



## PSYCHOSOCIAL PREDICTORS OF SUICIDE MISSION AMONG NIGERIAN YOUTHS

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### ABSTRACT

*Suicide is a serious health problem as it is currently the third leading cause of death for teenagers between the ages of 15 and 24 years. Depression, which is also a serious problem for adolescents, is one of the significant biological and psychological risk factor for youth suicide. Substance use remains extremely widespread among today's youths and is related to both suicide mission and depression. This study therefore examined psychosocial predictors of suicide mission among Nigerian youths. The study adopted a descriptive survey design of the ex-post-facto type. Three hundred (300) students participated in the study with a total of 108 (36.0%) males and 192 (64.0%) females. Their ages ranged between 12 and 20 years with a mean of 16.11 years. Seven standardized instruments were used. Two research questions were raised and answered. The result indicated a significant joint and relative contributions of the independent variables to the prediction of suicide behaviour. Based on the findings of the result, it was recommended that more effective ways of working with the adolescents who are at risk of suicide or have potential to commit suicide needed to be designed. First, it is necessary to understand the unique characteristics of adolescents' physical, mental, and socio-psychological features. By understanding adolescents' unique features that may be related to suicidal risks, Counsellors, social workers and parents could work proactively to prevent suicide and make more effective interventions.*

**Key words:** *Suicidal behaviour, Depression, Substance use, School achievement, Interpersonal relationship, Self esteem, Environmental factors.*

### INTRODUCTION

The past decade has witnessed heightened interest in youth suicidal behaviour, with several studies published on this topic (Bridge, Goldstein, & Brent, 2006; Evans, Hawton, & Rodham, 2004; Wasserman, Cheng, & Jiang, 2005). This growing interest reflects not only an acknowledgement that suicidal behaviour might have a direct impact on the normal development of young people, but also provides a strong recognition for the early identification of potential risk as well as protective factors that influence youth suicidal behaviour (Joe, Stein, Seedat, Herman, & Williams, 2008; Louw, Louw, & Ferns, 2007). Furthermore, it is increasingly recognised that promoting the healthy development of youths is one of the most important and cost-effective long-term investment a society can make (Call et al., 2002; Reddy et al., 2010).

The term suicidal behaviour or mission can be viewed as a continuum of behaviours, ranging from a person wishing him- or herself dead to the actual deed of killing themselves (Bridge, Goldstein & Brent, 2006; Schlebusch, 2005). It refers to complex, multi-dimensional and multi-factorial events with different behavioural characteristics incorporating a range of self-harming acts precipitated by emotional discomfort and distress (McLean, Maxwell, Platt, Harris & Jepson, 2008; Schlebusch, 2005). Furthermore, suicidal behaviour can be considered in two ways, namely non-fatal and fatal suicidal behaviour. Fatal suicidal behaviour refers to completed suicidal behaviour that reflects the person's intent to die and where the person has managed to achieve the pre-determined goal. As opposed to this, non-fatal suicidal behaviour refers to suicidal behaviour that does not end the person's life and embodies several manifestations such as those



seen in attempted suicide (Palmer, 2008). Suicidal behaviour is defined as the domain of thoughts, images and ideas about committing suicide or a desire to terminate one's life without the suicidal act (Bridge et al., 2006; McLean et al., 2008).

According to the World Health Organization (WHO, 2008), at least 100,000 youths commit suicide each year making youth suicidal behaviour a serious public health problem in many countries including Nigeria. Although no national, systematic, mortality data collection systems currently exist in Nigeria Njoku (2010), Madu and Matla (2003), Awoniyi and Madu (2009) denote that the rate of suicidal behaviour amongst youths of all ethnic backgrounds is on the increase. Results from the two Nigerian National Youth Risk Behaviour Surveys (Njoku, 2010), conducted with a multi-ethnic sample of 10,000 high school learners, suggest that suicidal thoughts amongst learners within the six months prior to the survey had increased from 19% in 2002 to 20.7% in 2008, while the percentage of learners who indicated that they had a definite suicide plan increased from 15.8% in 2002 to 16.8% in 2008. Furthermore, the number of participants who reported to have attempted suicide on one or more occasions rose from 17% in 2002 to 21.4% in 2008. However, given the relatively high rates of youth suicidal behaviour in Nigeria, it is surprising to note that studies focusing on the causes and prevention of youth suicidal behaviour have received little attention from Nigerian researchers (Joe, Stein, Seedat, Herman & Williams, 2008; MSchlebusch, 2005).

