



## Suicidal Ideation among in-School Adolescents and Stress-Related Factors: A Pilot Study of a Nigerian Educationally Less Developed State (ELDs)

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### Abstract

This pilot study investigated the prevalence of suicidal thoughts and stress-related factors in a Nigerian educationally less developed state (ELDS). Because there may be insufficient supports in ELDS schools, this study becomes imperative to gain an understanding of how the impact of stress caused by significant people's academic expectations, as well as stress caused by academic activities themselves, on adolescents' suicidal ideation could lead to evidence-based interventions for students in this context. Using a multi-stage sampling technique, 300 in-school adolescents were sample for the study. Data were gathered via survey questionnaires. The data were analyzed using percentages, mean, t-test, and ANOVA, and the findings revealed that almost 46% of the respondents had suicide ideation, more than half of the students suffered academic stress, and were pressured by parents to succeed in school. Suicidal thoughts were significantly influenced by students' perceived academic stress and parental academic pressure. Among the demographic variables, only gender had a significant impact on students' suicidal ideation. It was concluded that stress-related factors may have a greater impact on students' suicide ideation than demographic variables. The significance of the findings was highlighted.

**Keywords:** Academic Stress, Educationally Less Developed States, Parental Academic Pressure, Suicidal Ideation

## **Introduction**

The achievement of sustainable development goals for education necessitates efforts to provide quality education to all children. Despite international declarations to attain education for all in order to achieve sustainable development, many governments fail to deliver high-quality education to their citizens (Beckman & Gallo, 2015). For many years, Nigeria, for example, has struggled to keep students in school despite indicated increases in access to education. More than 14.6 million children are out of school in Nigeria (Olaniyan, Soyibo, Lawanson, Olasehinde, Odumosu, Orekoya, Owoeye, and Adeyemi, 2018), with a higher percentage of dropouts reported in educationally less developed states (ELDS). These are states that lack appropriate resources for effective and quality education. These economic constraints reduce educational possibilities, raise competition for limited resources, and impose additional costs on students and their families, leading in increased stress and psychological suffering (Stanley & Chinwe, 2022). For example, Nwosu, Wahl, Okwuduba, and Ogu, (2021) have demonstrated that academic stress may occur from learning without suitable educational support and resources. Poverty, a lack of resources, and financial insecurity can all add to academic stress and subsequently lead to suicidal thoughts. Suicidal ideation in adolescents is influenced by a variety of psychological, social, and environmental factors. Consequently, suicidal thoughts, parental academic pressure and academic stress may be influenced by the specific cultural and socioeconomic characteristics of ELDS. Understanding the prevalence and possible causes of suicidal ideation in vulnerable populations is essential for effective intervention and support.

## **Overview of Suicidal Ideation among Adolescents**

Suicidal ideation, defined as thoughts of self-harm or suicide (Alabi, Alabi, Ayinde and Abdulmalik, 2014), is a distressing and complex issue that affects adolescents all over the world. Numerous studies have shown that a significant number of adolescents experience suicidal ideation during their adolescence, leading to increasing rate of suicide in Nigeria (Omaka-Amari, Aleke, Nwafor, Afoke, Ngwakwe, Okeke, Item, Dauda, and Nwankwo, 2021). Suicide is one of the leading causes of death among adolescents aged 15 to 29, with rates varying across countries and regions (World Health Organization, 2021). Suicidal ideation, according to Park and Lee (2022), transcends specific cultural, socioeconomic, or educational backgrounds and can occur in both developed and developing countries. According to Constantinou (2021), untreated or unaddressed suicidal ideation can have serious consequences for adolescents. While not all people who have suicidal thoughts act on them, they are a significant risk factor for suicide. Untreated suicidal ideation can lead to nonfatal self-harm and completed suicides (Smith & Cipriani, 2017). Even if a suicide attempt does not result in death, it can cause serious physical harm and long-term psychological distress (Goldman-Mellor, Caspi, Harrington, Nada-Raja, Poulton, and Moffitt, 2014). According to Raj, Ghosh, Verma, & Singh, (2021), the impact of untreated or unaddressed suicidal ideation extends beyond immediate outcomes. Adolescents who have persistent or recurring suicidal ideation are more likely to develop long-term mental health problems.

