



Relationship between Family Cohesion, Stress, and Suicidal Ideation among Undergraduates in Public Universities in Delta Central Senatorial District

Ebube Dorcas Okoh

Department of Guidance and Counselling, Delta State University, Abraka
tabbytab944@gmail.com

Rev. Fr. (Prof.) Jude J. Obiunu

Department of Guidance and Counselling, Delta State University, Abraka
obiunu@delsu.edu.ng

Abstract

The present study focused on the relationship between family cohesion, stress, and suicidal ideation among undergraduates of public universities in Delta Central senatorial district. This study was guided by three research questions and three hypotheses. The design is *ex post facto*. The 378-observation sample was drawn from a 42,286 undergraduate study population from 3 public universities. This study uses the instrument 'Family Cohesion, Stress and Suicidal Ideation Scale (FCSSI)', which was validated based on factor analysis using experts' judgment. The content validity and construct validity of the instrument were based on factor analysis. Cronbach's Alpha value for the instrument was greater than 0.70 and was used to measure the reliability of the instrument. In order to answer the research questions, the data were analysed using the Pearson product-moment correlation coefficient, and to test the hypothesis at 0.05 significance level, regression statistics were used. This study found that family cohesion, stress, and suicidal ideation among undergraduates have a significant relationship. Furthermore, sex moderates the relationship between family cohesion, stress, and suicidal ideation among undergraduates. Based on these findings, it was recommended that the guidance and counselling units in all institutions should be kept active with qualified counsellors to give good mental health counselling to undergraduates who are having either passive or active suicidal ideation.

Keywords: Family Cohesion; Stress; Suicidal Ideation; Undergraduate; University.



Introduction

Suicide is viewed as a way of ending one's own life as a result of being overwhelmed with a plethora of feelings into despair, hopelessness, loneliness, and intense emotional pain. Now it emerges often from mental distress, such as; depression, anxiety, or just pure trauma. However, it can also be affected by external factors such as overwhelming stress, social pressure, or feelings of isolation. According to O'Carroll et al. (1996), suicide is the death of oneself, by one's purpose and with evidence (explicit or implicit) of such intent to die. Kroning and Kroning (2016) also supported this definition of Suicide by defining it as the act of thinking up and carrying out intentions to die. The majority of suicides is preceded by ideation; in other words, suicide is not an unannounced event. Schwenk et al (2010) lay out suicide ideation as thoughts, activities, and contemplations of ending one's own life in an attempt to avoid some pain. In addition, Harmer et al. (2021), sees suicidal ideation as a broad term encompassing thoughts of wishing, contemplations, or preoccupation with death and suicide. In some cases, it is also described as suicidal thoughts or ideas.

Klonsky et al (2016) defined as thinking cognitively or imagining the end of one's life, as Suicidal Ideation. According to Harmer et al. (2021), he defined suicidal ideation as Active and Passive in its form. For instance, passive suicidal ideation is a general want to die, except without a plan to inflict deadly self-hurt and kill yourself or, if you do not have the motivation to reside anymore but you do not have a plan to kill yourself.

Passive suicidal thoughts approach: "I just want to go to sleep and don't wake up", "I want to just let myself go into the fog and then just disappear", "I just want the world to end tomorrow." Passive suicidal ideation is when you are indifferent to death by accident and people will explain that if your hands are not taken to save your life. Clinicians and researchers are less likely to focus attention on passive suicidal ideation as compared to active ones. While few studies specifically focus on passive ideation, most research studies do not distinguish between the active and passive ideation. In turn, the premise on which healthcare professionals presume to believe that the desire to die is not usually a preface to additional serious suicidal symptoms.

Active Suicidal ideation is experiencing current, specific suicidal ideas; active suicidal ideation are different from passive suicidal notion, the latter is that the person no longer have a want to stay alive however they now have an intention to die. Their means of attempting suicide are not focused on to be the probable lethality (Kumar 2017). However, it is the individual expectation of a fatal outcome if his or her attempt to acquire the motor vehicle were successful (McCullum et al, 2022). "Active suicidal ideations" are expressed as "I would have no problem terminating my life by now." There are more thoughts than actual suicide in the form of self-harm, with the thoughts to commit suicide in the form of self-harm thought to occur 10 to 20 times more often. They might conceivably come from pressures from their families. Such family dynamics as communication patterns and the contents of the family interaction can contribute to it.