Historically, there has been no constant philosophical perspective about suicide (Alloway, 2005; WHO, 2006). Suicide has been both condemned and glorified throughout the ages. The argument continues even today. Durkheim, who began the study of suicide as a science, categorized types of suicide and mentioned altruistic suicide as a valuable type (Hamilton, 2007; Mangino, 2005; Moskowitz, 1993). The individuals who commit altruistic suicide have a motivation to help others benefit from their own death. For example, patriots who burned themselves in protest of injustice could be regarded as committing an act of self-sacrifice. Another example of altruistic suicide is that of individuals who view themselves as "problems" and choose death in order to rid society of a burden. They believe that their suicide will produce immediate and tangible benefits to society (Hamilton, 2007; Mangino, 2005).

From the medical perspective, suicide has been regarded as a form of psychopathology (Alloway, 2005; Mittendorfer-Rutz, Rasmussen, & Wasserman, 2008; Ravndal & Vaglum, 1999). The first effort to explain the rationale behind suicide was made in 1763 by Merian, who asserted that suicide was neither a crime nor a sin, but a disease (WHO, 2006).

More recently, there has been a new perspective that tries to analyze individuals' suicide within their contextual situations (Barron, 2000; Halverson, 2005; Lucey, 1997; Parkar, Dawani, & Weiss, 2008). This attempt not only focuses on individual's factors, but also on the environmental factors around people who commit suicide.

Worldwide, suicide is one of the leading causes of death, especially in the 15 to 35 year-old age group. According to WHO (2006), the global suicide rate (new deaths per year) rose from 10 out of every 100,000 people in the 1950s to 18 out of every 100,000 people in 1995. While it has declined in some countries, there has been an upward trend across the world in general. Although it is a relatively small percentage (1.3%) of the total deaths in the U.S., in 2002, suicides outnumbered homicides by five to three and deaths due to AIDS by two to one (Halverson, 2005). Recent data reported that, in 2006, more than 33,000 people committed suicide, making it the eleventh leading cause of death among all ages in the U.S (as cited in CDC, 2009a). For these reasons, suicide has been recognized as one of the most serious public problems in the U.S.

The problem of suicide is most critical among adolescents and youths whereby many of them die from suicide than from cancer, heart disease, AIDS, or stroke (Kessler, Berglund, Borges, Nock, & Wang, 2005; WHO, 2007).

Suicide has negative effects on a person and his or her environment. People who attempt suicide and survive may have serious injuries such as brain damage, broken bones, or organ



failure. Also, people who survive often have mental health problems such as depression (CDC, 2009a). Suicide also has negative effects on the health of the community. Family, friends, or acquaintances of people who attempt suicide may feel shock, depression, anger, or guilt. The study of suicidal factors at the transition stage from childhood to adulthood is of especially high priority (Health and Human Services, 2000, 2001; U.S. Public Health Service, 1999; WHO, 2007).

The last two decades have seen a shift in suicide rates, from the elderly towards younger people (Schlebusch, 2005; WHO, 2008). Today, youth suicide represents a serious public health problem in many countries (Reddy et al., 2010; WHO, 2008). Global estimates suggest that at least 100,000 youths commit suicide each year (WHO, 2008). In the United States of America (USA) alone, suicide accounts for at least 12% of all deaths reported for youths annually, with an estimated ratio of 50 suicide attempts for every 1 completed suicide reported (National Institute of Mental Health, 2004).

Globally, approximately one million people commit suicide annually, 10 to 20 million attempt suicide, and 50 to 120 million are profoundly affected by the suicide or attempted suicide of a family member or associate (WHO, 2008). The World Health Organization estimates that, based on current trends, approximately 1.53 million people will commit suicide by the year 2020 and 10 - 20 times more people will attempt suicide worldwide, representing an average of one death by suicide every 20 seconds and one attempt every 1 - 2 seconds (Bertolote & Fleischmann, 2002).