Depression, anxiety disorders, substance abuse, and other psychiatric disorders can develop as a result. These mental health issues can have a significant impact on an adolescent's overall well-being, academic performance, social relationships, and future prospects (Adeyeye, 2022). Suicidal ideation is significantly increased by psychological conditions such as depression, anxiety, bipolar disorder, and borderline personality disorder, which are characterized by feelings of hopelessness and distorted perceptions (Orri, Ahun, Naicker, Besharati, & Richter, 2022; Park & Lee, 2022). Social factors such as dysfunctional family patterns, negative peer relationships, and cultural/socio-demographic factors all contribute to suicidal ideation (van den Berg, Tancred, & Louw, 2017). Isolation, disconnection, and a lack of social connections increase the risk, while bullying, peer pressure, and relationship conflicts can worsen the situation (Kim, Moon, Lee, & Kim, 2018; Mohan & Swaminathan, 2022; Orri et al., 2022). Furthermore, environmental factors such as stressful life events, socioeconomic adversity, and adversity in childhood (ACEs) all contribute to an increased risk of suicidal ideation (Prokopez, Vallejos, Farinola, Alberio, Caporusso, Cozzarin, and Daray, 2020; Wang, Sun, Lin, Zhang, Mu, & Cao, 2019). These factors, according to Orri et al. (2022), are influenced by the socio-cultural and educational context in which adolescents find themselves. Educational settings, in particular, place significant strain and pressure on students, negatively impacting their mental health. Recent research has highlighted the importance of parental academic pressure and academic stress as critical contributors to suicidal ideation among stress-related factors (Deb, Strodl, & Sun, 2015).

### **Academic Stress and Suicidal Ideation**

Examining academic stress is important because it includes pressures within the educational environment such as excessive workload (Maajida, Vishnu & Gayathri, 2018) , competition (Deb et al., 2015) , challenging learning environments (Alt, 2018) , and the fear of failure (Banks & Smyth, 2015). Adolescents in school, face a variety of academic-related stressors. According to Carollo, Chai, Halstead, Dimitriou, & Esposito (2022), an excessive workload contributes to academic stress by resulting in an overwhelming number of assignments, tests, and deadlines that leave adolescents feeling overwhelmed and stressed. Furthermore, Sommet, Pulfrey, Butera, and Ozakinci, (2013) stated that intense competition within the educational environment exacerbates students' stress levels. Academic stress is exacerbated in challenging learning environments with limited resources and overcrowded classrooms (Zhu, Haegele, Liu, & Yu, 2021). These factors impede effective coping mechanisms and add to psychological distress.

Academic stress is consistently linked to psychological distress in adolescents. It can cause anxiety disorders, depression, and other mental health problems, as well as disrupt sleep, concentration, and motivation. Stress weakens coping mechanisms and increases the likelihood of suicidal ideation (Akbar & Aisyawati, 2021; Rao, 2022). Academic stress, when combined with other stressors or perceived failures, can lead to feelings of hopelessness and despair (Cho, 2020; Zhang et al., 2022). Academic pressure and the fear of failing to meet expectations both contribute to distorted self-perception. Adolescents who are not resilient may consider suicide as a way to escape or end their perceived academic failures (Okechukwu, Ogba, Nwufu, Oluchi, Nneka, Nwanosike

& Amuche, 2022). It is critical to investigate the impact of academic stress and parental academic pressure on suicidal ideation among in-school adolescents, particularly in the context of Ebonyi State.

## **Parental Academic Pressure and Suicidal Ideation**

Parental academic pressure refers to the expectations and demands that parents place on their children's academic performance. Setting high academic standards, emphasizing the importance of high grades, and placing a high value on academic success are examples of such behaviors (Ahmad et al., 2023). According to Wong et al. (2018), while parental involvement and support in education are generally beneficial, excessive academic pressure can have a negative impact on adolescent mental well-being. Numerous studies have found that parental academic pressure has a negative impact on the well-being of adolescents. It almost always results in increased stress, anxiety, and depressive symptoms. High expectations lead to feelings of inadequacy, fear of failure, and chronic stress (Abildaeva et al., 2022; Ahmad et al., 2023; Fang et al., 2022). Quach et al., (2015) stated that high levels of parental academic pressure are associated with negative mental health outcomes in adolescents. Anxiety disorders and depressive symptoms can be exacerbated by stress. Internalizing the demanding expectations causes increased stress and emotional distress (Fu et al., 2022).

Academic pressure from parents can also contribute to suicidal ideation. Failure, hopelessness, and despair result from the fear of not meeting expectations (Akhtar & Alam, 2015). Adolescents may develop distorted beliefs about their worth as a result of academic achievements, leading to suicidal or self-harming thoughts (Ganesan et al., 2020). While parental academic pressure is not the only cause of suicidal ideation, it does play an important role in the context. The interplay between parental academic pressure, academic stress, and other factors amplifies the risk of suicidal ideation among in-school adolescents.

## **The Current Study**

Suicide rates have increased (Adewuya et al., 2016; Alabi et al., 2014), and are becoming a global health concern (Omaka-Amari et al., 2021). Research suggests that high levels of parental academic pressure can lead to increased stress, anxiety, and depressive symptoms among adolescents (Fu et al., 2022). Mueller & Winsor (2018) argued that the constant pressure to perform academically can lead to feelings of inadequacy, failure, or hopelessness, all of which can foster the emergence of suicidal ideation. Similarly, academic stress, such as an excessive workload, intense competition, and a difficult learning environment, can exacerbate adolescents' psychological distress, potentially increasing the likelihood of suicidal ideation (Subramani & Kadhiraavan, 2017).

