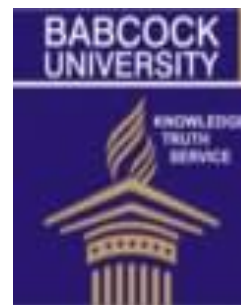




Available [online@www.ctlsr.com](http://www.ctlsr.com)
CTLSR 1 (2): 133 - 144 (December, 2022)



Current Trends in Life Science
Research

ISSN: 2814-1679

The influence of reinforcing factors on suicidal intention among students in South-South universities, Nigeria

Chigeru Chinyere^{1*}, Atulomah Nnodimele¹ and Olanrewaju Motunrayo¹

¹Department of Public Health, Babcock University, Ilishan-Remo, Ogun, Nigeria.

*Corresponding author < abalichinyere74@gmail.com >

Abstract

The study objective was to determine the influence of reinforcing factors on suicidal intention among students in south-south, Nigeria. Reinforcing factors considered were level of family relationship and support, peer distractions, teacher-responses experienced and drug use dispositions. Descriptive survey was adopted using multi-stage sampling techniques. 115 students participated in the study. Institutions selected for the study were University of Port-Harcourt, Ignatius Ajuru University of Education, Federal University Otuoke, Niger Delta University, State University Akwa Ibom and Obong University. Data were collected using questionnaire and analyzed using descriptive statistics; frequencies, percentages, means, standard deviations, and inferential statistics, correlation test using Statistical Package for Social Sciences (SPSS) and statistical significance was accepted at $P < 0.05$ level of significance. Results revealed there was significant but weak positive correlation ($r = 0.214$, $p = 0.011 < 0.05$) between drug use disposition and suicidal intention, significant but weak positive relationship between suicidal intention and family support ($r = -0.179$, $p = 0.028 < 0.05$) and teacher-student experience ($r = -0.178$, $p = 0.029 < 0.05$) existed. However, there was no significant relationship between peer distraction and suicidal intention ($r = 0.041$, $p = 0.330 > 0.05$). Regression analysis showed significant relationship between reinforcing factors and suicidal intention ($F_{110} = 2.92$, $P = 0.025 < 0.05$, $R^2 = 0.096$). Results showed reinforcing factors account for 9.6% of the variation in suicidal intention. Peer distraction, family relationship and support, teacher-student experience and drug disposition when combined have significant effect on suicidal intention. This study recommends that health education should focus more on dangers of substance use and positive impact of other reinforcing factors to promote and boost the influence of the reinforcing factors on suicidal intention among students.

Key words: Suicidal intention, reinforcing factors, peer distractions, drug use, family support and teacher-student relationship

Introduction

Nigeria is ranked 13th in the world of countries having high rate of mortality from suicide above the Regional (African) average of 7.4. The dearths of structured state-specific, region-specific and national-specific data are areas that clearly need to be improved upon so as to fully grasp and manage the complexities around suicidal behaviour. It is however clear that the rise in suicide rate in Nigeria from 6.5 per 100,000 people in 2012 to 9.9 in 2015 makes it a serious public health concern of national imperative (Ogbolu, Mba-Oduwusi, Ogunnubi, Buhari, Rahmon, et al, 2020; Opakunle, Opakunle, Aloba, 2021). There is no suicide without suicide intention and there is no suicide intention without risk factors or issues that activates the ideas to harm one-self. This is supported by Gonçalvesa, Sequeirab, Duartea, & Freitasc (2014) who indicated in their studies that suicidal ideation severity is higher on students who are far from home and living alone; students with weak social/familiar support networks (less involvement on social activities and intimate relationships).

In addition, peer influence that can trigger suicidality, that is acting negatively against one's life just like a friend did, and drug use disposition becomes a major concern in public health. Though there are numerous risk factors but tackling the major ones can also interfere positively with other hidden complex factors that are possibly insidious or hidden. Responding to these, additional voiced concerns may be challenging for health and social care practitioners, especially at a point where the young adult has capacity to choose to seek help or not; the need to maintain confidentiality and trust is very necessary (Aloba, Ojeleye & Aloba, 2017). In the course of characterizing the problem phenomenon to be addressed in this study, these set of research questions were raised and they include, what influence does the level of family support, peer distractions, teacher-responses experienced and drug use dispositions have on suicidal intention among undergraduates in south-south, Nigeria?

Reinforcing factors

Scholars like Blalock, Bone, Brewer, et al (2020) describes reinforcing Factors as “factors following a behavior that provide continuing reward or incentive for the persistence or repetition of the behavior”. This study has highlighted reinforcing factors that can be a booster or antidote for suicidal intention as family support, peer distractions, teacher-responses experienced and drug use dispositions. However, reinforcing factors are not limited to these but can encompass all of social support, behavior of peers, caregivers, professionals, and significant others (Clarke, Frankish, & Green, 1997). According to studies, suicidal ideation (intention) severity is higher on students who are far from home and living alone. This is applicable to students with weak social/familiar support networks, that is, less involvement on social activities and intimate relationships or peers leading to social isolation, a rapid breakdown of contacts with family (Gonçalvesa, Sequeirab, Duartea, & Freitasc, 2014; Harmer, Lee, Duong & Saadabadi, 2021 and Soreff, 2021).

