

A Study of Level and Sources of Stress among Secondary School Students

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Abstract: *This study investigated level and sources of stress among secondary school students in the Federal Capital Territory (FCT) Abuja. The study was a descriptive survey and the population comprised all senior secondary school students in the FCT. A sample of 18 secondary schools out of the 59 public senior secondary schools in the FCT was involved in the study with a total of 540 respondents made up of male and female students. A questionnaire was designed by the researchers and validated through expert judgment to collect relevant data. The data collected were analyzed using percentage, statistical weighted mean and standard deviations for the research questions while t-test was used to test the hypotheses. The results indicated that secondary school students had a medium level of stress and some of the significant sources of stress include: academic, intra-personal and environmental. There was a significant gender difference in the level of stress and also some sources of stress among secondary school students. It was recommended that the guidance and counselling unit of secondary schools should identify students with stress and provide adequate support and management strategies.*

Key Words: *Stress, Level of Stress, Sources of Stress, Secondary School Students*

I. Introduction

Stress is a normal part of life. It can come from any situation or thought that makes you feel frustrated, angry or anxious. A low level of stress could be good. It can motivate you and help you become more productive. It provides the means to express talents and energies and pursue happiness. However, too much stress or a strong response to stress can be harmful. A high level of stress may have negative effect on cognitive functioning and learning of students. It can affect student's grades, health and personal adjustment.

A large number of secondary school students belong to the adolescence stage. This is a transition stage between childhood and adulthood. The stage is characterized by rapid physical changes and mental development. According to Abolarin (2010) adolescence stage is define as the time when individuals begin to function independently of their parents. It is generally viewed as a critical period of development both in Africa and Western culture. Behavioural scientists have often referred to adolescence as a period of "storm and stress". The biologically oriented psychologists have attributed this pronounced period of storm and stress to the adjustment required by the tremendous physiological and psychological changes both in body structure and functioning (Anusiem, 1995). According to Kai-wen (2010) students at this level may sometimes experience incompatibility of their mental development with their physical changes or with social environment and thus suffer from problems arising from inadequate adaptation. These problems may further cause psychological troubles and even induce deviant behaviours.

There have been many studies (Schafer, 1996; Fisher, 1994; & Altmaier, 1983) which have reported strong relationship between stress and secondary school students. Stress has been associated with the major life events, daily life hassles and changes in life. It is created by excessive environmental and internal demands that need constant effort and adjustment.

Kai-wen (2010) in his study on stress sources among college students in Taiwan identified the following sources:

- Physical/mental Factor: Adolescents are mostly concerned about their physical appearances than about other aspects. This is more peculiar with girls than boys and as such girls may feel upset by their appearance. Feng (1992) in Kai-wen (2010) pointed out that setting high goals, being a perfectionist and comparing self with others and self degradation may all cause stress and result in depression.
- School Factor: Some of the situation in the school that could cause stress for students include: too much homework, unsatisfactory academic performance, preparation for test/examination, lack of interest in a particular subject. According to Roberts and White (1989) academic work may reflect some of the high level of stress that college students have reported. Some of them experience grade pressures that cause students to have problem with stress. Too much stress can

interfere with a student preparation, concentration and performance. One of the main cause of academic stress is test anxiety.

- Relationship factor: Many students at this level of development are pre-occupied with the development of relationship with opposite sex. They want to belong and be accepted by their peers. Making new friends is another source for college students. "Giving up or changing new friendships and developing new ones is often a stressful activity associated with college life" (Greenberg, 1996, p280).
- Family factor: The family can also be a source of stress for secondary school students. Some families place a great deal of stress on students by telling them that they need to acquire good grades. In addition, families with constant conflicts are characterized by a lack of parent-child communication and shallow understanding of each other's expectation.

However, this study was designed to find out the level and sources of stress among secondary school students in the Federal Capital Territory (FCT) with particular attention on the following sources of stress as they affect students: interpersonal, intra-personal, academic and environmental.

Research questions

1. What is the level of stress among secondary school students in the FCT?
2. What are the sources of stress among secondary school students in the FCT?

Hypotheses

1. There is no significant gender difference in the level of stress experienced by secondary school students.
2. There is no significant difference in the sources of stress experienced by secondary school students with particular reference to gender.

II. Methodology

Design

This study is a descriptive survey research which involved a survey of level and sources of stress among Senior Secondary School students in the Federal Capital Territory.

