

# Factors, Gender and Locational Differences of Stress among Secondary School Students in Ikwerre and Port Harcourt Local Government Areas of Rivers State, Nigeria

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**Abstract** This study was conducted to ascertain the factors gender and location differences of stress among secondary school students, in Port Harcourt and Ikwerre Local Government Areas of Rivers State. Population of the study comprised all the senior secondary school class two (SS2) and junior secondary school class two (JSS2) students in Port Harcourt and Ikwerre Local government areas of Rivers State. Simple random and stratified random sampling techniques were used to draw a sample of 272 students used for the study. The sample was made up of 136 male and 136 female students. It also comprised 136 urban and 136 rural students. The JSS students were 136 while the SSS students were 136. The instrument used for the study was titled factors of Stress among Secondary School Students Inventory (FSSSI). The instrument which measured possible factors of stress among secondary school students comprised 26 items. Cronbach Alpha was used to determine the reliability co-efficient of the instrument which was 0.84. Three research questions and two hypotheses were answered and tested respectively, using mean, standard deviation and t-test. The results obtained were as follows: The identified sources of stress among secondary school students include: poor academic performance, too much punishment in school, some teachers not teaching during their period, gossiping from school mates, poor health condition, the issue of gaining admission into the university, parents poor financial condition, not having text books, parents sickness and traffic hold-up, to and from school. There was significant difference between male and female students stress. There was also significant difference between urban and rural secondary school students stress. It was recommended among others that government should expand the infrastructural facilities in the existing universities so as to enable them offer more admission to the students in order to reduce their stress in this regard; and that rural posting allowance be paid to teachers in the rural areas. In addition, counsellors, are to counsel students on stress coping strategies.

**Keywords:** *stress, eustress, distress, chronic stress, acute stress*

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## 1. Introduction

In human existence, there are two things that appear inevitable, these are death and stress. However, our major concern in this study is stress, especially as it affects secondary school students. According to Bernstein, Penner, Clark – Stewart and Roy [1], “stress is basic to life, no matter how wealthy, powerful, attractive, or happy you might be”. Colman [2] defined stress as the “psychological and physical strain or tension generated by physical emotional, social, economic or occupational circumstances, events or experiences that are difficult to manage, or endure”. Inherent in the above definition is

that when someone makes the greatest possible effort, using all his energy, it culminates to stress. Akande, Olowonirejuaro and Okwara-Kalu [3] state that stress is a normal part of life and that it can come from any situation or thought that make you frustrated, angry or anxious. Weiten, Lloyd, Dunn and Hammer [4] defined stress as any circumstance that threaten or are perceived to threaten one’s well-being and thereby tax ones copying abilities. The threats in this regard include someone’s immediate physical safety, long-range security, self-esteem, reputation or peace of mind. However, Taylor in Bernstein et al [1] saw stress as “the negative emotional and physiological process that occur as individuals try to adjust to or deal with stressors, which are environmental circumstances that disrupt individuals daily functioning

and lead to negative emotional and physical reactions which is stress". Thus stress emanates due to daily, transactions between people and their environment.

The environmental conditions that tend to disrupt human functioning are known as stressors." According to Akinade [5] "Stressors are special kinds of environmental stimuli that lead to stress". Stressors may be physical, psychological, real or imagined. Akinade [5] further highlighted that stressors may range from mild stressors to very severe or intense stressors. Thus they may be classified as micro stressors in the form of daily struggle and macro-stressors which are catastrophic and often negative events such as the death of a loved one. A simple definition of stress as postulated by Selye cited in Amadi [6] is that stress is the wear and tear of the body due to the demand placed on it.

Essentially, there are two types of stress; these are eustress and distress. Akinade [5] saw eustress as a good or positive stress. Selye cited in Akande saw eustress as a state of physical and mental well-being in which the mind and the body together achieve their full potential. Instances of eustress as contained in Amadi [6] are as experienced by people who are engaged in games, sports, debates and interviews, waiting for pregnancy diagnostic test result, going to pick admission or employment letter, baby naming ceremony and marriage ceremony.

According to Akinade [5] distress is negative and better known form of stress. Amadi [6] stated that distress is a negative stress and further observed that the event or circumstance that causes distress usually produce unpleasant and regrettable consequences.