According to WHO (2014), some studies have identified risk factors for suicide to include family relationship, social capitals (friends, educators or teachers, among others), harmful use of alcohol and other substances, family history of suicide and genetic/biological factors. This signifies that families contribute to suicide through their contribution to the level of stress experienced by the adolescent and their failure to provide social support. More so, given that the majority of indigenous suicides are among adolescents, the role of the family environment may be more crucial in these groups. Another perspective of evidence is confirmed by Wanyoike (2015), who identified that the main causes of suicide amongst university students are social pressure, high cost of education, academic performance, loneliness, substance abuse, illness, conflict, and social pressure.

A team of researchers, whose aim was to use the available literature to identify the causes of suicide among indigenous adolescents in USA, Canada and New Zealand using the PRECEDE model revealed that the increased suicide rates

among indigenous adolescents were not a product of their native origins, but of the social milieu in which these people generally found themselves (Clarke, Frankish, & Green, 1997). According to Klonsky, May & Saffer (2016) and Blasco, Vilagut, Almenara, Roca, Gabilondo, et al, (2019), suicidal intentions risk factors can include interpersonal violence, divorce, parental death, family violence, bullying, among others, which often interplay with the precipitating factors. In another study, the risk factors in potential suicide include isolation, alcoholism, lowered self-esteem, feelings of social and family refusal. According to Wanyoike (2015), alcohol dependence or substance, social influences from peers, responses of teachers to students and family refusal or acceptance substance abuse can determine the progress or reversal of suicide intention. The extent of influence of reinforcing factors on suicide intention is assumed a valid means to design more effective programmes in public health interventions.

1.1. Conceptual framework based on suicidal intention, interactions of factors and outcome

The framework adopts existing models and theories for proper understanding of the interactions that occurs between some factors and suicide intention irrespective of its complexities. The purpose of the framework is to create a simple and cost effective pathway that can be applied to stimulate reduction in suicide behaviour. This behavior is a target for any intervention or program and that is what is measure or assess understand the position of any health issue. Health behaviors are actions or inactions that can be health-enhancing or health-depleting, and it is affirmed that virtually all health problems whose etiology are well defined are associated with behavioral patterns (Atulomah, 2014).

Health behavior is any activity or behavior undertaken to maintain, attain or regain health: to maintain means to keep your health at the same level, to attain means to improve health, for example, a new student who practices advices given during “fresher’s” orientation programs so as to avoid negative effects of stress, avoid drugs, who to seek for help, and

management resources or difficult situation so as to excel in an academic and social environment is been empowered to overcome negative triggers (Saleh,2019). In concise, the Health Belief Model (HBM) drives health-seeking and identifies if someone tried to seek help from a professional or fails to seek help, sought sort for help and got the help, exhausted every avenue and fails (Wayne, 2019). Theory of Planned Behavior (TPB) provides with intention (deals with behavioral control) and the ability (resilience) to engage in help seeking and health behavior together. At this stage, it best identifies the health seeking levels whether at primary or secondary level which deals with prevention and interventions respectively (Rezapur-Shahkolai, Khezeli, Hazavehei, et al, 2020). In view of reinforcement of positive responses, applying the PRECEDE-PROCEED model (Figure 1) is considered most important and amenable to change in suicidal intention. The factors associated with achieving individual resilience to suicide (predisposing, enabling, and reinforcing factors) for students or individual. The use of these theories or models for planning to plan interventions for suicidal intention and health seeking behavior helps to impact, based on importance and changeability (Rural Health Information, 2021).

The broken arrow headlines indicate pathways of expected outcomes stimulated by level of knowledge about some health educations. This means part of the expected outcome is to reverse the suicide intention to ability to cope with life. The most important thing is to learn to prevent suicidal intention by understanding possible pathways and curb it. The outcomes influenced by reinforcing factors are organized in a relevant way of planning potential interventions based on well-known major channels of influence (individual, lifestyle or environment) that can be mobilized for change. The change is expected in the behaviors of students such as suicidal behaviors (intention), which falls in the domain of the dependent variables. This study seeks to identify how significant it is for educational programmes to target the domain of the independent variables

(reinforcing conditions of the individual or target population).