The population comprised of all Senior Secondary School students in the FCT eighteen (18) senior secondary schools were selected as sample for the study. This was done through a stratified random sampling approach. Three (3) schools were selected each from the six area councils.

A sample of 540 respondents made up of 30 students per school was selected for the conduct of the study. This was done through a multi-stage approach involving both stratified and simple random techniques. This was to ensure that the sample cut across gender and class level.

The instrument for data collection was self developed questionnaire titled "Level and Sources of Stress among Secondary School Students Questionnaire". The instrument was made up of three sections A, B, & C. Section A elicited personal data, Section B was made up of 15 items aimed at measuring level of stress, while Section C had 20 items designed to find out sources of stress. Both section B & C required the respondents to respond to the items using a Five Point Rating Scale of: Never (0), Rarely (1), Sometimes (2), Often (3) and Very often (4).

The face and construct validity of the instrument were established through expert judgment made by some lectures of educational psychology/guidance and counselling.

The reliability of the instrument was established through a test-re-test method of three weeks interval that involved students that did not participate in the research. A reliability co-efficient of 0.73 was established through Pearson Product Moment.

The data on research question one were analyzed using frequency count and percentages after interpreting the scores on the basis of the following range: 0-15= Good control over stress; 16-30 low level of stress; 31-45= Medium level of stress and 46-60= High level of stress. Mean and standard deviations were used to analyze data on research question two, the summated approach was used to score the instrument for the purpose of hypotheses testing. The t-test was employed to test the two hypotheses at 0.05 level of significance.

III. Results

The results of analyzed data are presented based on the research questions and hypotheses. They are presented in tables 1, 2, 3 and 4.

Table 1: Percentage analysis of stress level among secondary school students

| Range | Level of stress | N | % |
|---------|-----------------|-----|------|
| 0 – 15 | Good control | 57 | 10.8 |
| 16 – 30 | Low | 197 | 37.3 |
| 31 – 45 | Medium | 241 | 45.6 |
| 46 – 60 | High | 33 | 06.3 |

Table 1: indicated that 10.8% of the respondents had good control over stress, 37.3% had a low level of stress, while 45.6% had a medium level of stress. However, only 6.3% had a high level of stress. In essence, majority of the student had a medium level of stress.

Table 2: Mean and Standard deviation of responses on sources of stress among secondary school students.

| s/n | Items | X | SD | Remarks |
|-------------------------|--|-----|-------|---------|
| A Interpersonal | | | | |
| 1 | Change in social activities | 1.4 | 0.35 | |
| 2 | Class mate conflict | 2.8 | 0.44* | Sig |
| 3 | Fight with boyfriend or girlfriend | 3.1 | 0.33* | Sig |
| 4 | New boyfriend or girlfriend | 2.6 | 0.31* | Sig |
| 5 | Trouble with parents | 2.4 | 0.34 | |
| B Intra-personal | | | | |
| 6 | Financial difficulties | 2.7 | 0.42* | Sig |
| 7 | Speaking in public | 2.5 | 0.36* | Sig |
| 8 | Outstanding personal achievement | 2.3 | 0.31 | |
| 9 | Minor violation of school rules/regulation | 2.6 | 3.34* | Sig |
| 10 | Change in religious belief | 2.3 | 0.41 | |
| C Academic | | | | |
| 11 | Increased class work | 2.6 | 0.51* | Sig |
| 12 | Lower grade than anticipated | 2.8 | 0.43* | Sig |
| 13 | Missed too many lessons | 2.5 | 0.33* | Sig |
| 14 | Anticipation of examination | 2.8 | 0.44* | Sig |
| 15 | Serious argument with teachers | 1.7 | 0.39 | |
| D Environmental | | | | |
| 16 | Placed in unfamiliar situation | 2.5 | 0.38* | Sig |
| 17 | Dirty living condition | 2.1 | 0.41 | |
| 18 | Change in living environment | 2.4 | 0.36 | |
| 19 | Divorce between parents | 2.8 | 0.39* | Sig |
| 20 | Waiting in long line | 2.7 | 0.43* | sig |

Table 2 analyses indicate that all the four sources (inter-personal, intra-personal, academic and environmental) are important sources of stress to secondary school students, but the academic source of stress seem to be the most significant because almost all the items were seen as stressors.

