

PERCEIVED STRESS, SOURCES AND COPING STRATEGIES AMONG SECONDARY SCHOOL STUDENTS IN MAIDUGURI, BORNO STATE

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Introduction

Stress is an essential and inevitable consequence of daily living. Rapid developments in science and technology have led to increasingly intense competition among people. Therefore, people now live highly active lives making stress a natural consequence (Purna & Gowthami, 2011). Secondary school students are not exempted as various internal and external expectations saddled upon them ensure stress as part of their academic lives. They are predominantly susceptible to the problems associated with academic stress as transitions occur at an individual and social level (Reddy, Menon & Thattil, 2018). Stress is therefore defined as a psycho-physiological process, which results from the interaction of the individual with the environment and results in disturbances caused to the physiological, psychological and social systems, depending upon individual characteristics and psychological processes (Akhlaq, Amjad, Mehmood, Hussan & Malik, 2010). In other words, stress is seen as psychosomatic pressure on an individual which stems from interactions with the individual's ambience, sensitivity and reaction.

Moderate stress is important for self-growth as it serves as a drive for people to advance dynamically. Imperatively, Reddy, Menon and Thattil (2018) posited that certain levels of stress push students towards optimum performance. Purna and Gowthami (2011) further reported that challenging stimulus can lead to productive outcomes such as motivation and enhanced task performance while threatening stimulus or distress can result in anxiety, depression, social dysfunction and even suicidal intention. When stress is perceived negatively or becomes extreme, individuals tend to experience physical and psychological impairment. However, Reddy, Menon and Thattil (2018) admonished that low stress does not basically establish that students will perform better, but under such circumstance, they are likely to perceive the task as unchallenging and may also get easily bored. Stress affects thoughts, feelings and behaviour (Purna & Gowthami, 2011).

Stressors affecting students can be categorized as academic, financial, time or health related and self-imposed (Goodman, 1993). Busari (2011) also established that stress comes from various aspects of life including developmental and social changes, financial and accommodation problems, work demands and the specific demands of academia. Academic stress among students have long been investigated and researchers have identified stressors as too many assignments, competitions with other students, failures, poor relationships with other students or lecturers, pressure to earn good grades (Fairbrother & Warn, 2003; Hirsch & Ellis, 1996). Byrne, Davenport and Masanov (2007) also claimed that school-related stressors include academic performance, interactions with teachers, and balancing one's leisure time with school.

In addition, Ross, Niebling and Heckert (1999) in their study found that five most frequent stressors among students were change in sleeping habits, vocations/breaks, change in eating habits, new responsibilities and increased class workload. Abouserie (1994) further reported that greatest sources of academic stress among students include taking and studying for exams, grade competition and the large amount of content to master in a small amount of time. Time management and social activities have also been identified as sources of stress to students. The pressure to perform well in the examination or test and time allocated makes academic environment very stressful (Erkutlu & Chafra, 2006). The study by Galloway, Conner and Pope (2013) calls for caution as it indicated that students who do too much homework at home tend not have adequate time to spend with friends and peers and thus may miss out in some rudiments of life.

Hosseinkhani, Nedjat, Hassanabadi and Parsaeian (2019) investigated Iranian adolescents' views about the sources of academic stress. Semi-structured interview methods were utilized to obtain data from participants were students aged 12–18 years old. The results of this study showed that the most important causes of academic stress in the school environment are the grades of the examinations, the high amount of homework, family expectations, competition among peers and educational assistance classes. Other stressors identified by the students are rankings in school, teachers and the school supervisors. Furthermore, the study conducted by Reddy, Menon and Thattil (2018) on 336 Indian students measured the sources of stress primarily on four dimensions namely, personal inadequacy, fear of failure, teacher-student relationship, interpersonal difficulties, and inadequate study facilities. Findings revealed that total academic stress score was 53.46(SD=25.70) with 48.80% of students having average to high stress levels. The independent samples t-test results indicated no significant difference in total academic stress experienced by males and females.

The study by Acosta-Gómez et al. (2018) on Mexican students revealed that students reported high (3%), normal (54%) and lower (39%) stress levels with sex differences on the Stress Scale indicating that women experience more stress than men in high school. The students in this study further reported that examinations were their greatest source of stress, making career choices was the second greatest source of stress in this study and family problems was the third most important source of stress for the students. Other sources of stress comprised economic difficulties, problems with boyfriend/girlfriend, having a relative or a friend with an illness, personal health problems, homework and teachers respectively. There were no significant sex differences as the first five sources of stress were the same for men and women.