The emotional bonding between family members is referred to as family cohesion. A functional family environment is a family that is supportive, expressive, and organized, family members have good communication, a sense of belongingness, clear rules, and fewer conflicts. If the family environment is very much coping, loving, expressive, and has positive communication, the atmosphere becomes happy and the person can easily relate the challenges to the family and



also receives emotional support and other support. This action and these continuous actions depress you in such a way that there are no depressive thoughts of neglect, of abandonment, of emotional distress that could lead you to this suicidal ideation. Prevention of suicidal ideation has been purported to be explained by family cohesion, defined as a strong emotional bond, communication, and support within the nuclear and extended family (Rapp et al., 2017). Further, how families can adapt to crises and stressors is critical to their capacity to help support persons with suicidal ideation.

Yet dysfunctional or low family cohesion does not provide support for them, and makes matters worse, deepening feelings of hopelessness, loneliness, alienation, and despair, and creating a tendency to think in a line of depressing thoughts, which then leads to the ideation of suicidal thoughts. Suicidal ideation has far-reaching consequences, not only on the person but also on the rest of the family, because their cohesion and adaptability are main factors in protecting or accentuating the suicide risk. Families with a rigid or ineffective way of coping may not be able to meet the care needs of someone with suicidal ideation. In addition, low family cohesion, low family adaptability, and low communication would lower the psychological resource of adolescents, and eventually they will be depressed, suicidal, or suffer from mental health problems (Peng et al., 2023). When the underlying causes leading to such a mental state, for instance, hopelessness, low family communication, lack of family support and cooperation, and so on, are present, the individual will consider suicidality ideation as a way out of the pain. In this study, other factors will be considered, except for genetic factors, like life experiences of stress. This study then attempts to understand under what stress one can suffer suicidal ideation.

Stress is a common response to the changes and pressures that we all experience in our roles in life. Stress, defined by Fink (2010), is a 'psychobiological response to an external or internal event that threatens to disrupt an individual's homeostasis.' In small amounts, little doses of stress are very useful to the human body, but too much high and regulated stress is dangerous and necessary to examine in undergraduates. It can have either positive or negative impacts, based on how it is handled. Stress is very much related to financial, academic, health, societal, and relationship issues for undergraduate students, which can have a big impact on their well-being and academic performance" (Reid et al, 2020; Reyes-Portillo et al., 2022; Johnson, 2022). Financial stress is one of the biggest problems students have when they are focusing on balancing academic work with a part-time job. With the increasing cost of tuition, accommodation, and other living expenses, students feel overwhelmed. Gbadamosi et al. (2018) state that financial stress makes students unable to concentrate on their studies, and their mental health becomes affected by anxiety and depression. This drives students to take up more than one job because of a lack of funds; these students do not have the time to devote to studies, but have to rest, thus affecting their academic performance. The pressure to perform well, meet deadlines, and achieve good grades is another major stressor for undergraduate students, as is academic stress. The increasing academic workload, fear of failure, and internal push for perfectionism sometimes lead to procrastination, burnout, and mental breakdown, which is added by the competitive nature of the academic environment. Anxiety and depression are the symptoms often experienced by students who are unable to cope with the pressure put on them. According to a study done by Wong et al. (2023), students who are exposed to a high amount of academic stress are more prone to mental health disorders and malicious acts, like abusing substances. Whether physical health stress or mental health stress, and either of these is severe, they can have such a devastating effect on the undergraduate students' well-being. All illness, injury, or ongoing health conditions can cause