A recent epidemiological study of suicide in Nigeria between 2010 and 2019 showed that of the number of persons who committed suicide, 33.6% are students (Oyetunji et al., 2020). Though, research on suicide in developing nations such as Nigeria appear inadequate to draw meaningful generalizations about suicide (Omaka-Amari et al., 2021) , a compounding problem is the fact that greater dearth of research exists in more educationally less developed states in Nigeria. Socioeconomic status has been identified as a significant factor in suicide by researchers. This is due to the fact that issues such as poverty and low educational attainment have an impact on people's psychological well-being (Oginyi et al., 2018). Individuals experiencing significant economic difficulty are more likely to experience suicide thoughts. Also, individuals living in educationally underdeveloped areas/communities may be subjected to poor income, impacting their psychosocial well-being. Such states in Nigeria include Ebonyi State in Southeastern part of Nigeria. Out of the five states in southeast, it is the only state included in the ELDS list. Though, Omaka-Amari et al. (2021) have found a high rate of suicidal ideation among secondary school adolescents, research is yet to explore how stress related issues such as academic stress and parental academic pressure are associated with in-school adolescents' suicidal ideation in Ebonyi State. Understanding how these academic stress-related factors contribute to suicidal ideation is especially important in Ebonyi State, where educational resources and opportunities may be limited in comparison to more developed states in the region (Onyeukwu, 2022). The study's focus on Ebonyi State as an educationally underdeveloped region is a strength, given its educational disparities and limited resources (Odey, 2018). It is important to note that educationally underdeveloped regions frequently face barriers to accessing mental health resources, exacerbating stress-related issues such as suicidal ideation among adolescents (Atilola, 2016). The study takes a broad approach, taking into account multiple dimensions of stress-related factors. Therefore, the following research questions guided the study:

1. What is the rate of suicidal ideation, academic stress and parental academic pressure among in-school adolescents in Ebonyi State?
2. Are the levels of academic stress and parental academic pressure associated with in-school adolescents' suicidal ideation in Ebonyi State?
3. Do in-school adolescents' socio-demographic factors (gender, primary place of residence, and place of residence in school) associate with their suicidal ideation in Ebonyi State?

## **Method**

The sample size for this study is 300 in-school adolescents. A multi-stage sampling technique was adopted in conducting this study. First, using the purposive sampling technique, the researcher selected the Abakaliki Education Zone given that it is in the capital territory of the state and there is higher awareness for schooling. Also, this awareness is likely to lead to academic pressure

among the students. Second, using a simple random technique, ten public secondary schools were randomly sampled. Third, a simple random sampling technique was used to select 30 respondents from ten public secondary schools in Ebonyi State totaling 300 hundred students. However, only 282 accounting for 94% of the total sample completed the questionnaire.

The study employed validated measurement tools to assess the variables of interest. Three scales were adopted for data collection. The Suicidal Ideation Questionnaire -Jr (SIQ-JR) developed and validated by Reynolds (1987) was employed to measure the suicidal ideation of the adolescents. The SIQ-JR is a 15-item scale developed for younger adolescents. In the present study we rated the scale on a 7-pointed scale from (7) "almost every day" to (1) "I never had this thought" following similar studies in Nigeria (Nwufo et al., 2020). Several researchers have confirmed the internal consistency of the SIQ-JR. In the current study, Cronbach's Alpha of 0.91 indicated that SIQ-JR is reliable. The second instrument is the Educational Stress Scale for Adolescents (ESSA) developed and validated by Sun, Dunne, Hou, and Xu (2011) using Chinese students. It is a 16-item questionnaire with five clusters: Pressure from Study, Workload, Worry about Grades, Self-expectation, and Despondency. The Pressure from Study cluster comprises 4 items which are items 4, 5, 6, and 11; the Workload cluster consists of 3 items which are items 2, 3, and 7; the Worry about Grades cluster contains 3 items which are items 8, 9, and 10; the Self-expectation factor comprises 3 items which are items 14, 15, and 16; whereas the Despondency factor contains 3 items which are 1, 12, and 13. These were rated on a 5-point scale of 'strongly agree (5), Agree (4), Undecided (3), Disagree (2) and Strongly Disagree (1). Higher scores indicate higher academic stress. In the current study, we obtained a Cronbach's Alpha coefficient of 0.82 indicating that ESSA is reliable.

The third instrument for data collection consisted of the Adolescent Perceived Parental Academic Pressure Scale (APPAPS) developed by Kaynak et al. (2021). It is a multidimensional scale consisting of psychological pressure, restriction and too high expectation dimensions. Kaynak et al (2021) adopted a two-phased approach including exploratory factor analysis (EFA) and the confirmatory factor analysis (CFA) to determine the validity of the scale. The scale was rated on a 5-point scale of 'strongly agree (5), Agree (4), Undecided (3), Disagree (2) and Strongly Disagree (1). Higher scores indicate higher parental academic stress. In the current study, we obtained a Cronbach's Alpha coefficient of 0.87 indicating that ESSA is reliable.

