# Job Stress Prevalence among Basic Science Teachers in Public Secondary Schools in South-West, Nigeria 

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#### Abstract

This study focused on the phenomenal of job stress of Basic Science teachers in South-west, Nigeria. The purpose of this study is to first assess the prevalence of secondary school Basic Science teachers' job stress. The study further investigated into the difference in the job stress among Basic Science teachers in rural and urban public Secondary Schools and also investigated difference in job stress between male and female Basic Science teachers in South-west, Nigeria. This study employed a descriptive research design of the survey type. The Sample consisted of roo Basic science Secondary School teachers chosen from fifty Secondary Schools in South West, Nigeria. The instrument used in collecting the data was Basic Science Teachers' Stress Questionnaire (BSTSQ) which was adopted for the study. The data generated were subjected to descriptive and inferential analysis using t -test. The study revealed that the level of job stress was moderate among Basic Science teachers. It also showed that there was difference in job stress between Basic Science teachers in rural and urban secondary schools. Also there was difference in job stress between female and male Basic Science teachers. Based on the findings, it was recommended that government should evolve effective and lasting strategies that will mitigate the effect of stress among basic science teachers in south-west, Nigeria. Both government and school principals should put in place routine seminars and workshops to reduce job stress.


Keywords: Job stress, Gender, Rural, Urban, Basic Science, Teachers

## INTRODUCTION

The scourge of stress among basic science teachers cannot be overemphasized. For the past four decades, the stress phenomena had become an important area of study medicine, psychology and the science. Workshops and seminars globally have been held, this has featured very
prominently in the headlines of the prints and mass media. We all experience stress through different degrees and any attempt live a stress free life will generate more stress( Akinboye,2002 in Arowolo 2008). School teaching is regarded as a stressful occupation, but the perception of the job as stressful may be influenced by coping responses and social support. Stress has been used as a common concept in explaining variety conditions such as psychological symptoms proceeding an illness, feeling of a nasal and other pathological conditions. These conditions are reported in the conditions are reported in the form of problems like insomnia (in ability to sleep), amnesia (memory loss), Palpitations, ashes, pain, migraine headaches, depression, anxiety, guilty, loneliness and amnesia. Udeagba (1995) in family stress management submits that Nigerians reported these symptoms in somatic terms like heat in the head.

A substantial proportion of teachers describe their jobs as stressful (Borg, 1990; Kyriacou\& Sutcliffe, 1978). Much research has tried to identify the specific stressors in teaching, and their impact on health and well-being (Travers \& Cooper, 1996). Workload, lack of resources, poor professional relationships with colleagues, inadequate salary, pupil misbehavior, difficult interactions with parents and expectations of other staff have been identified as sources of stress in many studies (Pierce \& Molloy, 1990;Pithers \& Soden,1998). Stress is often accepted as inescapable aspect of teaching. Teachers' lives are diversely affected by stress leading to physical ill health (Otto, 2005).

The second issue investigated in this study was the influence of work place, social supports or school location on basic science teachers' job stress in south-west region of Nigeria. And whether the job is congruent to what the job eventually offers. It is well established that social support can reduce the impact of stressors on a variety of outcomes including psychological well-being, job satisfaction and physical illness risk (Shumaker \& Czajkowski, 1994).

The location of a school has a big role to play on the curriculum implementation. Nelson (2004) observed that rural schools tends to be smaller than urban schools and that has a number of benefits since rural students' class tend to be smaller, students enjoy more individual attention towards practical activities from their teachers and their teachers know all the student ability and manipulating ability without stress. He has also observed that small rural school can be more effective in helping their student to learn better through practical activities, behave better and active in their school activities. This claim could in one way or the other reduce the stress that teachers pass through in rural places due to handible number of student.

This study also looks at how gender has affected basic science teachers' job stress in south-west region of Nigeria. Most research indicates a greater vulnerability of women when we talk about the experiences and consequences of stress at work in university teachers.

Some even report sources of stress that men experience more intensely than women, such as organisational structure and climate, inadequate style of management at university/college, or changes that reduce participation in decision making, the level of autonomy, and control over work (Kinman, 20II).

Eisler (1998) has suggested that men are affected more greatly than women when it comes to adhering to societal gender norms and can lead to anger and poor health decisions. It has further been concluded that male stress has a relationship to variation in aggression and violence (Mathew, 2002). For women, gender role stress has been linked to body image issues, as well as eating disorders Mathew (2005).

## Research Question

In the course of this study, a general question was raised:
r. What is the level of job stress among basic science teachers in public secondary schools in South-west, Nigeria?

## Research Hypotheses

The following hypotheses were postulated for this research work:
I. There is no significant difference between job stress among basic science teachers in rural and urban public secondary schools.
2. There is no significant difference in job stress between male and female basic science teachers in public secondary schools.

## Research Design

Descriptive survey research design was adopted in carrying out this study. It was adopted as it involved the collection of facts extensively from the basic science teachers for the purpose of describing and interpreting existing situation on job stress prevalent in public secondary schools south-west, Nigeria.

## Population

The population of this study consisted of 1350 basic science teachers in secondary schools insouth -west of Nigeria.

## Sample and Sampling Techniques

The sample for the study consisted of ioo basic science teachers selected using Multi-Stage, stratified random sampling technique. At the first stage, Ekiti and Oyo States were randomly selected from the six states in South-West Nigeria. At the second stage, twenty five secondary schools were purposively selected in each state taken into cognizance the schools with basic science laboratory and the school location (rural or urban). At the third stage, two basic science teachers were also purposively selected from each school, to be eligible; the teacher must be a full- time graduate of basic science, making ioo teachers (50 male and 50 female teachers).