students to become distracted from their studies as a result of stress. Peters et al. (2020) study shows that students with chronic illnesses also have more stress, which leads to lower academic performance. Students are facing pressures from society's expectations, which include the expectations to do certain things and meet certain achievements. Undergraduates are under pressure to excel academically, secure a good job after graduation, and live up to family and societal expectations. As Steptoe et al., (2020) point out, societal stress reaches students from marginalized groups (ethnic minorities or students with disabilities) disproportionately because they may be exposed to extra challenges, including discrimination and a lack of support. That means relationship stress is a consequence of conflicts, misunderstandings, or pressure to connect. Managing relationship stress, however, is a major challenge to students in particular, especially when this interferes with such responsibilities as academic and financial, Fink (2010) says. The breakdown of relationships, especially the romantic relationship, causes emotional distress and can ruin academic performance. Stress from parental expectations can also happen, especially for students who feel obliged to satisfy their families' academic and career expectations.

Undergraduates may feel overburdened by the combined effects of relationship, societal, academic, health, and financial stress. Lerner et al. 2016 recently conducted two studies. found that long-term exposure to these stressors can impair cognitive function and cause a person to experience concentration issues, memory loss, poor decision-making, and other mental health issues like anxiety, depression, suicidal thoughts, and more.

Statement of Problem

Recent data from the World Health Organization (WHO, 2022), social media reports, and academic literature have highlighted the growing incidence of suicide among university undergraduates. Within the last three months of the 2024/2025 academic session, the Delta State University Counselling Centre, Abraka, has recorded more than three suicide attempts by students.

In one instance, I was contacted by the University Health Centre regarding a student who had attempted suicide. Upon investigation, it became clear that she was overwhelmed by persistent negative experiences within her family, leading her to believe that her absence might ease her family's burdens. In another case, a student was driven to attempt suicide due to the combined weight of academic demands and financial hardship. A third case involved a student grappling with severe mental health challenges and clinical depression, who felt that ending her life was preferable to enduring continuous emotional pain.

Similarly, reports from the Counselling Centre of the Federal University of Petroleum Resources (FUPRE) indicate that suicidal behavior among undergraduates is often rooted in family dysfunction and external pressures, including academic and societal expectations. A tragic illustration of this crisis was the case of 19-year-old Opesusi Faith Timilehin, who, on Monday, 13th May, ingested a rodenticide known as "Push Out" after receiving a Joint Admission and Matriculation Board (JAMB) score of 190 a score she believed was insufficient for university admission. Furthermore, a recent study by Okoh (2024) found that factors such as family connectedness, stress levels, and individual differences significantly influence the incidence of suicidal ideation among undergraduates. These distressing cases and empirical findings have informed my commitment to investigate the extent to which family cohesion and stress contribute



to suicidal ideation and, consequently, suicidal attempts among undergraduates in Delta Central Senatorial District.

Hypotheses

The following null hypotheses have been formulated and were tested at a 0.05 level of significance.

1. There is no significant relationship between family cohesion and suicidal ideation among undergraduates in public universities in Delta Central Senatorial District.
2. There is no significant relationship between stress and suicidal ideation among undergraduates in public universities in Delta Central Senatorial District.
3. There is no significant difference between male and female undergraduates in their involvement in suicidal ideation in Delta Central Senatorial District.

Methods

This study used a cross-sectional approach and an *ex post-facto* research design. A cross-sectional study which describes a group of subjects at one particular point in time (Campbell, Machin, & Walters, 2007) is deemed appropriate because the study is collecting established information from individuals with similar characteristics across 3 universities at the same time to examine the relationship between family cohesion, stress and suicidal ideation among undergraduates in Delta Central Senatorial District. Kerlinger (1973) defined *ex post facto* research as that in which the independent variables (groups with certain qualities that already exist before the study, which in this case is family cohesion and stress have already occurred, and in which the researcher starts with the observation of a dependent variable (suicidal ideation). or variables. A total of 42,286 undergraduate students enrolled in public universities in the Delta Central Senatorial District during the 2021–2022 academic year made up the study population. According to information gathered from the Academic Planning Division of the three postsecondary institutions, there are 42,286 undergraduates enrolled at Delta State University, Abraka (20,934 students), Delta State University of Science and Technology, Ozoro (7,552 students), and Federal University of Petroleum Resources (13,800 students).