The strain theory of suicide was developed to explain socio-psychological mechanisms prior to suicidal behaviour (Zhang & Lester, 2008). This theory assumes that, because it is so insufferable to the victim, strain resulting from psychological suffering due to competing pressures and conflicting may lead to engagement in suicidal behaviour as a solution to reduce or stop the strain (Zhang, 2005; Zhang & Song, 2006; Zhang & Lester, 2008).

The strain theory was first developed by Durkheim (1951), and has since been advanced by Merton (1957), Agnew (1992), and other researchers. The strain theory of suicide has suggested four types of strain resulting from specific sources, each of which consists of at least two conflicting social facts (Zhang & Lester, 2008):

- (1) Conflicting Values: When two conflicting beliefs or social values are conflicting in one's daily life, the individual may experience value strain.
- (2) Reality vs. Aspiration: If there is an inconsistency between one's aspiration and the reality, the person has to follow or live with, the person may experience aspiration strain.
- (3) Relative Deprivation: In the situation where a poor individual recognizes that other people with the same or similar background are leading a better life, the individuals may experience deprivation strain.
- (4) Deficient Coping: If an individual faces a life crisis without abilities to cope with it, then he/she may experience coping strain.

Although several analyses of the prevalence of suicide in Nigeria have been published (Madu & Matla, 2003; Mhlongo & Peltzer, 1999; National Injury Mortality Surveillance System (NIMSS, 2007), very little information on non-fatal suicidal behaviour amongst youths is known. Available data suggest that the rate of suicide for males is about 25.3 per 100,000 and for females, 6.8 per 100,000 (NIMSS, 2007).

Several psychological and environmental factors have been associated with a significant increase in the risk for youth suicidal behaviour (OConner & Sheeney, 2001; Ulusoy & Demir, 2005). This study looks at the psychosocial factors predicting suicide behaviour among youths in Ibadan. The factors examined include – depression, self-esteem, substance use, environmental



factors, interpersonal relationship and low school achievement. Each of these factors would be briefly discussed as follows:

### **Depression**

One of the most prevalent mental health problems in adolescents is depression (Hamrin & Pachler, 2005). Untreated depression is a serious risk factor for anxiety disorders (Ferdinand, Nijs, Lier, & Verhulst, 2005), mental health problems (Steinhaus, Haslmeier, & Winkler-Metzke, 2006; Wilcox & Anthony, 2004), obesity in adulthood (Ferdinand et al., 2005), and suicidal behaviour in both adolescents and adults (Kisch, Leino, & Silverman, 2005; Thompson, Mazza, Herting, Randell, & Eggert, 2005).

### **Self-esteem,**

This refers to the evaluations individuals make about the self, and is shaped by individuals' appraisals of how they are perceived by significant others (Sullivan, 1953). Therefore, the quality of feedback received from the environment significantly affects one's functioning. As such, negative feedback about the self, is detrimental to the self-esteem (Sullivan, 1953). Thus, it would be logical to assume that self-esteem is a powerful resource for combating the effects of stress and suicidal ideation. During depressive episode the association between low self-esteem and suicidality was found and suicidal adolescents experienced significantly lower self-esteem as well as higher levels of depression and hopelessness than did non-suicidal adolescents (Daskalopoulou, Dikeos, and Papadimitriou et al. 2002; Tarrier, 2008). Research findings have indicated an inverse correlation between life stressors and self-esteem. Specifically a negative self-esteem predisposes adolescents to depression and other psychiatric difficulty (Garber, Robinson, & Valentiner, 1997; Hestnan, Dweck, & Cain, 1992). Therefore, it is conceivable that positive self esteem enhances one's ability to cope effectively with stress because individuals with poor coping mechanisms are more vulnerable to environmental stressors (Simonds, McMahon, & Armstrong, 1991). In fact, during depressive episode the association between low self-esteem and suicidality was found (Daskalopoulou, Dikeos, and Papadimitriou, et al. 2002; Tarrier, 2008). Goodwin and Marusic (2003) determined the association between feelings of inferiority and suicidal ideation and suicide attempt among youth. They found that feelings of inferiority were associated with a significant increased likelihood of suicidal ideation and suicidal attempt.