According to him, the example of events that cause distress are loss of loved relation, being raped, contacting HIV/AIDS, automobile accident, death sentence and divorce, demotion, failure at election and impeachment. The above examples are also sources of severe or major stress. Severe stress elicits a lasting remarkable impact in the life of the individual affected.

Another type of stress is normal stress or every day stress. Just as the name implies, it has to do with the stress people encounter in their daily activities, these include queuing in a line at the bank, having car problem, misplacing something like comb, pen, cheque book or tooth brush, etc.

Chronic stress is the most serious and dangerous aspect of stress which lasts for a longer period of time. According to Weiten et al [4] "chronic stress are threatening events that have a relative long duration, and has no readily apparent time limit. Examples of chronic stressors given by Weiten et al include heavy financial strain produced by huge debts, ongoing pressure from a hostile boss at work or the demands of caring for a sick family member over a period of years.

The next type of stress according to Weiten et al [4] is Acute Stress. He stated that acute stressors are threatening events that have a relatively short duration and a clear endpoint. Example of acute stress include having confrontation with a lunatic or drunk, waiting to collect the result of a medical test and having the home threatened by fire or flooding.

Amadi [6], posited that the symptoms of stress could be classified into three as follows: Physiological, psychological and behavioral. The physiological symptoms according to Hart, Schular, Hellebrandt and Akinusi cited in Amadi [6]

are as follows: migraine headaches, rapid heartbeat and breathing rate, stomach upset, body pains, sweating, breathing problem which causes the individual to experience insufficient intake of air which causes sudden death. The physiological symptoms also include fidgeting of the whole body.

The psychological symptoms of stress as highlighted by Robins, Bechr and Newman Cooper and Marshal, Ngoka and Hart in Amadi [6], Bernstein et al [1] are as follows: anxiety, daydreaming, indecisiveness, sleep disorders, tension, nervousness, aggression, depression, hallucination, agitation, anger, frustration, irritability and short-temperedness.

Behavioural symptoms of stress as highlighted by Ngoka and Akinusi cited in Amadi [6] and Bernstein et al [1] are: addictive smoking, alcoholism, fatigue, clumsiness, work errors, frequent urination, impulsivity, aimless talk, random movement, frowning, low voice, blaming others, crying, a shaky voice, tremor, aggression, while some quit job or school.

Observation has shown that majority of secondary students are adolescents. Adolescence according to Hall cited in Nwankwo [7], is a period of storm and stress. Implicit therefore is that by virtue of majority of secondary students being adolescents they are bound to experience stress.

The stress could emanate from, the physical changes which they encounter on their journey to adult hood. According to Kairwen [8] adolescents are mostly concerned about their physical appearances than about other parts, especially girls. There are many school related factors which could cause stress among the secondary school students which include: poor academic performance, preparing for and writing examinations, too much home work, too much punishment in the school, bullying by school mates, lack of interest in some school subjects (Kaiwen cited in Akande, Olowonirejuaro and Okwara-Kalu [3]; Amadi [6]). Family's situations could as well be a source of stress to secondary school students and they include: low family income, parental divorce, constant quarrel between parents, parent's ill-health and too much domestic activities in the house. Social sources of stress among students may include: not having a friend, being gossiped by students in the school. Students may also worry about their future, especially as it pertains to their ability to gain admission into the university to study a course of their choice [3,6,9].

Researchers investigated gender difference in stress without any consistent result. Some of the research findings show females as having more stress, while some other research results show males as having more stress. In a study conducted by Akande, Olowonirejuano and Okwara-Kalu [3], they found a significant gender difference in the level of stress. Thus, female students experienced more stress than male students in the study. In a study of gender differences in academic stress and burnout among medical students in final years of education, Backovic, Zinojinovic, Maksimovic and Maksimovic [10] found that female students associated their physical health status and general stress level as worse compared to males.

In a different study by Vijavalakshmi and Lavanya [11], they found that urban students experienced more stress than rural students. The study by Srivastava, Singh and

Srivastava [12] indicated that urban adolescents reported more stress than their rural adolescent counterparts.