Table 1: Population of undergraduates in the three public universities in Delta Central Senatorial District

S/N	List of Universities	Number of Students
1	Delta State University, Abraka	20,934
2	Delta State University of Science and Technology, Ozoro	7,552
3	Federal University of Petroleum Resources	13,800
	Total	42,286

The sample size for this study is 378. According to Gill, Johnson, and Clark (2010), 378 is an adequate sample size, with a population between 25,000 and 49,999. The sample was selected from three public universities in Delta Central Senatorial District by way of a stratified sampling procedure which involves selecting specific types of educational institutions (federal and state) from Delta Central Senatorial District. Proportionate stratified and convenience sampling techniques will be employed. In proportionate stratified sampling, the sample is selected in proportion to the relative size of each stratum in the overall population to ensure that each sub-



group is adequately represented in the final sample. To ensure that the three institutions get equal representation, the researcher did proportional allocation using the formula ($n_i = N_i \times n/N$). 187 students were selected from Delta State University, Abraka, 68 students were selected from Federal University of Petroleum Resources 123 students were selected from Delta State University of Science and Technology, Ozoro and all from the Department of Geology, faculty of science across the 3 Universities. The convenience sampling technique was used to select individual students from each institution. That is, on getting to each institution, only students who were willing and able to participate in the study were allowed to participate.

The research instrument is divided into two sections, Section A was used to collect demographic information of the respondents including their age, gender, and academic level. Section B contain three sub-scales which include the Stress Rating Scale, the Family Cohesion Rating Scale, and the Suicide Ideation Rating Scale. Holmes and Rahe (1967) developed the Stress Rating Scale which was adopted from *The Social Readjustment Rating Scale*, it contained 26 items at the beginning, however, after pilot testing, it was reduced to 14 items. Gonzales et al (2012) adopted the Family Cohesion Rating Scale from *Randomized Trial of a Broad Preventive Intervention for the Mexican American Adolescent*. It initially had 44 items but was reduced to 21 after the trial. Ghasemi et al. (2015) introduced the use of the Suicidal Ideation Rating Scale from *Measurement Scale of Suicidal Ideation and Attitudes*. The original 20 items were modified towards the pilot testing, but finally, it had 20 items. Items in section B were presented on a 4-point rating scale (strongly disagree = 1; strongly agree = 4). The four levels of aggregation were: N = all unit responses, m = mean of all responses given by a unit within the case, e = mean of the lower aggregation levels and a = sum of all aggregation levels. Face validity was determined by presenting the instrument to the researcher's supervisor and two experts of the Guidance and Counselling Department, Delta State University, Abraka. The instruments were appraised for appropriateness and utility to achieve the aim of the study by these experts. As a result, some of the items were changed with a regard to language choice as they were not fitting for the study. Therefore, through the experts' judgment, its face validity was considered adequate. Content and construct validity of the instrument used in the factor analysis. The content validity of the instrument was estimated based on the principal component analysis of the extraction method. It yielded cumulative variance to the following percent: family cohesion rating scale = 76.92%; stress rating scale = 61.32% and suicidal ideation rating scale = 62.54%. To estimate the construct validity of the instruments, the rotated component matrix is done. The scores yielded by this scale were as follows: family cohesions rating scale = 0.962 – 0.0997, stress rating scale = 0.480 – 0.898 and suicidal ideation rating scale = 0.412 – 0.867. In order to ascertain the reliability of the research instrument, the Questionnaire was administered to thirty (30) undergraduates at the University of Delta, Agbor, Delta State. Cronbach alpha reliability was used to analyse the data. The following coefficients were obtained: family cohesion rating scale = 0.920, stress rating scale = 0.750 and suicidal ideation rating scale = 0.89.

The questionnaire was administered to the students directly by the researcher with the help of three research assistants. The researcher first visited to obtain permission from the university authorities and then returned with the research assistants to administer the questionnaire to the undergraduates. The data obtained was collated, scored, and analysed using the Statistical Package for Social Science (SPSS) version 26. Thereafter, the resulting data was analysed with Pearson product-moment correlation coefficient (PPMC) and regression statistics. The Pearson's

coefficient of determination was used to answer the research questions. Regression statistics were used to test the hypothesis at a 0.05 level of significance.