The survey questionnaire was adopted in our study. The questionnaires were administered to 300 adolescents randomly selected after permission was granted by the school authorities. The essence of the study was explained to the students and the researchers got the consent of the respondents before distributing the questionnaire. They were told that their responses will be used only for research purposes. Students were informed that they can quit the study if they deem it necessary. They were given 30 minutes to fill in the questionnaires and return them to the researchers. Out of the 300 copies of questionnaires distributed to the respondents, only 282 was properly filled, returned and collected by the researcher. Therefore, the 282 questionnaires were used for the analysis. Appropriate statistical techniques were employed including percentages, mean, t-test and

ANOVA. These statistical methods allowed for the examination of associations between variables and determination of statistical significance.

## Results

**Table 1: Socio-demographic Variables of the Participants**

S/N	Variable	Dimensions	Frequency (N=282)	Percentage	Mean
1	Age	Range = 13-20 years			16.67±1.35
2	Gender	Male	110	39	
		Female	172	61	
3	Primary Place of Residence	Urban Area	48	17.1	
		Rural Area	233	82.9	
4	Type of Residence in School	Lives in School	119	42.2	
		Comes from home to school	163	57.8	

The demographics of the respondents are shown in Table 1. The greatest number of participants (61%) are female students, and the majority of students live predominantly in rural areas. More students live within the school. The majority of their parents had education beyond primary education.

**Table 2: Percentage and Mean Responses on Students' Suicidal Ideation**

S/N	THIS THOUGHT WAS IN MY MIND:	I never had this thought	had this thought before but not in the past month	About once a month	Couple of times a month	About once a week	Couple of times a week	Almost every day
1	I thought it would be better if I was not alive.	104 (36.9%)	26 (9.22%)	56 (19.9%)	43 (15.2%)	19 (6.7%)	16 (5.7%)	18 (6.4%)
2	I thought about killing myself.	134 (47.7%)	30 (10.7%)	55 (19.6%)	29 (10.3%)	13 (4.6%)	11 (3.9%)	9 (3.2%)
3	I thought about how I would kill myself.	156 (55.3%)	21 (7.4%)	50 (17.7%)	26 (9.2%)	12 (4.3%)	10 (3.5%)	7 (2.5%)
4	I thought about when I would kill myself.	150 (53.2%)	36 (12.8%)	22 (7.8%)	33 (11.7%)	24 (8.5%)	6 (2.1%)	11 (3.9%)

5	I thought about people dying.	80 (28.4%)	25 (8.9%)	44 (15.6%)	35 (12.4%)	35 (12.4%)	20 (7.1%)	43 (15.2%)
6	I thought about death.	81 (28.8%)	25 (8.9%)	44 (15.7%)	29 (10.3%)	33 (11.7%)	24 (8.5%)	45 (16.0%)
7	I thought about what to write in a suicide note.	140 (49.6%)	31 (11.0%)	28 (9.9%)	27 (9.6%)	16 (5.7%)	20 (7.1%)	19 (6.7%)
8	I thought about writing a will.	135 (47.9%)	25 (8.9%)	22 (7.8%)	21 (7.4%)	16 (5.7%)	23 (8.2%)	40 (14.2%)
9	I thought about telling people I plan to kill myself.	160 (57.6%)	28 (10.1%)	26 (9.4%)	27 (9.7%)	17 (6.1%)	4 (1.4%)	16 (5.8%)
10	I thought about how people would feel if I killed myself.	107 (37.9%)	28 (9.9%)	37 (13.1%)	35 (12.4%)	24 (8.5%)	13 (4.6%)	38 (13.6%)
11	I wished I were dead.	127 (42%)	24 (8.5%)	37 (13.2%)	37 (13.2%)	28 (10%)	18 (6.4%)	20 (7.1%)
12	I thought that killing myself would solve my problems.	127 (45%)	27 (9.6%)	35 (12.4%)	35 (12.4%)	21 (7.4%)	16 (5.7%)	27 (9.6%)
13	I thought that others would be happier if I was dead.	107 (37.9%)	23 (8.2%)	35 (12.4%)	35 (12.4%)	24 (8.5%)	13 (4.6%)	38 (13.6%)
14	I wished that I had never been born.	109 (38.7%)	33 (11.7%)	28 (9.9%)	30 (10.6%)	31 (11%)	23 (8.2%)	48 (17%)
15	I thought that no one cared if I lived or died.	99 (35.2%)	22 (7.8%)	37 (13.1%)	30 (10.7%)	28 (10%)	22 (7.8%)	70 (24.9%)
Mean scores		43.69						
SD		20.45						
Kurtosis		-0.21						
Skewness		0.502						

Table 2 revealed that more than 42% of the respondents have had suicidal ideation at least once in their lifetime. The average mean score of the items indicated that about 46% of the respondents have suicidal ideation. Items with the highest frequency of occurrence are item 15 (I thought that no one cared if I lived or died; 70%), item 14 (I wished that I had never been born, 48%), item 6 (I thought about death, 45%), item 5 (I thought about people dying, 43%), item 8 (I thought about

writing a will (i.e., how people should share what I have or who to take my belongings, 40%), and items 10 and 13 (I thought about how people would feel if I killed myself; I thought that others would be happier if I was dead, 38% respectively). A closer look at the result reflects primary concerns about not being catered for by others as well as concerns about the feelings of others' possibly significant others on their death.