## 2. Stress Coping Strategies

People adopt various strategies to cope with stress. According to Weiten, Lloyd, Dunn and Hammaer [4] coping refers to efforts to master, reduce, or tolerate the demands created by stress, Scheier, and Weintraub cited in Weiten, Lloyd, Dunn and Hammer [4], classified coping strategies into fourteen (14) as follows:

**Active Coping:** This involves taking additional action to try to get rid of the problem.

**Planning:** The individual in this regard comes up with a plan on what to do about the problem.

**Suppressing Competing activities:** This requires putting aside other activities in order to concentrate on the present problem.

**Restraint Coping:** This involves forcing oneself to wait for the right time to do something.

**Seeking Social Support (for Instrumental Reasons):** Ask people who have had similar experiences what they did, and solicit for help.

Seeking Social Support for emotional reasons: Talk to people about how you feel.

**Positive Reinterpretation and Growth:** Look for the good aspect of what is happening.

**Acceptance:** In this regard, the individual learns to live with the situation.

**Turning to Religion:** In this approach, the person seeks God's help.

**Focus on venting of emotions:** The individual in this regard becomes upset and lets his emotions out.

**Denial:** The individual refuses to believe that the event happened.

**Behavioural Disengagement:** This involves giving up the attempt to get what the person wanted which caused stress.

**Mental Disengagement:** This requires the person to turn to work or other substitute's activities in order to remove one's mind from the problem.

**Alcohol, Drug Consumption:** this involves the person drinking more alcohol or drugs in order to think less of the problem. (This is not a good option).

### 2.1. Statement of Problem

The major concern of stake holders in education is to ensure that the resources invested in the venture yields maximum dividend. The dividend being referred to in this context is high academic achievement. High level of stress may, result in low cognitive functioning of the students, it may also affect the health of the students adversely. If the students are having health challenges and emotional instability, educational objectives may not be achieved. The problem of this study therefore is to find out the factors of stress, gender and location differences among secondary school students in Rivers State, Nigeria.

### 2.2. Research Questions

The following research questions guided the study.

- (1) What are the factors of stress among secondary school students in Port Harcourt and Ikwerre Local Government Areas?
- (2) What is the gender difference in stress among secondary school students in Port Harcourt and Ikwerre Local Government Areas of Rivers State?
- (3) What is the locational difference in stress among secondary school students in Port Harcourt and Ikwerre Local Government Areas of Rivers State.

## 3. Hypotheses

The null hypotheses below were tested at an alpha level of 0.05.

1. There is no significant difference between male and female students stress in Port Harcourt and Ikwerre Local Government Areas of Rivers State.
2. There is no significant difference between rural and urban students stress in Port Harcourt and Ikwerre Local Government Areas of Rivers State.

## 4. Methodology

The research design adopted for this study was descriptive survey. The population comprised all the Senior Secondary School class two (SSS2) students and Junior Secondary Class two (JSS 2) students in Port Harcourt and Ikwerre Local Government Areas of Rivers State. Stratified sampling technique was used to draw four schools for the study in Ikwerre and Port Harcourt LGAs. The sample size for the study was 272 students. The sample was made up of 136 male students and 136 female students. The sample size also comprised 136 rural and 136 urban students and 136 SSS and 136 JSS students. Sample from each school was 68 students. The instrument used for the study was titled Factors of Stress among Secondary School Students, Inventory (FSSSSI). It was a non-cognitive instrument developed by the researchers. The instrument was made up of two sections, namely section A and B. Section A measured personal data such as gender, location and level of schooling. Section B measured factors of stress. It contained 26 items. The reliability of the instrument was determined using Cronbach Alpha method which gave a co-efficient value of 0.84. Mean and standard deviation were used to answer the research questions, while t-test was used to test the two null hypotheses.

Likert response scale of Strongly Agree, Agree, Disagree and Strongly Disagree was used to measure the responses.

## 5. Results

The results of the study are presented below:

### 5.1. Research Question One

What are the factors of stress among secondary school students in Ikwerre and Port Harcourt Local Government Areas of Rivers State?