Results

Hypothesis One: There is no significant relationship between family cohesion and suicidal ideation among undergraduates in public universities in Delta Central Senatorial District.

A simple linear regression analysis was conducted to test the research hypothesis one. The result is presented in Table 1

Table 1: Regression analysis between Family cohesion and suicidal ideation among undergraduates' public universities in Delta Central Senatorial District.

Model Summary and F statistics					
r	R ²	F	df	p	
0.842	0.708	913.79	1, 376	0.000	
Coefficient					
Variable	Unsaturated Coefficients		Standardized Coefficients	t	p
	B	SE	Beta (β)		
Constant	4.531	1.449		3.127	.002
Family Cohesion	.841	.028	.842	30.229	.000

Note. F (1, 376) = 913.79 $p < 0.001$, $R^2 = 0.708$

The result of the test conducted, as shown in Table 1, indicates that family cohesion explained a variance of 70.8% in suicidal ideation ($R^2 = 0.708$); the result also indicated that family cohesion has a significant relationship with suicidal ideation among undergraduates in public universities in Delta Central Senatorial District. $F(1, 376) = 913.79$; $p < 0.001$. The null hypothesis that states that there is no significant relationship between family cohesion and suicidal ideation among undergraduates is therefore rejected. This implies that family cohesion significantly correlates with suicidal ideation among undergraduates in this study. It was found that family cohesion significantly predicts suicidal ideation ($\beta = 0.842$; $p < 0.001$). The B coefficient of 0.841 obtained revealed that for 1-unit increase in family cohesion, it is predicted that there would be a corresponding 0.841 unit increase in suicidal ideation (if and only if other variables are held constant).

Hypothesis Two: There is no significant relationship between stress and suicidal ideation among undergraduates in public Universities in Delta Central Senatorial District.

Hypothesis two was tested using the simple Linear regression analysis. The result is presented in Table 2

Table 2: Stress regression analysis predicting and suicidal ideation among undergraduates in public Universities in Delta Central Senatorial District

Model Summary and F statistics						
r		R ²		F	df	p
0.885		0.732		1024.39	1, 376	0.001
Coefficient						
Variable	Unsaturated Coefficients		Standardized Coefficients	t	p	
	B	SE	Beta (β)			
Constant	-5.558	1.682		-3.304	0.001	
Stress	1.569	0.049	0.855	32.006	0.000	

Table 2 shows that stress explained a variance of 73.2% in suicidal ideation ($r = 0.885$, $R^2 = 0.732$); The result shows that there was a significant relationship between stress and suicidal ideation [$F(1, 376) = 1024.39$; $p < 0.001$]. The null hypothesis is therefore rejected. The result implies that stress is significantly related to suicidal ideation. The result also shows that stress significantly predicts suicidal ideation ($\beta = 0.834$; $p < 0.001$). The B coefficient of 1.569 shows that for every 1 unit increase in stress, it is predicted that there would be a corresponding 1.569 unit increase in suicidal ideation (if and only if other variables are held constant).

Hypothesis Three: There is no significant difference between male and female undergraduates in their involvement in suicidal ideation.

A mean statistic was used to answer this research question. The result is presented in Table 3

Table 3: Mean difference in suicidal ideation between Male and female undergraduates

Variables	Mean	SD	t	df	P
Male	175	48.7714	5.64305	2.210	376
Female	203	47.3448	6.74128		0.028

Table 3 shows that there was a significant difference in suicidal ideation between male ($M = 48.7714$; $SD = 5.64$) and female ($M = 47.34$; $SD = 6.74$). [$t(376) = 2.210$; $p < 0.05$]. The null hypothesis 9 is therefore rejected. This means that there is a significant difference between male and female undergraduates in their involvement in suicidal ideation.