**Table 3: Percentage and Mean Responses on Students' Perceived Academic Stress**

S/N	Items	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	I am very dissatisfied with my academic grades.	65 (23.3%)	29 (10.3%)	50 (17.9%)	82 (29.4%)	56 (19.9%)
2	I feel that there is too much school work.	27 (9.7%)	22 (7.8%)	35 (12.4%)	55 (19.7%)	103 (37.2%)
3	I feel there is too much homework.	52 (18.4%)	25 (8.9%)	52 (18.4%)	69 (24.5%)	81 (28.7%)
4	My education in future and career bring me a lot of academic pressure.	24 (8.5%)	37 (13.1%)	30 (10.6%)	102 (36.2%)	104 (36.0%)
5	My parents care about my academic grades too much which brings me a lot of pressure.	65 (23%)	28 (9.9%)	35 (12.4%)	80 (28.4%)	79 (28%)
6	I feel a lot of pressure in my daily studying.	37 (13.1%)	45 (16.0%)	58 (20.6%)	88 (31.2%)	72 (25.5%)
7	I feel that there are too many tests /exams in the school.	29 (10.3%)	54 (19.1%)	28 (9.9%)	101 (35.8%)	90 (31.9%)
8	Academic grade is very important to my future and even can determine my whole life.	22 (7.8%)	35 (12.4%)	13 (4.6%)	75 (26.6%)	159 (56.4%)
9	I feel that I have disappointed my parents when my test/exam results are poor.	25 (8.9%)	21 (7.4%)	7 (2.5%)	77 (27.3%)	181 (64.2%)
10	I feel that I have disappointed my teacher when my test/exam results are not good.	16 (5.7%)	14 (5%)	25 (8.8%)	147 (52.1%)	75 (26.6%)
11	There is too much competition among classmates which brings me a lot of academic pressure.	5 (1.8%)	12 (4.3%)	29 (10.3%)	89 (31.6%)	150 (53.2%)
12	I always lack confidence with my academic scores.	36 (12.8%)	5 (1.8%)	58 (20.6%)	115 (40.8%)	68 (24.1%)

13	It is very difficult for me to concentrate during classes.	18 (6.4%)	9 (3.2%)	44 (15.6%)	84 (29.8%)	70 (24.8%)
14	I feel stressed when I do not get the scores I plan to get.	24 (8.5%)	20 (7.1%)	13 (4.6%)	94 (33.3%)	70 (24.8%)
15	When I fail to get the scores I plan to get, I feel that I am not good enough.	62 (22%)	12 (4.3%)	70 (24.8%)	63 (22.3%)	147 (52.1%)
16	I usually cannot sleep because of worry when I cannot meet the goals I set for myself.	14 (5%)	10 (3.5%)	17 (6%)	109 (38.7%)	131 (46.5%)

**Mean** = 59.37

**SD** = 10.72

**Kurtosis** = 1.104

**Skewness** = -0.806

#### Levels of Academic Stress

- Low Level of Academic Stress (< 50% of total score = 1-39): 15 (5.4%)
- Moderate Level of Academic Stress (40-59): 112 (40.3%)
- High Level of Academic Stress (60-80): 151 (54.3%)
- Missing Values: 4 (1.4%)

Table 3 presented the levels of academic stress among our respondents. The item-by-item analysis was conducted with the grand mean presented. Further analysis revealed the level of academic stress. It indicated that over 54% of the students were highly stressed and 43% of the students were moderately stressed. Only 5.3% reported low mean scores on academic stress.

**Table 4: Percentage Responses on Students' Perceived Parental Academic Pressure**

S/N	Items	Strongly Disagree	Disagree	Agree	Strongly Agree
1	My parents insist I must be successful at school.	7 (2.5%)	9 (3.2%)	67 (23.8%)	195 (69.1%)
2	My parents think that I shouldn't do anything other than studying.	20 (7.1%)	66 (23.4%)	90 (31.9%)	104 (36.9%)
3	My parents have very high expectations of me.	4 (1.4%)	8 (2.9%)	67 (23.9%)	201 (71.8%)
4	My parents cannot tolerate me failing my examinations.	3 (1.1%)	24 (8.5%)	90 (31.9%)	165 (58.5%)
5	My parents restrict my activities other than studying.	24 (8.5%)	96 (34.0%)	81 (28.7%)	80 (28.4%)
6	My parents expect me to perform beyond my capacity.	16 (5.7%)	59 (20.9%)	97 (34.4%)	110 (39.0%)
7	My parents always make me feel that I have to be successful in school.	3 (1.1%)	15 (5.3%)	73 (25.9%)	191 (67.7%)