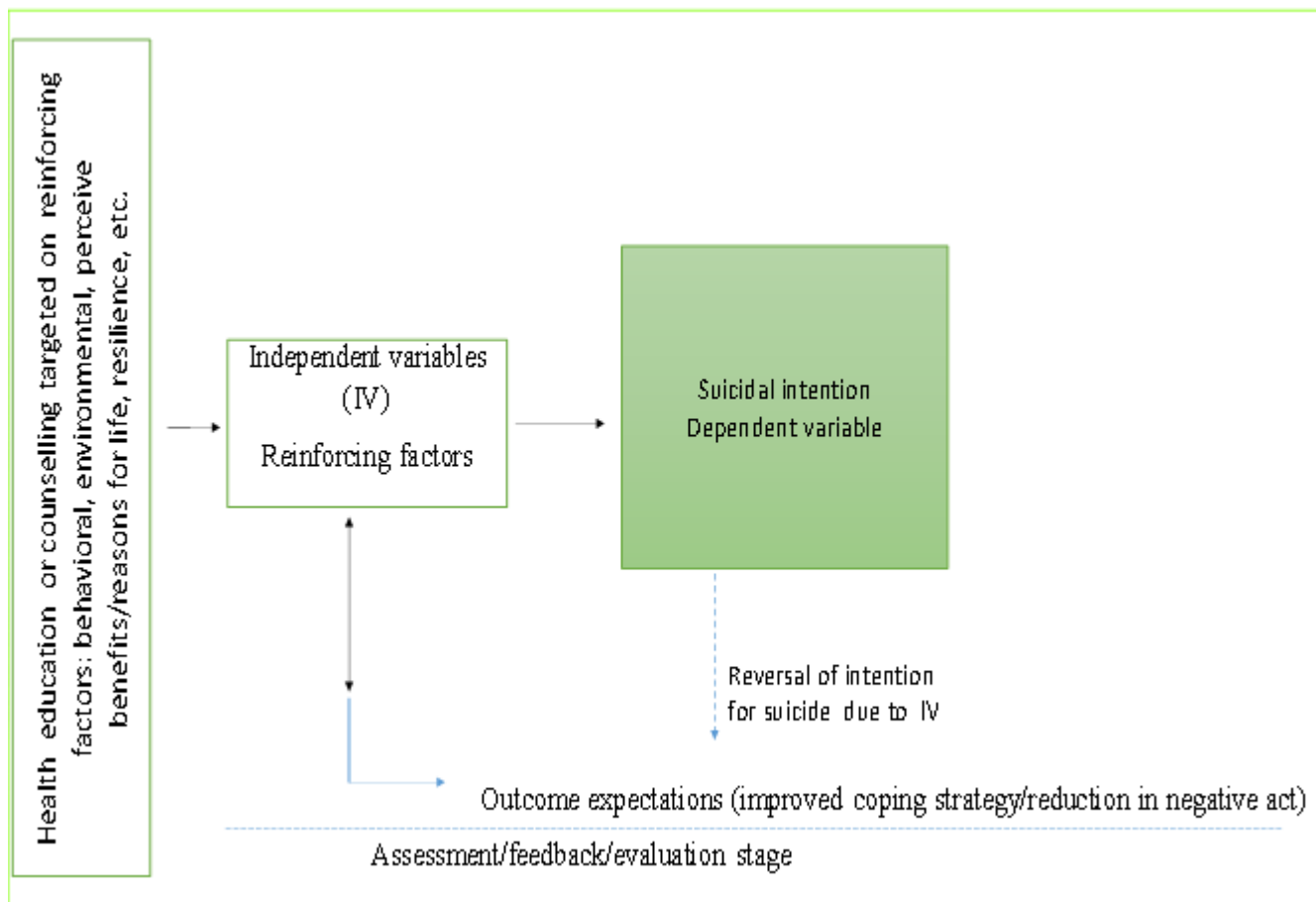


Figure 1 Conceptual Framework for suicidal intention interventions and interactions of factors and outcome (Rural Health Information, 2022)

Reinforcing factors are factors subsequent to (attempted suicidal/ reversal) behavior that provide the continuing reward or incentive for the behavior and contribute to its persistence or repetition (Clarke, Frankish, & Green, 1997). Accordingly Wallack (2007), research study on factors associated with suicidal ideation among American college students, the first step before implementing any suicide prevention and intervention program for young people or students is to initially identify the process of how they have become suicidal.

Suicidal intention among university students, for example, has been related to a variety of factors focusing mainly on the maladaptive characteristics of the suicidal individual and characteristics that may contribute to suicidal behaviors. These include a family history of suicidal intention, peers distraction, drug use disposition, background, and elevated levels of exposure to adverse life events, depression, hopelessness and loneliness (Ojio, Matsunaga,

Hatakeyama, Kawamura, Horiguchi, et al, 2021). Although there has been very little research into suicidal intention among undergraduate students, it is also essential to identify the relationship that exists between the suicide intentions and reinforcing factors such as family support, peers distraction, teacher-response experience and drug use disposition.

Methodology

This research is a descriptive research survey that adopted multi-stage sampling techniques in selecting 115 students from south-south Nigeria universities. Three states out of six states were selected through balloting, and the same technique was applied in the selection of 6 universities out of 12 universities in the south-south region of Nigeria. The 2 faculties were selected from each university through the same techniques. The selected institutions were University of Port-Harcourt, Ignatius Ajuru University of Education Federal, University,

Otuoke, Niger Delta University, State University Akwa Ibom and Obong University.