Discussions

The first major finding of the study revealed a significant relationship between family cohesion and suicidal ideation among undergraduates in public universities in the Delta Central Senatorial District. At face value, this finding may appear counterintuitive, as higher family cohesion is typically associated with better mental health outcomes. However, this result can be interpreted in light of several underlying factors including the complexity of family dynamics, individual personality traits, and the intense external pressures faced by university students. Empirical studies have shown that while cohesive families often provide emotional support and a sense of belonging, they can also inadvertently impose high expectations that burden young adults (Flett, Hewitt, & Heisel, 2014). For undergraduates, especially in cultures where academic success



is strongly tied to family honor or future socio-economic mobility, these expectations can manifest as immense psychological pressure. When students perceive that they are not meeting familial standards, it can lead to feelings of inadequacy, hopelessness, and eventually suicidal ideation (Yap, Pilkington, Ryan, & Jorm, 2014). This aligns with Joiner's (2005) Interpersonal-Psychological Theory of Suicidal Behavior, which posits that perceived burdensomeness and thwarted belongingness contribute significantly to suicidal thoughts. Moreover, high family cohesion can sometimes limit open dialogue about personal struggles, especially in households where mental health is stigmatized. This suppression of emotional expression may prevent undergraduates from seeking help, thereby increasing psychological distress (Nock et al., 2008). In these scenarios, the outward appearance of cohesion masks deeper emotional disconnects and internalized stress. In addition, individual complexity, which is the multifaceted nature of a person's identity, experiences, and cognitive processing, plays a critical role. Students with complex cognitive styles may engage in extensive rumination, a process of overanalyzing situations and replaying perceived failures or negative experiences. This can exacerbate emotional dysregulation and foster suicidal ideation (Bong, 2001; Luthar, 2003; Nolen-Hoeksema, 2000). Complex thinkers may lack the coping strategies to navigate overwhelming emotions, especially in high-pressure environments, leading them to internalize failure and spiral into despair. Therefore, while family cohesion is generally a protective factor, in specific contexts where expectations are intense and communication is limited, it can become a source of stress rather than support. These findings underscore the importance of promoting open, emotionally supportive family environments and teaching adaptive coping strategies to undergraduates to mitigate the risk of suicidal ideation.

The second finding showed that there is a significant relationship between stress and suicidal ideation among undergraduates in public universities in Delta Central Senatorial District. This implies that stress among undergraduates can be related to suicidal ideation, meaning that stressful factors like academic issues, health challenges, financial difficulties, and relationship problems, amongst others, increase the risk of suicidal ideation among undergraduates. This finding supports the assertion of Hawton et al. (2016) that individuals exposed to multiple stressors were significantly more likely to experience suicidal ideation. Specifically, stressors such as high parental expectations and insufficient emotional support within the family environment were identified as key contributors. Students often reported feeling overwhelmed by academic demands and tense family dynamics, which heightened their vulnerability to suicidal thoughts. Prolonged or chronic exposure to stress has been consistently linked to an increased and sustained risk of suicidal ideation among young adults. This aligns with the findings of Johnson et al. (2008), who emphasized that the cumulative effect of multiple stressful life events significantly raises the likelihood of experiencing suicidal thoughts. Furthermore, the interplay of individual characteristics adds another layer of complexity to this relationship. Cognitive overload—resulting from the diverse and often conflicting elements of an individual's personality, life experiences, and thought patterns—can lead to persistent rumination and emotional dysregulation. Conclusively, various external stressors compound the emotional burden faced by undergraduates. Academic pressures, financial instability, societal expectations, and the breakdown of romantic relationships are significant contributors to suicidal ideation among undergraduates.