8	My parents don't want me to spare my time to anything other than my lessons.	16 (5.7%)	55 (19.5%)	89 (31.6%)	122 (43.3%)
9	My parents always want more from me in terms of school achievement.	4 (1.4%)	19 (6.7%)	74 (26.2%)	185 (65.6%)
10	My parents don't like me to be friends with my classmates who are not having high grades in school.	16 (5.7%)	50 (17.7%)	73 (25.9%)	143 (50.7%)
11	If I can't get good grades, I am scared of my parents' reaction.	15 (5.3%)	33 (11.7%)	86 (30.5%)	146 (51.8%)
12	If I fail the exams, my parents accuse me of not studying enough.	11 (3.9%)	37 (13.1%)	75 (26.6%)	159 (56.4%)
13	My parents get angry with me when I take care of something except studying.	39 (13.8%)	88 (31.2%)	73 (25.9%)	81 (28.7%)
14	Because of my parents' pressure, I feel stressed out.	33 (11.7%)	90 (32.0%)	72 (25.6%)	86 (30.6%)
15	I get nervous when I talk to my parents about my exam results.	22 (7.8%)	55 (19.5%)	89 (31.6%)	116 (41.1%)
16	My parents set up rules to prevent me from spending my time for non-academic activities.	31 (11.1%)	81 (28.9%)	69 (24.6%)	99 (35.1%)
17	My parents want me to study always.	8 (2.8%)	29 (10.3%)	105 (37.2%)	139 (49.3%)
18	My parents put pressure on me to increase my pace of work.	17 (6.0%)	57 (20.2%)	83 (29.4%)	124 (44.0%)
19	My parents compare my school success with others.	31 (11.0%)	36 (12.8%)	72 (25.5%)	143 (50.7%)
20	What I want to do outside of studying is limited by my parents.	39 (13.8%)	69 (24.5%)	73 (25.9%)	95 (33.7%)

**Mean** = 63.38

**SD** = 9.32

**Kurtosis** = 1.117

**Skewness** = -.512

#### Levels of Parental Academic Pressure

- Low Level of Parental Academic Pressure (< 50% of total score = 1-39): 3 (1.1%)
- Moderate Level of Parental Academic Pressure (40-59): 81 (30.6%)
- High level of Parental Academic Pressure (60-80): 181 (68.3%)
- Missing Values: 17 (6%)

**Note:** *Subsequent analysis with parental academic pressure was conducted by merging low and moderate levels together since only 3 respondents fell within the low-level category. Hence, we continued with only two groups.*

Table 4 presented the levels of parental academic pressure among our respondents. The item-by-item analysis was conducted with the grand mean also presented. The grand mean indicated that generally about 51% of the students experience academic pressure from their parents. Regarding the levels of the parental pressure over moderate parental academic pressure and 30.6% of the students reported academic pressure. Only 1.1% reported low mean scores on parental academic pressure.

**Table 5: Associations between Demographic Variables, Academic Stress, Parental Academic Pressure and Suicidal Ideation**

Variables	Category	Suicidal Ideation (M ± SD)	Calculated Values (t/F)	df	p-value
Gender	Male	46.90 ± 20.91	2.095	271	0.037
	Female	41.60 ± 19.93			
Primary Place of Residence	Urban Area	47.02 ± 20.67	1.241	270	0.216
	Rural Area	42.92 ± 20.38			
Type of Residence in School	Lives in School	41.40 ± 20.94	-01.574	271	0.117
	Comes from home to school	45.33 ± 19.99			
Levels of Academic Stress	Low	30.29 ± 18.66	4.326 (F)	266	0.014
	Moderate	42.10 ± 18.85			
	High	45.90 ± 21.13			
Levels of Parental Academic Pressure	Moderate	38.43 ± 19.63	-3.206 (t)	257	0.002
	High	47.01 ± 20.31			

**Note:** Analysis with parental academic pressure was conducted by merging low and moderate levels together since only 3 respondents were in the low-level category.

Results in Table 5 show that male adolescent students (M = 46.90, SD = 20.91) significantly higher mean score in suicidal ideation than their female counterparts (M = 41.60, SD = 19.93),  $t(271) = 2.095$ ,  $p = 0.037$ ; students who reside primarily in urban areas (M = 47.02, SD = 20.67), had non-significantly higher mean scores in suicidal ideation than those from rural areas (M = 42.92, SD = 20.38),  $t(270) = 1.241$ ,  $p > 0.05$ . Also, students who come from home (M = 45.33, SD = 19.99) had a non-significant higher mean scores in suicidal ideation than those who reside inside school (M = 41.40, SD = 20.94),  $t(271) = -1.574$ ,  $p > 0.05$ .