The sample size was determined statistically using intervention formula which measures the appropriate size through the population prevalence in a specific area. Intervention formula was used for the selection of the sample for intervention studies using prevalence of cases in the selected area (Pourhoseingholi, Vahedi & Rahimzadeh, 2013 and Meki, Bråtveit, Michelo & Moen, 2021). This formula is stated as follow: $N = \frac{Z^2 \times P_0(1-P_0)}{(P_0-P_1)^2}$

$$(P_0-P_1)^2$$

Where N = Sample Size, Z α = confidence level to address type 1 error, P₀ = Nig. Prevalence, P₁= Global prevalence, 1= constant

$$N = \frac{1.96^2 \times 0.173(1-0.173)}{(0.173-0.1)^2} \quad N=52$$

The sample size of 52 was made up to 120 students to check the effect of attrition and make it robust for increased credibility of sample size. The study was first promoted among the students in the selected faculties with the use of flyers that portrayed suicidal thoughts and needing help for it. In order to identify the actual sample with suicidal intention, done with an assessment scale (instrument) titled "Scale for identification of suicidal intention", was administered to the students to identify those qualified for the study. The desired number of participants was attained based on this suicide intention assessment tool, that is students who selected questions number 2, 3, 4, 15 and 16 on the scale for identification of suicidal intention criteria (assessment). This study included all undergraduates with suicidal intentions in selected universities in South-South Nigeria. A total of 115 participants were selected constituting 95.8% of the expected participants: (University of Port Harcourt, 26; Ignatius Ajuru University, 18; and Federal University Otuoke, 16; and control group, 55 (Niger Delta University, 22; Akwa Ibom State University, 18; and Obong University, 15).

Quantitative data were evaluated using questionnaire. The influence of reinforcing factors on suicidal intention among university undergraduates' data collected were subjected to descriptive statistics; such as frequencies, percentages, means, and standard deviations, and inferential statistics; correlation test using Statistical Package for Social Sciences (SPSS) and statistical significance accepted at P<0.05

level of significance as cut off. An ethical approval was obtained from Babcock University Health Research and Ethics Committee (BUHREC No 833/21) while a letter of introduction was secured from the Department of Public Health, Babcock University for presentation to the universities. Each participant that indicates a willingness to participate will be counselled regarding confidentiality and the nature of the intervention and consent will be secured. This means that all study participants will give informed consent prior to data collection and intervention. Where the respondents preferred anonymity given the security situations in the environment, their confidentiality will be respected and such persons' names are merely replaced with double alphabets or initials/phone number. However, their anonymity will not undermine the content of the information given for the study.

Detailed Analysis

The survey completed by 115 participants whose age range fall between 16 to 26 years and a mean age of 21±2.92 contained major variables on reinforcing factors such as peers' distraction, family support, teacher-student responses, drug use disposition and self-reported suicide intention. About three quarter (74.8%) of the participants are female. Major parent occupation of participants or respondents was self-employment (57.4%) followed by a wide gap of 13% whose parents are civil servants. While results showed that respondents' responses on parent marital status indicated 70.5% for Married and the rest 29.5% encompasses widow, divorced, separated and those who were orphaned.

The results of the reinforcing factors associated with peer distractions, by averaging each of the item score on a maximum scale of 2 showed that issues of emotional sensitivity triggered by peers is prominent for most of the respondents (1.76), worth considering is the confirmations by the respondents that their intimate friend influences how they act or behave (1.65), the value of admiration from their friends which a concern to respondents (1.58) and the fear of rejection from their peers was also present with majority of the respondents (1.57). while minimal peer distraction or influence indicated by respondent is the use of 'entertainment' drugs due to their friends (see Table 1). The total average (mean)

score of 23.24 ± 1.74 for peer distraction on a maximum scale of 30 was high

Table 1: Peer Distraction:

	Peer Distractions items	Mean	Std. Deviation
1	It makes me really angry when somebody makes fun of me (emotional sensitivity trigger by peers)	1.76	.431
2	My friends say how much they admire me for having achieved something important.	1.58	.495
3	If most of my classmates skip classes I would do it too	1.27	.446
4	Although I don't want to, I would change my physical appearance because others have urged me to	1.36	.481
5	I would hurt myself if my friends did it too.	1.30	.462
6	I am afraid of being rejected by my friends	1.57	.498
7	I accept my friends offers to avoid bully or attack	1.19	.395
8	I have taken alcohol because of friends	1.38	.488
9	I have taken 'entertainment' drugs because of friends	1.17	.381
10	I go to party and dance because it is the trend	1.43	.498
11	My intimate friend influences how I act in my environment	1.65	.478
12	There is pressure to take me to party	1.51	.502
13	Pressure to respect adults	1.45	.500
14	My Self-disclosure to people brings worry to me	1.42	.495
15	I feel ignored by people who should care	1.38	.488

Total mean score: 23.24±1.74

As shown on Table 2, statistical nature of family relationship and support that warrants mention were respondents who believe that their family care for them with a score of 3.57 on scale of 5 - points. Similarly, a portion of the respondents showed that a cordial relationship exists between them and their parents (3.17) however less than average indicated that they often get help and support from their parents (2.30) at this time. The total mean score based on the 15 items considered for analysis was 23.79±3.88 on a

maximum scale point of 40, and this is an indication that family relationship and support of respondents is moderate or slightly above average. Less than average (43%) gets the actual emotional help and support needed from their family taking cognizance that majority (74%) of the respondents rated their family or parent to be middle- income class (see figure 2).