The third finding showed that there is a significant difference between male and female undergraduates' involvement in suicidal ideation in public universities in Delta Central Senatorial District. The significant difference between male and female undergraduates in terms of suicidal



ideation can be attributed to various psychological, social, and cultural factors. Research has consistently shown that females tend to report higher levels of depressive symptoms and suicidal ideation compared to males. A study by Nock et al. (2008) found that females are more likely to experience depressive disorders, which are strongly linked to suicidal thoughts and behaviors. This higher rate of depression in females could explain their increased susceptibility to suicidal ideation, as depression is one of the most common risk factors for such thoughts. The emotional and psychological factors contributing to this can be linked to females' greater willingness to express their emotions and seek help, which may result in more pronounced expressions of distress such as suicidal ideation. Conversely, males often internalize their emotions and may be less likely to disclose their struggles, making their experiences of suicidal ideation less visible. According to a study by Wilkins and Brumley (2020), although males may experience suicidal ideation at similar or even higher rates than females, they are more likely to act on these thoughts through violent means, such as firearms, which can result in higher rates of completed suicide among males. This gender difference in how suicidal ideation is manifested could contribute to the disparity observed in studies, where females may be more likely to report suicidal thoughts but males may be more prone to fatal outcomes. Thus, the actual rates of suicidal ideation could be underreported in males due to the reluctance to seek help or openly discuss mental health concerns. Additionally, societal expectations and gender roles play a significant role in how males and females cope with stress and mental health challenges. Females are often socialized to be more emotionally expressive and are thus more likely to acknowledge their suicidal ideation, while males may feel pressured to conform to traditional ideals of masculinity that discourage emotional vulnerability.

Conclusion

In conclusion, the findings of this study suggests that family cohesion and stress play a pivotal role in suicidal ideation and there is a significant difference between male and female involvement in suicidal ideation. This implies that individuals of the two sexes need help to overcome this threatening clinical concern.

Recommendations

Based on the findings of this study, the following recommendations were advanced:

- i. University counselling centres in all institutions should be active with available counsellors to offer effective mental health counselling to undergraduates who are experiencing passive or active suicidal ideation based on one or more factors in their lives.
- ii. The government should create a financial budget for the setting up of mental health workshops and seminars to train and update counsellors to deliver the best services to undergraduates.
- iii. Seminars should be conducted regularly to educate both undergraduates and parents on the pros and cons of family cohesion, self-derogation, stress, and suicidal ideation on the undergraduates' mental health.



References

- Campbell, M. J., Machin, D., & Walters, S. J. (2007). *Medical statistics: A textbook for the health sciences* (4th ed.). Chichester, UK: Wiley.
- Fink, G. (Ed.). (2010). *Stress consequences: mental, neuropsychological and socioeconomic*. Academic Press.
- Flett, G. L., Hewitt, P. L., & Heisel, M. J. (2014). The destructiveness of perfectionism revisited: Implications for the assessment of suicide risk and the prevention of suicide. *Review of General Psychology*, 18(3), 156–172. <https://doi.org/10.1037/gpr0000011>
- Gbadamosi, A. (2018). The anatomy of international students' acculturation in UK universities. *Industry and Higher Education*, 32(2), 129-138.
- Harmer, B., Lee, S., Duong, T. vi H., & Saadabadi, A. (2021). Suicidal Ideation. PubMed; StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK565877>.
- Hawton, K., Saunders, K. E. A., & O'Connor, R. C. (2016). *Self-harm and suicide in adolescents*. The Lancet, 387(10036), 2413–2422. [https://doi.org/10.1016/S0140-6736\(16\)30302-6](https://doi.org/10.1016/S0140-6736(16)30302-6)
- Johnson, J. L., Oliffe, J. L., Kelly, M. T., & Lohan, M. (2008). "I'm not a doctor, but I know what I see": Men's health and the role of lay knowledge. *Sociology of Health & Illness*, 30(1), 1–18. <https://doi.org/10.1111/j.1467-9566.2007.01056.x>
- Kerlinger, F. N. (1973). *Foundations of Behavioral Research*. New York: Holt, Rinehart and Winston.
- Klonsky, E. D., May, A. M., & Saffer, B. Y. (2016). Suicide, suicide attempts, and suicidal ideation. *Annual review of clinical psychology*, 12(1), 307-330.
- Kroning, M., & Kroning, K. (2016). Teen depression and suicide: A silent crisis. *Journal of Christian nursing*, 33(2), 78-86.
- Kumar, U. (Ed.). (2017). *Handbook of suicidal behaviour*. Singapore: Springer Singapore.
- Lerner, E., Bonanno, G. A., Keatley, E., Joscelyne, A., & Keller, A. S. (2016). Predictors of suicidal ideation in treatment-seeking survivors of torture. *Psychological trauma: theory, research, practice, and policy*, 8(1), 17.
- McCallum, S. M., Batterham, P. J., Christensen, H., Werner-Seidler, A., Nicolopoulos, A., Newton, N., ... & Caelear, A. L. (2022). Personality factors associated with suicidal ideation, plans and attempts in adolescents. *Journal of affective disorders*, 310, 135-141.
- Nock, M. K., Borges, G., Bromet, E. J., Alonso, J., Angermeyer, M., Beautrais, A., ... & Williams, D. (2008). Suicide and suicidal behavior. *Epidemiologic Reviews*, 30(1), 133–154. <https://doi.org/10.1093/epirev/mxn002>