### **Substance Use**

Substance use is defined as self administration of a psychoactive substance (alcohol or drug). This term differs to the notion of 'substance misuse', which tends to be used to describe more illicit and/or problematic use of substances. For the purposes of this study, the term "substance use" is used to refer to the use of alcohol and other drugs. In many cases, these substances are used in combination and therefore it is also important to consider their inter-related use, and substance use as a whole which often disposes the user to suicide behaviours (Health Advisory Service, 2001). Numerous studies have reported a significant correlation between substance use and suicide in adolescents and youths (Conason, Oquendo, & Sher, 2005a & 2005b; Mehlenbeck, Spirito, Barnett, & Overholser, 2003). Studies have consistently demonstrated that suicidal behaviours are more likely to occur among adolescents who abuse alcohol (Bae, Ye, Chen, Rivers, & Singh, 2005; Shaffer & Pfeffer, 2001) or use illicit drugs (Gould, Greenberg, Velting, & Shaffer, 2003; King, Schwab-Stone, & Flisher, 2001).

### **Environmental factors**

This includes the quality of interpersonal relationships between youths, their family members (parents and siblings) and friends can be a major resource for youths, but can also serve as major stressors, especially if conflict occurs within these relationships. Stable and secure relationships with family and peers can assist youths in making a smooth transition into adulthood



and to cope with negative life events (Cornwell, 2003; Liu, 2002; Way & Robinson, 2003). Way and Robinson (2003) suggest that the family is an essential part of the youth's support system. The family provides emotional support both in the family context as well as the broader community. The aspect of social support from family and peers (Wassenaar & Narboni, 2001), poverty (Yoder & Hoyt, 2005) and socio-cultural transition (Bridge et al., 2006) appears to be a significant determinant in the suicidal behaviour of adolescents and youths. Secure and stable relationships with family and peers not only assist adolescents in making a smooth transition into adulthood, but can also help in coping with negative life events, thereby protecting them against suicidal behaviour (Cornwell, 2003; Liu, 2005; Way & Robinson, 2003). Peer connectedness (or the lack thereof) appears to strongly influence adolescent suicidal behaviour, as adolescents often judge their own value by the reactions of others (McGraw, Moore, Fuller, & Bates, 2008; Louw, Louw, & Ferns, 2007).

The school environment has been implicated as a major contributor to adolescent suicidal behaviour (Byrne et al., 2007). School-related stressors that have been identified include high academic demands (Da Costa & Mash, 2008), and the inability to balance leisure time with school demands (Suldo et al., 2009). Furthermore, very high (or very low) expectations from parents to perform academically (Wasserman & Narboni, 2001), school bullying (Birkett, Espelage, & Koenig, 2009), inadequate provision of educational facilities (Meehan, Peirson, & Fridjhon, 2007) and feeling unsafe at schools (Da Costa & Mash, 2008) all contribute to the experience of the academic environment as stressful.

### **Interpersonal relationship**

Interpersonal relationships between youths, their family members (parents and siblings) and friends can be a major resource for youth suicidal behaviour, but can also serve as major stressors, especially if conflict occurs within these relationships. Stable and secure relationships with family and peers can assist youths in making a smooth transition into adulthood and to cope with negative life events (Cornwell, 2003; Liu, 2002; Way & Robinson, 2003). Way and Robinson (2003) suggest that the family is an essential part of the youth's support system. The family provides emotional support both in the family context as well as the broader community. However, environmental stressors such as parental divorce, death of a parent, interpersonal conflict between parents and siblings, pre-existing family psychiatric conditions and suicidal behaviour in the family context can all lead to an increased sense of insecurity and a risk for suicidal behaviour (Aspahan, 2003; Cassimjee & Pillay, 2000; Engelbrecht & Van Vuuren, 2000; Evans, Hawton, & Rodham, 2004; Ittel, Kretchmer, & Pike, 2010).