Furthermore, a detailed analysis on the table shows that among the stressors in inter-personal source, items 2, 3 & 4 were significant while items 6, 7, and 9 were identified by respondents as stressors in intra-personal source of stress. In addition, items 11, 12, 13 & 14 were identified to be the main stressors in academic source of stress, and environmental source stressors identified are items 16, 19 & 20.

Table 3: T-test differential analysis in level of stress between male and female students

| Gender | N | X | SD | df | t-cal | Critical t |
|--------|-----|------|------|-----|-------|------------|
| Male | 238 | 27.3 | 3.01 | | | |
| Female | 290 | 28.1 | 2.71 | 526 | -5.7 | 1.96 |

*P<0.05

Table 3 shows that there is a significant gender difference ($t = -5.7$, $P < 0.05$ ($df = 526$)) in the level of stress among secondary school students.

Table 4: t-test differential analysis in stress sources between male and female students

| Source of stress | Gender | X | SD | Df | t-cal | Critical t |
|------------------|--------|------|------|-----|--------|------------|
| Inter-personal | Male | 12.8 | 2.81 | | -1.57 | 1.96 |
| | Female | 13.1 | 2.83 | 526 | | |
| Intra-personal | Male | 11.5 | 3.68 | | 6.89 | 1.96 |
| | Female | 11.3 | 2.71 | 526 | | |
| Academic | Male | 12.8 | 2.87 | | -12.19 | 1.96 |
| | Female | 13.1 | 3.66 | 526 | | |
| Environmental | Male | 12.3 | 2.73 | | -8.13 | 1.96 |
| | Female | 12.5 | 2.61 | 526 | | |

The t-test analyses in table 4 indicate that there is significant gender differences in intra-personal ($t=6.89, P<0.05$), academic ($t= -12.19, P<0.05$) and environmental sources ($t=8.13, P<0.05$) of stress among secondary school students. However, there was no significant gender difference ($t= -1.57 P>0.05$) between male and female students in the inter-personal source of stress.

IV. Discussion of Findings

The study reveals that majority of secondary school students experience stress at medium and low levels. However, 45.69 of the respondent had a medium level of stress which may demand acquiring strategies to cope with the stress. This is in line with findings of Sohail (2013) which indicated that 71.6% of medical students had moderate stress. However, the result is contrary to the studies of Schafer (1996) and Fisher (1994) which have reported strong relationship between stress and college students. Looking at the present situation under which secondary education is taking place one would naturally have expected a higher level of stress among secondary school students. This could also be due to the general adaptation of Nigerians to situations.

The study also shows that the four sources (interpersonal, intra-personal, academic and environmental) constituted significant sources of stress to secondary school students. The academic source of stress seems to be the most significant among the sources of stress and the stressors identified are: Lower grade (performance) than anticipated, fear or anticipation of examination, increased class work load and missing too many lessons. This result is supported by Fisher (1994) who reported that one of the main causes of academic stress is test anxiety.

The results of hypotheses testing indicted a significant gender difference in the level of stress among secondary school students. The female students tend to experience more stress than the male students. This could be attributed to the nature of female: who are generally more emotional than males.

The study also reveals that a significant gender differences exist in three of the sources of stress among secondary school students. The sources are intra-personal, academic and environmental.

This is consistent with the result of the first hypothesis tested which revealed that female students are more prone to stress than males.

However, there was no significant gender difference in inter-personal source of stress among students. This is in line with Kai-wen (2010) study which found no significant gender difference in the relationship factor as a source of stress among college students in Taiwan.

V. Conclusion

This study has established that secondary school students experience a moderate (medium) level of stress and some of the sources of stress include academic, inter-personal, intra-personal and environmental, there is the need to provide essential strategies for management of stress at the secondary school level.

VI. Recommendations

The following recommendations are hereby made based on the findings of the study;

1. Secondary schools should identify students that are experiencing stress and provide adequate support. This could be done through the guidance and counselling unit or department as the case may be.
2. Facilities should be provided for physical exercises and relaxation to release tension in students.
3. Students should be enlightened on the need for positive attitude, healthy relationships and time management which can help to reduce stress.
4. Teachers should be encouraged to make the teaching/learning environment more humane, cordial and tension free for effective learning.
5. The female students should be assisted to improve on their stress management abilities. This can be done by organizing seminars for the female students to enhance their emotions management abilities.
6. Parents should work in co-operation with the schools to reduce the level of stress experienced by the students. This could be done by providing the necessary supports that their adolescent children may need.

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