- Nolen-Hoeksema, S. (2000). The role of rumination in depressive disorders and mixed anxiety/depressive symptoms. *Journal of Abnormal Psychology*, 109(3), 504–511. <https://doi.org/10.1037/0021-843X.109.3.504>
- O'Carroll, P. W., Eastgard, S., & Knickmeyer, S. (1996). Perspectives from Research, Public Health. *Suicide and Life-Threatening Behavior*, 26, 3.
- Peng, S., Peng, R., Lei, H., & Liu, W. (2023). Family functioning and problematic behavior among secondary vocational school students: the mediating role of hope and the moderating role of perceived social support. *Personality and Individual Differences*, 207, 112156.
- Peters, M. A., Wang, H., Ogunniran, M. O., Huang, Y., Green, B., Chunga, J. O., ... & Hayes, S. (2020). China's internationalized higher education during Covid-19: Collective student autoethnography. *Postdigital science and education*, 2, 968-988.
- Rapp, A. M., Lau, A., & Chavira, D. A. (2017). Differential associations between social anxiety disorder, family cohesion, and suicidality across racial/ethnic groups: Findings from the National Comorbidity Survey-Adolescent (NCS-A). *Journal of anxiety disorders*, 48, 13-21.
- Reid, M., Jessop, D. C., & Miles, E. (2020). Explaining the negative impact of financial concern on undergraduates' academic outcomes: Evidence for stress and belonging as mediators. *Journal of further and higher education*, 44(9), 1157-1187.
- Reyes-Portillo, J. A., Masia Warner, C., Kline, E. A., Bixter, M. T., Chu, B. C., Miranda, R., ... & Jeglic, E. L. (2022). The psychological, academic, and economic impact of COVID-19 on college students in the epicenter of the pandemic. *Emerging Adulthood*, 10(2), 473-490.
- Schwenk TL, Davis L, Wimsatt LA. Depression, stigma, and suicidal ideation in medical students. *JAMA*. 2010 Sep 15;304(11):1181-90. doi: 10.1001/jama.2010.1300. PMID: 20841531.
- Step toe, A., Emch, S., & Hamer, M. (2020). Associations between financial strain and emotional well-being with physiological responses to acute mental stress. *Psychosomatic Medicine*, 82(9), 830-837.
- Wilkins, K., & Brumley, L. (2020). Suicide mortality in Canada: An overview of trends and patterns. *Health Reports*, 31(12), 3–13. Retrieved from <https://www150.statcan.gc.ca/n1/pub/82-003-x/2020006/article/00001-eng.htm>
- Wong, S. S., Wong, C. C., Ng, K. W., Bostanudin, M. F., & Tan, S. F. (2023). Depression, anxiety, and stress among university students in Selangor, Malaysia during COVID-19 pandemics and their associated factors. *PloS one*, 18(1), e0280680.
- Yap, M. B. H., Pilkington, P. D., Ryan, S. M., & Jorm, A. F. (2014). Parental factors associated with depression and anxiety in young people: A systematic review and meta-analysis. *Journal of Affective Disorders*, 156, 8–23. <https://doi.org/10.1016/j.jad.2013.11.007>