Table 2: Family Relationships and Support

	Family related items	Mean	Std. Deviation
1	How close do you feel to your parents?	2.97	.973
2	How much do you think they care about you?	3.57	1.469
3	How often do you get help and support from your parents?	2.30	1.504
4	How often do your parents commend you when you perform well in anything?	2.62	1.514
5	Are you permitted by your parents to state your opinion about issues when there is need?	3.09	1.081
6	Is there a cordial relationship between you and your parent	3.17	1.432
7	Do you express your feelings freely before your parents?	2.92	1.446
8	How often are your parents willing to listen to your life related issues?	3.16	1.268

Total mean score: 23.79±3.88

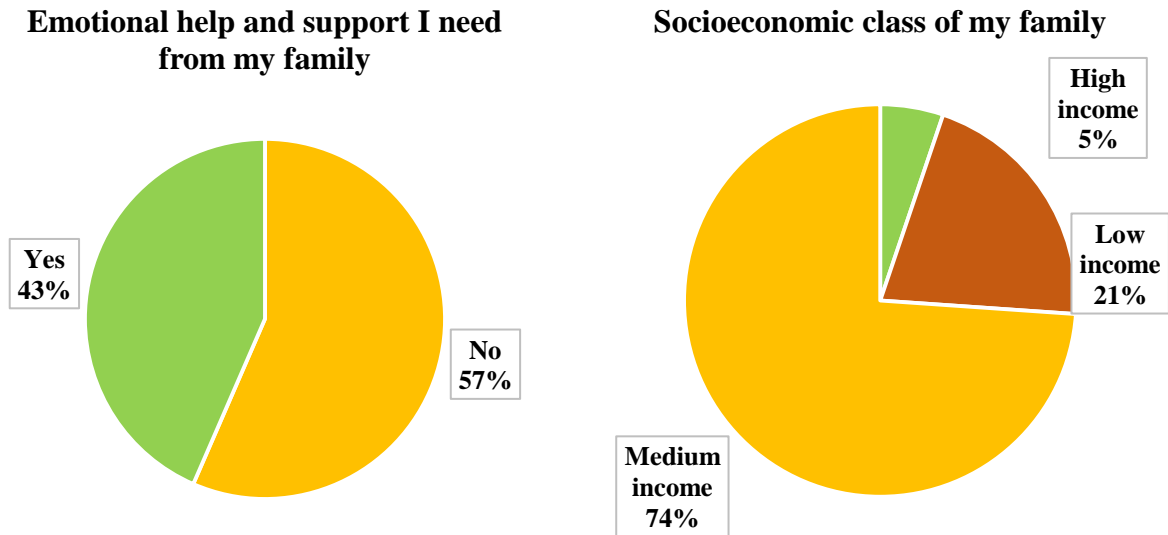


Figure 2: family support and socioeconomic class of respondents’ family

The teacher-students experience scores for the five items is moderately high at 7.42 ± 0.99 on a maximum scale point of 10: supported by the teacher (university staff) were 1.45 on a scale of 2 points, teachers (University staff) paying close attention to students’ worries were 1.24, disappointed on teacher-student relationship in school were 1.20, trust my teacher to guide

students through challenges were 1.59 and frequency of how teachers (lecturers) are willing to listen to students’ academic challenge complains were higher with 1.93. The role of teacher-student experiences is perceived reinforcing because of possible impact of the specific items in the life of the students (see table 3).

Table 3: Teacher-student experience

	Teachers support/ students’ capability to with teachers	Mean	Std. Deviation
1	I feel supported by the teacher (university staff)	1.45	.500
2	My teachers (University staff) pay close attention to students worries	1.24	.431
3	I am disappointed on teacher-student relationship in my school	1.20	.402
4	I can trust my teacher to guide me through challenges	1.59	.494
5	How often your teachers (lecturers) are willing to listen to your academic challenge complains?	1.93	.256

Total mean score: 7.42 ± 0.99 ; Note. **Item Q3 was reverse coded. The mean reported here are adjusted for the reverse coding

According to the result on Table 4, mean score level of drug use disposition for respondents is high at 5.50 on maximum scale point of 8. The specific results of the drug use items as a reinforcing factor on a maximum scale of 2 showed that the use of beer, wine or liquor (1.40) were prominent than other drug such as

cannabis (1.20) and cigarettes (1.20). The tendency for alcohol or recreational drugs was higher with stress and worried (1.60). The level of Suicidal intention scores for the eight items is moderate or slightly above average at 22.5 ± 6.05 on a maximum scale point of 40: thought of one’s family better off without

respondent were 3.57 on a scale point of 5, feelings of not being understood were 3.02 while feeling of not been able to make things better was also more with 3.04 while the least of the suicide intention display by respondents planning a suicide (2.14) (see table 3). It was

also observed that less than half (41%) of respondents does not know or believe that designated place for tackling suicide intention exist because great number of them indicated poor support from their family (see figure 3 and then figure 2).