Regarding students' levels of academic stress, ANOVA showed a significant main effect on students' suicidal ideation  $F(2, 266) = 4.326$ ,  $p = 0.014$ . Posthoc analysis on students' level of academic stress showed significant differences among students who reported low academic stress and those who reported high academic stress ( $p = 0.018$ ), whereas there was no significant difference between low and moderate levels of academic stress as well as between moderate and high levels of academic stress ( $p > 0.05$ ).

Furthermore, t-test analysis revealed that students who reported high parental academic pressure (M = 47.01, SD = 20.31) had a significantly higher mean score in suicidal ideation than those who reported low/moderate level of parental academic pressure (M = 38.43, SD = 19.63),  $t(257) = -3.206$ ,  $p = 0.002$ .

## Discussion

Our study focused on the educational resource-constrained context to investigate how stress-related problems and socio-demographic characteristics could be linked to adolescents' suicidal

ideation. Suicide has become a global concern, and it may intensify in high-stress environments. Because there may be insufficient supports in ELDS schools, we felt it was critical to conduct this study in order to gain an understanding of how the impact of stress resulting from significant person's academic expectations, and stress resulting from academic activities themselves on adolescents' suicidal ideation could lead to evidence-based interventions for students in this context.

First, our findings revealed that more than 42% of the respondents have had suicidal ideation at least once in their life time. The average mean score of the items indicated that about 46% of the respondents have suicidal ideation. A closer look at the result reflects primary concerns about not being catered for by others as well as concerns about the feelings of others, possibly significant others, on their death which is actually a red-flag to the mental well-being of these adolescents. This finding aligns with similar studies that have reported high incidence of suicidal ideation among students (Omaka-Amari et al., 2021).

Also, our findings revealed that over 54% of the students were highly stressed and 43% of the students were moderately stressed. Only 5.3% reported low mean scores on academic stress. This shows that these students experience substantial dose of stress in their educational pursuit. Research has shown that students who do not access the institutional wellness resources are likely to report stress (Johnson, 2019) indicating that there could be higher academic stress in situations that may lack appropriate supports and facilities (Nwosu et al., 2021). Similarly, researchers who have investigated stress among students coming from minority or low resource-environments have reported high school stress level among them (Bower & Baldwin, 2017; Clark & Mitchell, 2018; McKenzie, 2019). Most stress-related conditions among students from these backgrounds may be compounded by illiteracy and financial hardship. For example, in this situation, children are frequently involved in paid jobs to assist their parents, and most parents may be unable to meet their children's physical demands. As a result, they may not be able to provide emotional support to their wards. Furthermore, most resource-constrained ELDS states in Nigeria find it challenging to provide the required facilities for meaningful learning. School personnel may be insufficient to care for the well-being of students who are also struggling.

Furthermore, findings revealed a significant main effect on students' suicidal ideation as a result of students' academic stress. Students, who reported higher academic stress, also reported higher levels of suicidal ideation. Posthoc analysis on students' level of academic stress showed significant differences among students who reported low academic stress and those who reported high academic stress whereas there were no significant differences between low and moderate levels of academic stress as well as between moderate and high levels of academic stress. These findings align with findings from similar studies. For example, among secondary school adolescents, academic stress has been demonstrated to be a significant predictor of suicidal ideation (Ang & Huan, 2006).

Also, among undergraduate university students, academic stress is significantly related to suicidal ideation (Nkwuda et al., 2020; Obinna et al., 2021; Okechukwu et al., 2022). Only a few studies

have documented no significant effect of academic stress and suicidal ideation among university undergraduate students (Uyenne, 2021). Studies that have shown significant impact of academic stress on students' suicidal ideation demonstrated that academic stress is a potential factor in heightening suicidal thoughts among students. The mechanism through which academic stress could result in suicidal ideation is in its capacity to lead to anxiety disorders, depression and mental health by weakening coping capabilities of students (Akbar & Aisyawati, 2021; Rao, 2022). Worst still, is its resultant effects on feelings of hopelessness and despair in combination with other stressors or perceived failures (Cho, 2020; Zhang et al., 2022). Consequently, adolescents who are not resilient may consider suicide as a way of escape (Okechukwu et al., 2022).

More so, the grand mean indicated that generally about 51% of the students experience academic pressure from their parents. Regarding the levels of the parental pressure, over 68% of the students reported high level of academic pressure and 30.6% of the students reported moderate parental academic pressure. The students reported that they were pressured by their parents. There was the pressure to do well in school even beyond the capacities of the students. Though, currently, there may not be studies on parental academic pressure of students from resource-constrained ELDS states, previous studies have reported instances where parents mount pressure on their children to perform well in school (Deb et al., 2015; Eriksen, 2020; Sangma et al., 2018). These studies revealed high levels of parental academic pressure among adolescents which can result in achievement-related mental health problems (Eriksen, 2020).