**Table 1. Mean and Standard Deviation of Stress factors among Secondary school students**

S/N	ITEM	$\bar{X}$	SD	CRITERION MEAN	REMARKS
1	Physical appearance	1.62	.83		Not accepted
2	Poor academic performance	2.59	1.1		Accepted
3	Too much home work in school	1.71	.79		Not accepted
4	Worry during period of examination	2.01	.98		Not accepted
5	Tensed when writing examination	1.97	.86		Not accepted
6	Too much punishment in school	2.55	1.20		Accepted
7	Some teachers do not teach during their period	3.09	1.06		Accepted
8	Preparing for examination	1.81	.85	2.5	Not accepted
9	Bullying in school	2.28	1.12		Not accepted
10	Gossip from school mates	2.81	1.10		Accepted
11	Too much domestic activities at home	2.38	1.14		Not accepted
12	Changes in the body as an adolescent	2.15	1.20		Not accepted
13	Poor health condition	2.57	1.16		Accepted
14	The issue of gaining admission into university	3.25	1.03		Accepted
15	Parent poor financial condition	3.07	.94		Accepted
16	Parents sickness	2.74	1.14		Accepted
17	Going to school everyday	1.63	.91		Not accepted
18	Not having a friend in the school	1.66	.89		Not accepted
19	Not having text books	2.65	1.18		Accepted
20	Hostility of some teachers to students	2.53	1.13		Accepted
21	Traffic hold-up to and from school	2.51	1.20		Accepted
22	Writing notes in the class	1.68	.99		Not accepted
23	Hate mathematics as a subject	1.53	.78		Not accepted
24	Hate English as a subject	1.32	.55		Not accepted
25	Parents constant quarrel	2.29	1.23		Not accepted
26	Being disturbed a day before examination	2.12	1.19		Not accepted

The result as contained in [Table 1](#) is that items 2, 6,7,10, 13, 14,16,19,20 and 21 are factors of stress to secondary school students. This means that poor academic performance, too much punishment in school, some teachers not teaching during their period, gossiping from school mates, poor health condition, the issue of gaining admission into the university, parent poor financial condition, parents sickness, not having text books, hostility of some teachers to students, and traffic hold-up to and from schools are sources of stress to students. Item 1,3,4,5, 8, 9, 11, 12,17,18,22, 23, 24, 25 and 26 were not accepted by the respondents (students) as factors of stress to them.

## 5.2. Research Question Two:

What are the gender difference in stress among secondary school students in Ikwerre and Port Harcourt LGA of Rivers State?

**Hypothesis 1:** There is no significant difference in stress between male and female students in Ikwerre and Port Harcourt LGA of Rivers State.

**Table 2. A t-test Analysis of Male and Female Students Stress differences in Ikwerre and Port Harcourt LGA**

GENDER	N	$\bar{X}$	SD	DF	t-cal.	SIG	RESULT
Male	136	55.35	10.52				
Female	136	60.23	8.99	270	-4.11	0.000	Significant

[Table 2](#) indicated mean and standard deviation of male students to be 55.35 and SD of 10.52, while the mean and standard deviation of female students are 60.23 and 8.99 respectively. The mean difference between male and

female students is 4.88. The P calculated of 0.000 is less than P critical of 0.05 at 270 DF. Therefore the null hypothesis was rejected. This means that there is a significant difference between male and female students stress. The female students had higher mean and therefore more stress than male students.

## 5.3. Research Question 3

What is the locational difference in stress among secondary school students in Ikwerre and Port Harcourt LGA of Rivers State?

**Hypotheses 2:** There is no significant difference between rural and urban students stress in Ikwerre and Port Harcourt LGA school student's stress.

**Table 3. A t-test Analysis of Rural and Urban Secondary School Students Stress**

LOCATION	N	$\bar{X}$	SD	DF	t-cal.	SIG	REMARKS
RURAL	1.36	61.00	9.08				
URBAN	1.36	59.06	10.23	2.70	5.07	000	Significant

[Table 3](#) indicated that mean and standard deviation of rural students stress to be 61. and 9.08 respectively, while the mean and standard deviation for urban students were 55.06 and 10.23 respectively. The mean difference is 5.50. The computed value of 000 is less than p critical of 0.05, at 270 Df. Therefore, the null hypothesis was not accepted. This means that there is significance difference in rural and urban students stress, based on the rural students higher mean score of 61.00, they have more significant stress than the urban students whose mean score was 55.06.