Table 4: Drug use disposition

	Alcohol and other drug use items	Mean	Std. Deviation
1	Have you had a drink of beer, wine or liquor this year?	1.49	.502
2	Do you smoke cigarettes?	1.20	.402
3	Do you take marijuana or hashish (cannabis)?	1.21	.408
4	When I am stressed or worried, I long for recreations drugs or alcohol	1.60	.492

5.4957 ±1.00327

Awareness of designated place to seek support for suicide intention situations in respondents' school

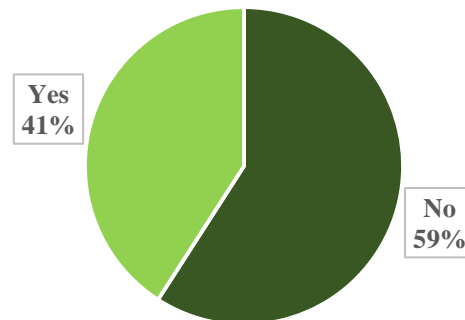


Figure 3: Designated place to seek support when faced with suicide intention or distress situation

3.1. Hypothesis

The study hypothesizes that reinforcing factor has significant influence on self-reported suicidal intentions response among students in the South-South Nigeria Universities.

The Pearson’s correlational analysis indicated a significant but weak positive correlation ($r=0.214$, $p=0.011<0.05$) between drug use disposition and suicide intention in this study, while the Pearson’s correlation analysis conducted revealed a significant but negative weak relationship between suicide intention and each of Family support ($r=-0.179$, $p=0.028<0.05$) and teacher-student experience ($r=-0.178$, $p=0.029<0.05$) among the students. However, the analysis showed that there is no significant relationship between peer distraction and suicide intention ($r=0.041$, $p=0.330>0.05$) though the relationship is positive. The regression analysis showed a significant relationship between reinforcing factors and suicide intention ($F_{110} = 2.92$, $P=0.025<0.05$, $R^2 = 0.096$). The result indicates that reinforcing

factors account for 9.6% of the variation in suicide intention. Given this finding, we accept the hypothesis: that reinforcing factor has significant influence on self-reported suicidal intentions response among students in the South-South Nigeria Universities.

3. Discussion

The study focused on the influence of reinforcing factors on suicidal intention among undergraduates in South-South, Nigeria. The result outcome revealed that level of family support, peer distractions, teacher-responses experienced and drug use dispositions can influence the level of self-reported suicidal intention among students. The average age of the students was 21 years and this falls within the bracket of high risk group according to WHO (2020). This group is vulnerable to peer group influence which can be a distraction in academic environment and negatively or positively influences their behaviours. Their level of peer distraction is high. However, there is no significant relationship between peer

distraction and suicide intention ($r=0.041$, $p=0.330>0.05$) though the relationship is positive. This means that an increase in peer distraction is expected or assume to increase suicidal intention. The weak relationship between the peer distraction and suicide intentions may be attributed to low level of peer influence towards use of 'entertainment' drugs due to their friends as indicated by the students. This does not rule out that few students have very high influence by their peers with regards to 'entertainment' drugs but not in the majority category.

This study also revealed that the family relationship and support of respondents is moderate or slightly above average. Further questions revealed that more than half of the student do not get the actual emotional help and support needed from their family taking cognizant. The relationship between family support and suicidal intention is in inverse(negative) direction to each other. That an increase in family support or better relationship with family members will significantly reduce suicide intention among students within that region ($r=-0.179$, $p=0.028<0.05$). Similarly, teacher-students experience will also significantly reduce suicide intention among students if improved upon as the findings has shown ($r=-0.178$, $p=0.029<0.05$). The teacher-student experience, which encompasses the course advisers, student counsellor and guidance and counselling staff of universities, is highlighted as a vehicle for instilling a purpose driven life and discovery of life purposes. However, parents or Guardian, family, relatives, friends, neighbours, and the society are not to be spared.

The study by Che, Ibrahim, Amit, Abdul-Kadir, Halim, et al, (2018), examined suicidal intention among young adolescents in Malaysia in which the results showed that the reasons for living and palliative coping strategy correlated negatively with suicidal intention while multiple regressions revealed that family alliance and optimistic and palliative coping strategies were found to be significant reasons for living that protect adolescents from suicidal thoughts. Furthermore, this means that families contribute to suicide through their contribution to the level of stress experienced by the adolescent and their failure to provide social support. Given that the majority of indigenous suicides are among

adolescents, the role of the family environment may be more crucial in these groups (Swedo, Rettew, Kuppenheimer, Lum, Dolan, et al, 1991; Robert, 1995; Clarke, Frankish, & Green, 1997).

