as support on the importance of seeking help when substance use patterns intensifies. The present study serves as a first step in evolving an improved thinking of suicidal ideation especially in the early stage of adulthood.

### **Conclusion**

In conclusion, our study made a reasonable attempt at understanding the relationship between substance abuse in general and alcohol dependence in particular and how it can predispose people to suicide ideation. In plain terms, those who misuse drug or

alcohol are susceptible to suicide ideation and prospects of this scenario happening to any individual who indulges in these behaviours may be compounded by lifestyle, personality factor indeed the economic situation. Although our findings were not gender specific, we are inclined to suggest that males may be more prone to these tendencies due to environmental factors that allow for some level of male pervasiveness in the Nigerian culture. However, further research may explore this proposition a little further.

### **Limitations of the Study**

- i.The survey was restricted to undergraduate students in the University of Lagos.
- ii.The research was limited to a survey of substance and alcohol dependence as correlates of suicide ideation among undergraduate students, as there are other factors that seem to be predictive of suicidal behavior.
- iii.This study is limited by sample size due to finance, limitedness of time and individual unwillingness to participate in the study.
- iv.This is strictly a correlational research rather than an experimental work, which limits its generalization and replication.
- v.Finally, the disadvantage of using a questionnaire, which in many cases may not be filled with sincerity and genuineness, is another limitation.

### **Recommendations**

Based on the findings of this study, the following are recommended for consideration by the relevant authorities:

- i. Government at all level should put in place and sustain programmes and policies aimed at reducing the prospects drug suicide and drug misuse in our schools and institutions of learning
- ii. Practitioners in the field of counselling and psychotherapy should be given the necessary support to carry their roles in schools and so as to curb this growing social menace.
- iii. Institutions of learning should be proactive in dealing with cases of drug abuse or alcohol dependence by identifying early warning signals among the youth.
- iv. There should be a complete paradigm shift in the way the public views issues related to drug misuse, alcohol dependence and suicide matters so that people will be more open and constructive with people who are in these situations.
- v. More research should be carried in this area so as to gain more knowledge on this phenomenon on a larger scope.

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