Sripongwiwat, Bunterm and Tang (2018) examined the influences of learning stressors among 925 secondary school students in a school in northeast Thailand. The study identified six different learning stressors namely academic-related, interpersonal-related, intrapersonal-related, learning and teaching, teacher-related, and group social-related. Descriptive statistics (mean score and percentage) and inferential statistics (MANOVA and ANOVA) were used to examine the differences in the six learning stressors between lower secondary and higher secondary groups of students. The results indicated that there were significant differences in all six learning stressors between lower secondary and higher secondary groups of students. Furthermore, only the academic-related stressor had a significant difference between males and females.

Stressors do not cause anxiety by themselves; stress results from interaction between stressors and the individual's perception and reaction to stressors (Romano, 1992). An individual's ability to effectively cope with stressful events and situations determines the extent of stress to be experienced (D'Zurilla & Sheedy, 1991). Hence, it becomes imperative that individuals have coping strategies to assuage the effect of stress. Findings from the study by Acosta-Gómez et al. (2018) revealed that the main responses to stress were listening to music, talking about the problem with a friend, physical exercise, going out with friends, talking to a relative, sleeping more than usual, watching TV, eating more than usual, smoking and drinking some alcohol respectively. The first three responses were the same for men and women, listening to music, talking about the problem with a friend and exercising.

In addition, Murphy and Archer (1996) suggested that methods to reduce stress by students comprise effective time management, social support, positive reappraisal and engagement in leisure pursuits. Wainwright and Calnan (2002) noted that therapeutic intervention could also serve as a strategy for coping with stress. Furthermore, physiological coping strategies against stress consist of biofeedback, muscle relaxation and aerobic activity (Cooley & Yovanoff, 1996; Kagan, Kagan & Watson, 1995). Biofeedback is the electronic measurement of mind-body functions (muscle tension, intestinal activity, blood flow, breathing, heartbeat) and techniques to control those functions. Muscle relaxation involves self-regulated, progressive body relaxation that puts the individual in an extremely restful state. Aerobic activity is any type of activity that raises the level of one's pulse rate such as bicycling, swimming or jogging.

Secondary school students in Maiduguri, Borno State are as susceptible to stress as every other student all over the world. To attain good performance in school, they are faced with pressure from within and out outside school. These set of students are forced to cope with various kinds of stress including stress emerging from the incessant mayhem by vicious insurgents in the state. The persisting security problems in Borno State could increase stress level of secondary school students which might interfere with their education and well-being. It is against this backdrop that this study was undertaken to determine the perceived stress, sources and coping strategies among secondary school students in Maiduguri, Borno State, Nigeria. Specifically, the study sought to:

1. determine the extent to which the students are stressed.
2. identify the students' main sources of stress.
3. ascertain the students' strategies for coping with stress.
4. determine the gender difference in the extent to which students are stressed.

Research Questions

The following research questions were raised to guide the study:

1. To what extent are the students stressed?
2. What are the students' main sources of stress?
3. What are the students' strategies for coping with stress?

Hypothesis

There is no significant gender difference in the extent to which students are stressed.

Methodology

The study adopted the survey design. The sample comprised 200 senior secondary school students from 10 secondary schools across Maiduguri Metropolis, Borno state, Nigeria. Multi-stage sampling technique was employed to obtain the sample for this study. Data was collected through researchers-made instrument tagged 'Stress among Students Questionnaire' (SSQ). The instrument had four sections; section A sought the background information of the respondents; section B comprised information on students' level of stress; section C contained 25 items designed to elicit information on the sources of stress; and section D consisted of 10 items to collect information on the coping strategies of the students. Section C further had four categories of potential sources of stress: five items representing interpersonal sources of stress, 8 items representing intrapersonal sources of stress, 8 items representing academic sources of stress and 4 items representing environmental sources of stress. Respondents were required to indicate either "Yes" or "No" as response for Section C and D. For Section B, respondents were required to tick any of the following: *Not Stressed*, *Moderately Stressed* or *Extremely Stressed* as response.

Informed consent forms were filled by willing participants. Hence, participation in the study was voluntary and recruited participants were assured that all collected data would be confidential. For validity, the questionnaire was given to experts knowledgeable on psychology related topics in the Faculty of Education, University of Maiduguri. Test-retest method of reliability was used and a reliability coefficient of 0.83 was got using the Pearson product moment correlation. A 2-week interval was observed between the initial test and the retest which were both carried out on the same students using 40 senior secondary school students from a school other than the ones selected for data collection. Data for the study were analysed using both descriptive statistics (frequency and percentage) as well as inferential statistics (Chi-square). The hypothesis formulated was tested at 0.05 level of significance.

Findings

The results of the study are presented as follows:

Research question 1: To what extent are the students stressed?