In this study, drug use disposition holds the most significant reinforcing factors among other factors such as peer distraction, family support, and teacher-student relationship. It was significantly identified that an increase in drug use will directly increase suicidal intention ($r=0.214$, $p=0.011<0.05$). Even few attempts can significantly trigger suicide intention for some students. Evidence is the tendency for alcohol or recreation drugs which was high among students when stress and worried.

These findings are also affirmed by another study that highlights reinforcing factors as a booster or antidote for suicidal intention through family support, peer distractions, teacher-responses experienced and drug use dispositions. However, reinforcing factors are not limited to these but can encompass all of social support, behavior of peers, caregivers, professionals, and significant others (Clarke, Frankish, & Green, 1997). Suicidal intention among university students, for example, has been related to a variety of factors focusing mainly on the maladaptive characteristics of the suicidal individual and characteristics that may contribute to suicidal behaviors. These include a peer distraction, drug use disposition, background, and elevated levels of exposure to adverse life events, depression, hopelessness and loneliness (Ojio, Matsunaga, Hatakeyama, Kawamura, Horiguchi, et al, 2021).

In this study, the level of Suicidal intention is moderate or slightly above average. The combined effect of the reinforcing factors accounts for 9.6% changes observes in the level of suicidal intention and this influence is significant as shown in this study. It is possible that other

reinforcing factors not included in this research study can go a long way to add to the influence of reinforcing factors on suicide intention if considered. The case of Japan showed that suicide can be curbed at its initial stages (Suicidal ideations and/ or intentions). The suicide rate in Japan has been alarming, but substantial efforts were made to reduce this rate, making prevention a high priority. This report reviews the developmental stages of a

comprehensive policy of suicide prevention in Japan from 1998 to 2013. Along with the establishment of a Special Fund program for local governments, the Basic Act and General Principles led to the development of a comprehensive and multi-sector approach to suicide prevention which led to a consistent decrease after 2009, especially among middle-aged men. This means that an effective intervention is feasible and worth proposing at national and global level (Tadashi, Takashi, Masatoshi, Manami, Toshihiko, et al, 2015).

Implication of study

Suicidal intention is a strong potential for suicide risk factors, and is a global phenomenon in all regions of the world and a serious public health problem, however, it is preventable with timely, evidence-based. According to Wanyoike (2015), the term implication which means the consequences of a given behavior, was used to outline some identified impact of suicidal behavior such as Suicidal intentions or attempt. According to Beautrais (2004), “a suicide attempt, patients may also feel ashamed and helpless, and fear parental and family rejection. They may also feel isolated, unloved and worthless within their family”. Therefore, efforts should be made to integrate young people who have exhibited suicidal behaviour first to their family or important social capital and then into the society at large. The roles of teachers are to inspire and motivate students to adapt to coping strategies that aid management of difficult situations. There is also development of concerns by families and friends of a suicidal individual and the interest is to understand the cause of suicide and suicidal tendencies. The understanding of these and how reinforcing factors intertwined with it is an asset for counsellors, health professionals, educators and preventive policy creation and implementation. This study also identifies areas to focus more strength on in combating suicidal behaviours.

Conclusion

On specific or individual applications each reinforcing factors-drug use disposition, family support and teacher-students experience were significant while peer distraction was not significant. However, when combine, the reinforcing factors influence was more significant. This creates a pattern for

strengthening any intervention geared towards tackling suicidal intention among students by recognizing that various reinforcing factors interplay in the prevention or reduction of suicidal intention. In order to boost the influence of reinforcing factors across the target population and beyond more awareness about designated places, more focus on substance abuse with diversion of interest to other recreation activities that are healthy for students such as seminars, sports, academic competitions, and health education should be upheld and aggressively carried out. More target should be placed on improving students’ experience with family and teachers or mentors to instill positive mindset.

References

- Aloba, O., Ojeleye, O., Aloba, T. (2017). The psychometric characteristics of the 4-item suicidal behaviors Questionnaire-Revised (SBQ-R) as a screening tool in a non-clinical sample of Nigerian University students. *Asian Journal of Psychiatry*, 26(2): 46-51.
- Atulomah, N. O. (2014). Effects of two health education interventions on adherence to antihypertensive medication and on blood pressure in selected tertiary health facilities in Southwestern Nigeria. A thesis in the department of Health Promotion and Education, University of Ibadan. <http://80.240.30.238/bitstream/123456789/648/1/Nnodimele%20Onuigbo%20ATULOMAH.pdf>
- Beautrais, A. L. (2004). Suicide and serious suicide attempts in youth: a multiple-group comparison study. *Am J Psychiatry*; 160:1093–9
- Blalock, S.J., Bone, L., Brewer, N. T., et al (2020). Health Behavior and Health Education: *Theory, Research, And Practice*. Med.Upenn website. Available at: <https://www.med.upenn.edu/hbhe4/part2-ch5-glossary.shtml>
- Blasco, M. J., Vilagut, G., Almenara, J., Roca, M., Piqueras, J. A., Gabilondo, A., et al, (2019). Suicidal thoughts and behaviors: prevalence and association with distal and proximal factors in Spanish university students. *Suicide and life-threatening behavior*;49(3): 881-898.