### **Low school achievement**

This is another risk factor that causes anxiety in the youth (Da Costa & Mash, 2008). A study conducted by Livaditis, Zaphiriadis, Fourkiot, Tellidou and Xenitidis (2002) found that youths who were not well integrated into their school environment were significantly more likely to report suicidal behavior than well-integrated youths. The risk for suicidal behaviour is also increased among individuals from socially disadvantaged backgrounds characterised by extreme poverty, unemployment, lack of social infrastructure, and the provision of inadequate educational, health, housing, recreational and transport facilities (Andrews & Lewinsohn, 1992; Govender & Killian, 2001; Ulusoy & Demir, 2005). For Nigerian youths, the relatively high levels of stress that often accompany this developmental stage are further amplified by the rapid socio-political, economic and socio-cultural transitions underway in Nigeria (Njoku, 2010). Thus, societal pressures and influences, such as rapid socio-political, economic and socio-cultural change have been found to play a pivotal role in the individual's engagement in suicidal behaviour (James, 2008). Petzel and Riddle (2008) maintained that a poor or an overachieved academic performance can serve as a precursor to stress, subsequent depression, and suicidality. Students



who have consistently exhibited a pattern of academic failure may simply engage in risk-taking behaviours (e.g., criminal acts, risky sexual activity) that predispose them to suicidality.

### Research Questions

1. What is the joint contribution of the independent variables (depression, substance use, self-esteem, environment, interpersonal relationship and school achievement) to the prediction of suicidal behaviours?
2. What is the relative contribution of the independent variables (depression, substance use, self-esteem, environment, interpersonal relationship and school achievement) to the prediction of suicidal behaviours?

## METHODOLOGY

### Research design

The research adopted a descriptive survey of the ex-post-facto type to determine the influence of psychosocial factors (depression, substance use, self-esteem, environment, interpersonal relationship and school achievement) on suicidal behaviour.

### Participants

Three hundred (300) participants were drawn from six schools, representative of three rural and three urban local governments of Ibadan metropolis selected by means of stratified random sampling to ensure a balanced representation of gender and age.

### Instruments

Seven major instruments were utilized for the study **namely:**

**1. The Suicidal Ideation Questionnaire (SIQ)** (Reynolds, 1987). The SIQ is a self-administered 15-item measure designed to assess an individual's preoccupation with thoughts of suicide. The measure, set on a 6-point Likert-type scale, requires individuals to indicate the frequency with which they have suicidal thoughts selecting from 1-6. The responses are summed to determine possible scores ranging from 0 to 150, with higher scores indicating a greater disposition for suicidal ideation. The instrument has been found to have a high internal consistency reliability (coefficient alpha = .96) and a moderate to high level of test-retest reliability ( $r = .86$ ). The instrument correlates highly with the Heimilton Depression Rating Scale ( $r = .92$ ) (Reynolds, 1987).

**2. Rosenberg Self-Esteem Scale (RSES)** (Rosenberg, 1965). The RSES is a 10-item instrument designed to assess adolescents' global feelings of self-worth. The instrument is set on a 4-point Likert-type scale with response choices ranging from "strongly agree" (1) "strongly disagree" (4). The measure possesses good reliability (.85) and confirmed face and convergent validity have been reported. The RSES has been purported to be the standard against which new self-esteem measures are evaluated (Robinson, Shaver, & Wrightsman, 1991). Psychometrics of the 10 items as reported by the author are ( $\alpha = .88$ , test-retest  $r = .51$ ).

**3. The Zung Self-Rating Depression Scale** was designed by Duke University Psychiatrist Dr. William W.K. Zung in 1965 to assess the level of depression for patients diagnosed with depressive disorder. The Zung Self-Rating Depression Scale is a short self-administered survey to quantify the depressed status of a patient. There are 20 items on the scale that rate the rating affective, psychological and somatic symptoms associated with depression. There are ten positively worded and ten negatively worded questions. Each question is scored on a scale of 1 through 4. Scores on the test range from 20 through 80. The scores fall into four ranges: 20-49 Normal Range; 50-59 Mildly Depressed; 60-69 Moderately Depressed; 70 and above Severely Depressed. It has a Cronbach alpha of 0.87.