Table 1: Responses on Perceived Level of Stress among Secondary School Students

Perceived Level of Stress	No. of Response	Percentage (%)
Not Stressed	50	25
Moderately Stressed	82	41
Extremely Stressed	68	34

Table 1 shows that the number of responses for *not stressed* is 50 (25%), *moderately stressed* is 82 (41%) and *extremely stressed* is 68 (34%). On the whole, it could be observed that 150(75%) of the respondents found themselves between moderately stressful to extremely stressful. It could then be deduced that 75% of the secondary school students found themselves stressed.

Research question 2: What are the students' main sources of stress?

Table 2: Responses on Students' Main Sources of Stress

ITEMS	YES (%)	NO (%)
Interpersonal Stressors		
Change in social activities	125 (62.5)	75 (37.5)
Fight with friend	43 (21.5)	157 (78.5)
Relating with people	78 (39)	122(61)
Making new friends	113 (56.5)	87 (43.5)
Trouble with parents	42 (21)	158 (79)
Intrapersonal Stressors		
Change in sleeping habits	112 (56)	88 (44)
Change in eating habits	88 (44)	112 (56)
Financial problems	92 (46)	108 (54)
Death of family member or friend	100 (50)	100 (50)
Taking adult responsibilities	75 (37.5)	125 (62.5)
Balancing leisure time with school	124 (62)	76 (38)
Poor health or severe injury	72 (36)	128 (64)
Uncertainty about the future	79 (39.5)	121 (60.5)
Academic Stressors		
Tests and examinations	141 (70.5)	59 (29.5)
Low grades than expected	90 (45)	110 (55)
Low school attendance	58 (29)	142 (71)
Interaction with teachers	117 (58.5)	83 (41.5)
Interactions with classmates/schoolmates	84 (42)	116 (58)
Performance expectations from parents and teachers	152 (76)	48 (24)
Heavy academic workload	103 (51.5)	97 (48.5)
Overcrowded and uncomfortable classroom	72 (36)	128 (64)
Environmental stressors		
Poor living condition	73 (36.5)	127 (63.5)
Problem between parents	64 (32)	136 (68)
Change in living environment	90 (45)	110 (55)
Conflict in the environment	132 (66)	68 (34)

Results in Table 2 shows that 76% of the respondents indicated that performance expectation from parents and teachers is a major source of stress among secondary school students. Results further reveals that 70.5%, 66%, 62%, 58.5%, 56.5, 56, 51.5 and 50% of the respondents respectively indicated that tests and examinations, conflict in the environment, balancing leisure time with school, interaction with teachers, making new friends, change in sleeping habits, heavy academic workload and death of family member or friend were other main sources of stress among secondary school students.

Research question 3: What are the students’ strategies for coping with stress?

Table 3: Responses on Students’ Strategies for Coping with Stress

ITEMS	YES (%)	NO (%)
I manage my time effectively	140 (70)	60 (30)
I sleep for longer hours than usual	116 (58)	84 (42)
I exercise my body to the point of sweating	78 (39)	122 (61)
I play games and watch television	126 (63)	74 (37)
I make out time to rest my mind	155 (77.5)	45 (22.5)
I try to smile more frequently	89 (44.5)	111 (55.5)
I chat with my friends	87 (43.5)	113 (56.5)
I eat more than usual	154 (77)	46 (23)
I discuss my problems with my parents	115 (57.5)	85 (42.5)
I listen to music	142 (71)	58 (29)

Results in table 3 reveal secondary school students’ strategies for coping with stress. Results shows that 77.7%, 77%, 71% and 70% of the respondents respectively indicated that they made out time to rest their mind, ate more than usual, listened to music and managed their time effectively to ease stress. The table further shows that other strategies for coping with stress comprised playing games and watching television (63%), slept for longer hours than usual (58%) and discussed their problems with their parents (57.5%).

Hypothesis

There is no significant gender difference in the extent to which students are stressed.

Table 4: Analysis on Gender Difference in the Extent to which Students are Stressed

Extent of Stress	Male n (%)	Female n (%)	X ²	P-value	Remark
Not Stressed	27 (54.0)	23 (46.0)	2.11	0.348	Not Sig
Moderately Stressed	47(57.3)35(42.7)				
Extremely Stressed	31(45.6)37(54.4)				

Table 4 indicates Chi-square analysis on gender difference in the extent to which students are stressed. Result reveals that there is no significant difference in the extent of stress between male and female students ($P > 0.05$). Hence, the null hypothesis is not rejected. Despite this insignificant difference, the table shows that females were more extremely stressed descriptively.