- Che, D. N., Ibrahim, N., Amit, N., Abdul-Kadir, N. B. A., Halim, M. R. T.(2018). Reasons for living and coping with suicidal ideation among adolescents in Malaysia. *Malays J Med Sci*;25(5):140–150.
- Clarke, V.A., Frankish, C. J., Green, L. W. (1997). Understanding suicide among indigenous adolescents: a review using the PRECEDE model. *Injury Prevention* 1997; 3: 126- 134.
- Goncalvesa, A., Sequeirab, C., Duartea, J., Freitasc, P. (2014).Suicide ideation in higher education students: influence of social support.*AtencionPrimaria*;46(1):88-9.
- Harmer, B., Lee, S., Duong, T., Saadabadi, A. (2021). Suicidal ideation. In: StatPearls (internet). Treasure Island (FL). StatPearls Publishing.
- Klonsky, E. D., May, A. M., Saffer, B. Y. (2016). Suicide, suicide attempts, and suicidal ideation. *Annual review of clinical psychology*; 12, 307-330.
- Meki, C. D., Bråtveit, M., Michelo, C., & Moen, B. E. (2021). Poor Provision of Sanitary Facilities in Markets of Lusaka District Zambia. *Annals of Global Health*, 87(1), 119. <https://doi.org/10.5334/aogh.3400>
- Ogbolu, R. E., Mba-Oduwusi, N., Ogunnubi, O. P., Buhari, O.I.N., Rahmon, O., Tade, T., et al. (2020). Situation report on suicide in Nigeria. *African journal for the psychological study of social issues*; .23(1).
- Ojio, Y., Matsunaga, A., Hatakeyama, K., Kawamura, S., Horiguchi, M., Yoshitani, G., et al. (2021). Anxiety and depression symptoms and suicidal ideation in Japan Rugby Top League Players. *International Journal of Environmental Research and Public Health*; 18(3): 1205.
- Opakunle, T., Opakunle, O., Aloba, O. (2021). Prevalence and factors associated with suicidal behaviors in a cross-sectional sample of Nigerian young adults. *Taiwanese journal of psychiatry*; 35(3): 117-123.
- Pourhoseingholi, M. A., Vahedi, M., & Rahimzadeh, M. (2013). Sample size calculation in medical studies. *Gastroenterology and hepatology from bed to bench*, 6(1), 14–17.
- Rezapur-Shahkolai, F., Khezeli, M., Hazavehei, S. M. M., Ariapooran, S. (2020). The effects of suicidal ideation and constructs of theory of planned behavior on suicidal intention in women: a structural equation modeling approach. *BMC Psychiatry*; 20,217.
- Robert,I., Pless, B. (1995). Social policy as a cause of childhood accidents: the children of lone mothers. *BMJ*; 311, 925-8.
- Rural Health Information (2021). Social cognitive theory. Rural health promotion and disease prevention toolkit: <https://www.ruralhealthinfo.org/toolkits/health-promotion/2/theories-and-models/social-cognitive>
- Saleh, M. (2019). Health, wellness, and illness. Jume Medicine: <https://doctor2016.jumedicine.com/wp-content/uploads/sites/6/2019/01/Illness-behavior-and-sick-role-behavior.pdf>
- Swedo, S., Rettew, D., Kuppenheimer, R, Lum, D., Dolan, S., Goldenberger, E. (1991). Can adolescent suicide attempters be distinguished from at-risk adolescents? *Pediatrics*; 88: 620-9.
- Tadashi, T., Takashi, Y., Masatoshi, I., Manami, K., Toshihiko, M., Yotaro K., et al. (2015). Suicide prevention strategies in Japan: a 15-year review (1998–2013). *Journal of Public Health Policy*; 36, 52–66.
- Wallack, C. E. (2007). Factors associated with suicidal ideation among American college students *PhD diss.* University of Florida; [[Ref list](#)].
- Wanyoike, B. (2015).Suicide among university students in Kenya: causes, implications and interventions, *Journal of Language, Technology & Entrepreneurship in Africa*; 5(1).
- Wayne, W. L. (2019). The social cognitive theory. Boston university school of public health<https://sphweb.bumc.bu.edu/otlt/MPHMo>

dules/SB/BehavioralChangeTheories/Behavioral
ChangeTheories5.html

World Health Organization, (2014). Preventing
suicide: a global imperative. World Health
Organization: Geneva.

World Health Organization (2020). int/ news-
room/ fact- sheets/ detail/ suicide [Accessed 7
Apr 2020]. [https://www.who.int/news-
room/fact-sheets/detail/adolescent-mental-health](https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health)