**4. This is Adolescent Relationship Scales Questionnaire (A-RSQ)** developed by Amie Kroes (2009) — a revision of the original relationship scale questionnaire. This scale is used to measure interpersonal relationship between adolescents, their family members (parents and siblings) and friends. It was found to have good reliability coefficient ranging from 0.82 to 0.96. The scale is rated in a 5-point likert format of Not at all like me=1; Somehow like me=2; Often like me=3; Most often like me=4; Very much like me. The scale has four sub-scale - Secure scale which is the average of items 3, 7 (Reverse), 8, 10, 17 (Reverse); Fearful scale which is the average of items 1, 4, 9, 14; Preoccupied scale is the average of items 5 (Reverse), 6, 11, 15 and Dismissing scale which is the average of items 2, 5, 12, 13, 16. The higher the score on the scale the lesser the interpersonal relationship and vice-versa.

**5. Substance use scale-** This scale measures Substance use of adolescents assessed with 10 items measuring the frequency of use of tobacco (cigarettes and chewing tobacco), alcohol, marijuana, and other illegal drugs during the four weeks prior to detention ( $\alpha = .64$ , test-retest  $r = .45$ ).

However, School achievement was measured using three years consecutive results of participants, while Environmental factor was also determined from the demographical section of the questionnaire.

**Procedure**

Permission to involve schools in the study was obtained from the Ministry of Education and the respective school principals. Written consent from participants prior to the inclusion of the learners in the study was obtained. All participants were guaranteed anonymity, confidentiality and the freedom to withdraw from the study at any stage. Participants were given the opportunity to complete the questionnaire in English language at their respective schools. The administration of the questionnaires took place within a period of one week.

**RESULTS**

**Research Question 1:**

What is the joint contribution of the independent variables (depression, substance use, self-esteem, environment, interpersonal relationship and school achievement) to the prediction of dependent variable (suicidal behaviour)? The result is presented in table 1:

**Table 1: Summary of regression showing the joint contributions of independent variables to the prediction of suicidal behaviour.**

R	=	0.979			
R Square	=	0.958			
Adjusted R square	=	0.957			
Std. Error	=	2.79772			
<b>Source of variation</b>	<b>Df</b>	<b>Sum of squares</b>	<b>Mean square</b>	<b>F-ratio</b>	<b>P</b>
Regression	6	52240.656	8706.776	1112.370	0.000
Residual	291	2277.723	7.827		
Total	297	5418.379			

Table 1 reveals a significant joint contribution of the independent variables (depression, substance use, self-esteem, environment, interpersonal relationship and school achievement) to the prediction of suicidal behaviour. The result yielded a coefficient of multiple regressions  $R = 0.979$ , multiple  $R^2=0.958$  and Adjusted  $R^2=0.957$ . This suggests that the six independent variables jointly accounted for 95.7% (Adj.  $R^2=0.957$ ) variation in the prediction of youth suicidal



behaviour. The other variables accounted for the remaining percentage, and are beyond the scope of this study. The ANOVA result from the regression analysis shows that there was a significant joint effect of the independent variables on youth suicidal behaviour,  $F(6,291)=1112.370, p<.001$

### Research Question 2:

What is the relative contribution of the independent variables (depression, substance use, self-esteem, environment, interpersonal relationship and school achievement) to the prediction of dependent variable (suicidal behaviour)?

**Table 2: Summary of regression showing the relative contributions of independent variables to the prediction of suicidal behaviour.**

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std. Error	Beta	T	P
(Constant)	0.286	1.337		0.214	.831
Self esteem	-0.079	0.035	-0.048	-2.234	.026
Depression	1.179	0.026	0.962	46.271	.000
School achievement	-0.235	0.033	-0.109	-7.112	.000
Interpersonal relationship	-0.022	0.023	-0.012	-0.953	.342
Substance use	0.056	0.020	0.037	2.747	.006
Environment	-0.026	0.012	-0.032	-2.222	.027

Table 2 showed that five out of the six predictor variables (depression, substance use, self-esteem, environment, interpersonal relationship and school achievement) are potent predictors of youth suicidal behavior. The most potent factor was depression (Beta=0.952,  $t=46.271, p<.001$ ), substance use (Beta=-0.109,  $t=-7.112, p<.001$ ), environment (Beta=-0.032,  $t=-2.222, p<.05$ ), substance use (Beta=0.037,  $t=2.747, p<.05$ ) and self-esteem (Beta=-0.048,  $t=-2.27341, p<.05$ ). But interpersonal relationship (Beta=-0.012,  $t=-0.953, p>.05$ ) is not significant predictor of suicidal behaviour. This implies that increase in depression and use rate will increase the likelihood for youth to engage in suicidal behavior. While influence of high school achievement, enabling environment and self-esteem will reduce the tendency for students to engage in suicide behaviour.