## 6. Summary of Findings

1. The sources of stress among secondary school students in Ikwerre and Port Harcourt LGA were found to be poor academic performance, too much punishment in school, some teachers not teaching during their period, gossip from school mates, poor health condition, the issue of gaining admission into the university, parent poor financial condition, parents sickness, not having text books, hostility of some teachers to students and traffic hold-up to and from school.
2. There was significant difference between male and female secondary school student stress in Ikwerre and Port Harcourt LGA. The female students tended to have more stress than the male students
3. There was significant difference between rural and urban secondary school students stress. Rural students tended to have more stress than the urban students.

## 7. Discussion

### 7.1. Factors of Students' Stress

Table 1 has shown the sources of stress to secondary school students to include: poor academic performance, too much punishment in school, some teachers not teaching during their period, gossiping from school mates, poor health condition, the issue of gaining admission into the university, parents poor financial condition, parents sickness, not having text books, hostility of some teachers to students and traffic hold-up to and from schools. Some of these identified sources of stress to secondary school students are in agreement with the findings of College Planning Group [9], Amadi [6], Akande, Olowonirejuaro, Okwara-Kalu [3].

### 7.2. Male and Female Students' Stress

Table two showed that there was a significant difference between male and female students stress. Thus the null hypothesis was rejected. The mean score of female students indicated that female students had more stress than male students. The finding of this study in this regard is consistent with the findings of Akande, Olowonirejuano and Okwara-Kalu [3] that female students experience more stress than male students. Also, it's in consensus with the result of Backovic [10] who found that female students assessed their physical health status and general stress level as worse compared to males. However, the findings of this study is contrary to that of Srivastava Singh and Srivastava [12] who found that male reported more stress than females. The reason why female secondary school students reported to experience more stress in this study could be attributed to their cultural additional responsibility of being more involved in taking care of domestic chores.

### 7.3. Rural and Urban Students Stress

Table 3 showed that there was significant difference between rural and urban secondary school students stress.

Consequently, the null hypothesis was rejected. Based on the finding that rural students mean score was higher than that of the urban students, it means that rural secondary school students have more stress than the urban secondary school students. The finding of this study is in disagreement with Srivastava Singh and Srivastava [12] who found that Urban adolescents reported more stress than their rural adolescent counterparts. Rural students have more stress may be because more poor economic condition in rural areas may compel most of the students to be engaged in farming activities as a way of helping their parents. In addition, they may not be having classroom lessons always due to shortage of teachers in rural areas relative to the urban areas.

## 8. Recommendation

1. Government is required to expand infrastructural facilities in the existing universities in Nigeria by building more lecture halls and other necessary facilities in order to increase the admission, capacities of the existing universities. This will reduce secondary school students' high stress elicited by the issue of gaining admission into the universities.
2. Principals of schools should take necessary steps to ensure that teachers go and teach in the classrooms when it is the period for them to teach. This will contribute in mitigating students stress.
3. Counsellors are required to counsel the secondary school students on stress coping strategies such as problem focused coping, emotion focused coping strategies and seeking social support.
4. Parents poor financial condition was one of the greatest sources of stress to the students. In this regard, government is required to create the enabling environment to reduce poverty in the country. In order to achieve this, there should be wage increase and more employment opportunities created; this could be in the area of agriculture, or industries.
5. Government is required to pay rural posting allowance to secondary school teachers as a way of motivating them to accept posting into the rural areas and to work with dedication.

## 9. Conclusion

The findings of the study showed that secondary school students experience stress. And that there was a significant difference between male and female secondary school students stress. Also, there was a significant difference between rural and urban students stress. This study revealed that the greatest source of stress to secondary school students was the issue of gaining admission into the university which had the highest mean score of (3.25). This was followed by some teachers do not teach during their period ( $\bar{X}=3.09$ ), while the third greatest source of stress to students was parents poor financial condition ( $\bar{X}=3.07$ ). Another important finding is that secondary school students do not actually hate English and Mathematics as subjects. This postulation was based on the finding that among all the items on possible sources of stress to

students, "I hate English" and "I hate Mathematics as a subject" got the least mean scores of 1.32 and 1.53 for English and Mathematics respectively. Consequently, one could conclude that the poor performance of many students in the two important subjects could be due to teachers' factors, some other aspects of the students' factor and students' inability to buy the test books, but not due to students' lack of interest.

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