Discussion

This study examined perceived stress, sources and coping strategies among secondary school students. The finding of the study revealed that most secondary school students were stressed. This finding may be source of concern since it has been established that stress affects thoughts, feelings and behaviour (Purna & Gowthami, 2011). However, the students who were moderately stressed predominated those who were reported to have experienced extreme stress. Moderate and extreme stress impact positively and negatively respectively on individuals. For instance, Reddy, Menon and Thattil (2018) stated that certain levels of stress push students towards optimum performance. Earlier, Purna and Gowthami (2011) reported that challenging stimulus yield productive outcomes such as motivation and enhanced task performance while threatening stimulus or distress can result in anxiety, depression, social

dysfunction and even suicidal intention. The finding of this study which showed that majority of the students were moderately stressed is consistent with that of Acosta-Gómez et al. (2018) which found that Mexican students' stress levels were normal.

Finding from the study also established that substantial number of students reported performance expectation from parents and teachers as a key source of stress. Other main sources of stress among secondary school students were tests and examinations, conflict in the environment, balancing leisure time with school, interaction with teachers, making new friends, change in sleeping habits, heavy academic workload and death of family member or friend. Studies (Abouserie, 1994; Ross et al., 1999; Erkutlu & Chafra, 2006; Byrne et al., 2007; Acosta-Gómez et al., 2018; Reddy et al., 2018 & Hosseinkhani et al., 2019) have also identified these stressors among students except conflict in the environment and death of family member or friend. The insurgency in Borno state could be attributed to these two sources of stress. Studying under volatile conditions with constant reports of attacks and death of a family member or friend could be quite challenging to students.

It is important to note that four stressors are academic related (performance expectation from parents and teachers, tests and examinations, heavy academic workload and interaction with teachers). Parental as well as teacher expectations seem a source of burden to the students. Hosseinkhani et al. (2019) posit that many parents had very high expectations from their children, such as being top students in school and participating in all school competitions. Also, teachers exhibit disrespectful behaviour by mocking students in front of others and use inappropriate terms in class. Reddy et al. (2018) further stated that parents and institutions relentlessly instil the fear of failure in students which consequently affects their self-esteem and confidence.

This study revealed that tests and examinations as well as heavy academic workload are stressors to students. According to Galloway, Conner and Pope (2013) studies have indicated that students who do heavy homework at home do not have enough time to spend with friends and peers and might not accomplish some essentials of life. Time expended to accomplish large homework as well as dependence on after school hour extramural lessons in Nigerian schools today has affected observing siesta among students. As such, students are forced to wake up very early and sleep very late. Students are thus faced with the stress of balancing leisure time with school and change in sleeping habits. The findings of this study which reported making new friends as a stressor among students could be attributed to the developmental stage of these secondary school students which is the adolescence. At this stage, students struggle for acceptance and recognition which could be achieved through good performance in school, interaction with teachers/peers which in turn helps them make new friends. Since how people perceive them is paramount to them, they are bound to be sources of stress to them.

To cope with stress, results from this study showed that secondary school students' strategies comprised making out time to rest their mind, eating more than usual, listening to music and managing their time effectively. Other strategies students utilized to ease stress include playing games and watching television, sleeping for longer hours than usual and discussing their problems with their parents. This finding is not really atypical of secondary school students to adopt these coping strategies. These strategies can help them maintain good mental health. However, constantly eating more than required

can have adverse effect on students' health. The studies by Murphy and Archer (1996) and Acosta-Gómez et al. (2018) recognized these strategies for coping with students' stress.

Results from the study further showed that there was no significant difference in the extent of stress between male and female students. Despite this insignificant difference, the results descriptively showed that females were more extremely stressed than males while male students were more moderately stressed than their female counterparts. The finding of this study which established no significant difference in the extent of stress between male and female students could be attributed to the fact that these students are probably not yet saddled with responsibilities saturated with gender stereotype. The finding of this study is consistent with that of Reddy et al. (2018) on 336 Indian students which indicated no significant difference in total academic stress experienced by males and females. Also, the study by Acosta-Gómez et al. (2018) confirmed that women experience more stress than men in high school. However, Sripongwiwat, Bunterm and Tang (2018) established that secondary school students in northeast Thailand had a significant difference between males and females on academic-related stressors.

Conclusion and Recommendations

Based on findings, this study concluded that secondary school students were moderately stressed which is acceptable as reasonable level of stress serves as a force for ardent growth. Furthermore, it was concluded that performance expectation from parents and teachers, tests and examinations and conflict in the environment were major sources of stress among secondary school students. To cope with stress, students made out time to rest their mind, ate more than usual and listened to music. The study further showed that there was no significant difference in the extent of stress between male and female students.

Based on these results, it was therefore recommended that school administrators should introduce sustained stress management programmes that will train students on positive strategies to cope with stress. The sources of stress identified as prevalent should be discussed with students to help them manage stress. Also, an educational forum should be provided for parents, teachers and students to interact in order to tackle problems on performance expectations and teacher/student relationship.

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