## DISCUSSION OF FINDINGS

The first and second research questions which tested the joint and relative contributions of depression, substance use, self esteem, environment, interpersonal relationship and school achievement to the prediction of suicide behaviour were confirmed. The results indicated significant joint prediction of all the independent variables on suicidal behaviour among Nigerian youths. This finding is supported by several studies on suicide ideation among youths. For example, Brausch (2008); Mazza & Reynolds (1998) reported that depression is one of the leading causes of suicide among youths. This is further supported by National Institute of Mental Health (2003), who reported that over 90% of the people who commit suicide have depression. Also, studies have consistently demonstrated that suicidal behaviours are more likely to occur among adolescents who abuse alcohol as reported by Bae, Ye, Chen, Rivers, & Singh (2005); Shaffer & Pfeffer (2001) or use illicit drugs (Gould, Greenberg, Velting, & Shaffer, 2003; King, Schwab-Stone, & Flisher, 2001). Additionally, Daskalopoulou, Dikeos, and Papadimitriou (2002) and TARRIER (2008) reported a significant association between low self-esteem and suicide ideation



among youths. Similarly, Overholser, Adams, Lehnert, and Brinkman (1995) found that low self-esteem was related to higher levels of depression, hopelessness, suicidal ideation, and an increased likelihood of having previously attempted suicide. Further, environmental factors, which include social support from family and peers (Pillay & Wassenaar, 1997; Wassenaar & Narboni, 2001), poverty (Yoder & Hoyt, 2005) and socio-cultural transition (Bridge et al., 2006; Wassenaar, Marchiene, Van der Veen, & Pillay, 1998) were found significant determinants in the suicidal behaviour of adolescents. Also, Sebate (1999) reported that, positive peer experiences among high school learners was identified as having a buffering effect against suicidal behaviour. Finally, Petzel and Riddle (2008) reported that a poor or an overachieved academic performance can serve as a precursor to stress, subsequent depression, and suicidal behaviour.

## **Conclusion**

Based on the findings from this study, it is hereby concluded that there is significant joint contribution of depression, substance use, self esteem, environment, interpersonal relationship and school achievement on suicidal behaviour among Nigerian youths and also there is significant relative contribution of depression, substance use, self esteem, environment, interpersonal relationship and school achievement on suicidal behaviour among Nigerian youths.

## **Recommendations**

This research recommends more effective ways of working with the adolescents who are at risk of suicide or have potential to commit suicide. First, it is necessary to understand the unique characteristics of adolescents' physical, mental, and socio-psychological features. Adolescence is a period characterized by great physical, emotional, and social change. By understanding adolescents' unique features that may be related to suicidal risks, Counsellors and social workers could work proactively to prevent suicide and make more effective interventions. Social workers who work for adolescents also need to have substantial information and knowledge about adolescent suicide and its predictors. As examined in this research, depression, substance use, self-esteem, school achievement, and interpersonal relationship are significant predictors of adolescent suicide behaviour. Having these comprehensive understandings will create a foundation from which to broaden Counsellors' and social workers' perspectives and coping skills to deal with adolescents' suicidal issues.

With this knowledge about adolescents' suicide and its predictors, Professional Counsellors and social workers need to attempt to educate adolescents, as well as stakeholders responsible for the care of adolescents, about suicide, in the hopes of prevention. As another way to reduce or prevent suicide among adolescents, support systems, such as counseling services and peer support groups, may work as valuable resources for adolescents who do not have adaptive coping skills to deal with suicidal behaviors.

Also, parents are in the unique position of helping adolescents build healthy interpersonal relationships, self-esteem and improve problem-solving and coping skills; in turn, this can help them deal with negative life stressors and reduce the occurrence of intrusive thoughts about suicide.



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