Furthermore, students who reported high parental academic pressure had a significantly higher mean score in suicidal ideation than those who reported low/moderate level of parental academic pressure. What this implies is that adolescents whose parents place excessive academic pressure on are more likely to have high suicidal ideation. There is the likelihood that these students may work beyond their capabilities in order to satisfy their parents. When they fail to meet up with the expectations of their parents, they may become hopeless and depressed. Consequently, adolescents could develop distorted beliefs about their worth as a result of academic achievements, leading to suicidal thoughts (Ganesan et al., 2020). Despite the fact that there appears to be a scarcity of studies that have examined how parental academic pressure could impact the suicidal ideation of adolescents, particularly in educationally underdeveloped contexts, numerous studies have indicated how parental pressure could lead to mental health problems (Toraman et al., 2022). Globally, research evidence reveals that parenting practices that seem to be domineering, harsh, and inconsiderate are linked to adolescents' suicidal ideation (Arafat et al., 2022). These practices can activate stress and hopelessness resulting in suicidal thoughts among adolescents.

Gender resulted in significant mean differences in suicidal ideation of our respondents with male students scoring higher than female students. This implies that male adolescents had more suicidal thoughts than female adolescents. This finding contradicts similar studies (Alabi et al., 2021; Kaess et al., 2011; Stephenson et al., 2006; Zhang et al., 2019) which reported higher incidence of suicidal ideation among female students. Kaess et al. (2011) further indicated that female students reported

higher emotional problems than male students. It is likely that suicidal ideation may be higher among students with higher emotional challenges than just being a male or female.

Also important in our findings is the discovery that whether a student comes from the rural, urban area, comes from home or resides within the school residence resulted in no significant differences in students' suicidal ideation. This means that differences in reported suicidal ideation were independent of students' primary residence and whether they are living inside school or coming from their homes. Our findings agree with previous studies (Murphy, 2013) that the rates of suicidal ideation did not differ between those in rural and urban areas but contradict those of Goldman-Mellor et al. (2017) which demonstrated that rural adolescents were substantially less likely to report recent suicidal ideation. This indicates the need for further research in the area of rural/urban disparity in suicidal ideation.

Regarding the impact of whether students come from home or live in school, our results contradict findings from similar studies that have shown that suicidal ideation severity is higher on students who are far from home and living alone indicting the need for stronger social and familiar supports (Gonçalves et al., 2014). In as much as stronger social support is critical for mental health, there is the possibility that students' capacity to adjust to an environment, resilience and self-belief system could play a very critical role in their mental well-being.

Our study has made valuable theoretical and practical contributions to knowledge. It provides insights into the relationship between stress-related factors and suicidal ideation among in-school adolescents by focusing on the unique context of an ELDS in Nigeria. It closes a critical gap in the literature by investigating the impact of parental academic pressure and academic stress in an underrepresented context. From the findings, researchers could understand how stress emanating from significant persons' academic expectation and stress resulting from academic activities in themselves could result in mental health issues such as suicidal thoughts of students living in ELDS of Nigeria.

Practically, our findings demonstrate the need for resilience-building interventions among these students. These interventions that will focus on coping strategies, stress management strategies and problem-solving skills will help ameliorate the impact of stress on students' mental health. Also, our findings point to the need to establish strong referral systems in ELDS to ensure that students with mental health concerns receive appropriate support. Schools should be equipped to collaborate with local healthcare providers, psychologists, and counselors to create a network of mental health professionals who can provide students in need with specialized care and counseling. Schools can create a supportive and nurturing environment for students by prioritizing mental health.

In spite of the significant contributions, our findings have some limitations. First, our sample is quite small and as a pilot study, it will be difficult to generalize our findings beyond the population that participated in this study. However, it is an eye-opener to the problems these students encounter and could direct research efforts among students in similar contexts. Second, our study

is a cross-sectional research study which makes it difficult to obtain a causal relationship between independent and the dependent variables. This warrants that future research is focused on conducting a longitudinal research that will enable researchers to establish causal relationships and observe changes that may occur in the variables.

## Conclusion

This study demonstrates the impact of academic stress related factors and students' demographic variables could have on their suicidal ideation among in-school adolescents in an ELDS in Nigeria. The findings highlight the critical need for mental health support services within the educational system in order to address these troubling issues given the fact that the participants had a high prevalence of suicidal ideation, academic stress and are experiencing high level parental academic pressure. This emphasizes the need for the implementation of interventions to reduce the risk of self-harm and suicide. More so, academic stress and parental academic pressure were identified as significant contributing factors to in-school adolescents' suicidal ideation, emphasizing the importance of strategies to alleviate the burden placed on students within the educational system. While gender was a significant factor in suicidal ideation among these students, whether the students come from home, live in school, primarily resides in rural areas or in urban areas was insignificant to the variances in the suicidal ideation reports of these students. It can be concluded that stress-related factors are more significant factors to the students' suicidal thoughts than their demographic characteristics.

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