## Research Instrument

The instrument used in this research work was Basic Science Teachers' Stress Questionnaire (BSTSQ), is a 39 item self-report questionnaire designed to elicit specific information about job stress among basic science teachers in secondary schools in south -west of Nigeria.

## Validity of the Instrument

Face and content validity of the instrument were ensured. The instrument was validated by experts in Basic Science and Test, Measurement and Evaluation. All their corrections were properly incorporated into the instrument before use.

## Reliability of the Instrument

The method of test-retest was used to establish the reliability of the instrument. The instrument was administered to thirty basic science teachers in Osun State twice within the period of two weeks. Pearson Product Moment Correlation analysis was used for the data collected and the reliability coefficient of o. 88 was obtained there-by making the instrument reliable. This proves the consistency of the instrument

## Data Analysis

Data collected for the hypotheses were analyzed statistically using descriptive statistics and t -test analysis at 0.05 level of significance.

## RESULTS AND DISCUSSION

## Descriptive Analysis

## Question I

What is the level of job stress among basic science teachers in public secondary schools in South-west, Nigeria?
In order to answer the question, mean score on job stress and standard deviation were computed. These ( $x=62.63, S D=9.20$ ) were used to categorized the subject (Basic Science teachers) into Low, Moderate and High levels of job stress as presented in Table i.

Table 1: Descriptive analysis showing the level of job stress among Basic Science teachers in public secondary schools in South-west, Nigeria

| Level of Job Stress | Frequency | Percentage |
| :--- | :--- | :--- |
| Low | 20 | 20.0 |
| Moderate | 59 | 59.0 |
| High | 21 | 21.0 |
| Total | 100 | 100.0 |

Table 1 shows that $20(20 \%)$ of the total sample experienced low level job stress while 59 ( $59 \%$ ) and 21 ( $21 \%$ ) had moderate and high levels of job stress respectively. Therefore, the level of job stress among Basic Science teachers in South-west, Nigeria was moderate.

## Testing of Hypotheses

## Hypothesis I

There is no significant difference between job stress among basic science teachers in rural and urban public secondary schools.

Table 2: t-test showing job stress among Basic Science teachers in rural and urban public secondary schools

| Group | $N$ | Mean | SD | DF | t-cal | t-tab |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Urban | 50 | 152.86 | 5.60 | 98 | 5.013 | I.980 |
| Rural | 50 | 162.46 | 12.33 |  |  |  |

Table 2 shows that $\mathrm{t}-\mathrm{cal}(5.013)$ is greater than the $\mathrm{t}-\mathrm{tab}(\mathrm{I} .98 \mathrm{o})$ at 0.05 level of significance. The null hypothesis was rejected. Therefore, there is significant difference between job stress among basic science teachers in rural and urban public secondary schools.

## Hypothesis 2

There is no significant difference in the job stress between male and female Basic Science teachers in public secondary schools.

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Table 3: t-test showing job stress between female and male basic science teachers in public secondary schools

| Group | $N$ | Mean | SD | DF | t-cal | t-tab |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Female | 50 | 65.52 | 9.56 | 98 | 3.293 | I.980 |
| Male | 50 | 59.74 | 7.9 I |  |  |  |

Table 3 shows that $\mathrm{t}-\mathrm{cal}(3.293)$ is greater than the $\mathrm{t}-\mathrm{tab}(\mathrm{I} .98 \mathrm{o})$ at 0.05 level of significance. This null hypothesis is not accepted. Therefore, there is significant difference in the job stress between female and male basic science teachers in public secondary schools.

## DISCUSSION

The study examined the prevalent of job stress among Basic Science teachers in south-west, Nigeria. The study showed that the level of job stress among Basic Science teachers in south-west, Nigeria was moderate. This agrees with Spear et al. (2000) which concluded that sources of teachers' job satisfaction included working with students, the cerebral challenge of the profession, and a sense of classroom autonomy which could be controlled. Further, they describe workload, salary, and professional status as sources of dissatisfaction. These conclusions suggest that working conditions for teachers are more likely to contribute towards job satisfaction than job dissatisfaction.

This study further revealed that there was significant difference in job stress between Basic Science teachers in rural and urban public secondary schools. The mean occupational stress scores of rural (162.46) and urban ( 152.486 ) teachers revealed that rural teachers are experiencing more stress than the urban teachers. This result is not supported by Soyibo (1994), who found that location of school is not influencing the stress among high school teachers.

Also, the study revealed that there was difference in job stress between female and male basic science teachers in public secondary schools in South West, Nigeria. The mean occupational stress scores of male (7.9I)
and female (9.56) teachers also reveal that female teachers are experiencing more stress than the male teachers. This result is in line with the findings of Doyle \& Hind (1998), Mazzola et al. (20II), and Sabu\& langaiah (2005); and contradicted by the results of Aftab\& Khatoon (2012),Anbuchelvan (2010), Chopra \&Gartia (2009), Okoza et al. (20IO), Reddy (20II), and Yang et al. (2009).

## RECOMMENDATIONS

Based on the findings, it was recommended that government should evolve effective and lasting strategies that will mitigate the effect of stress among Basic Science teachers. Also put in place routine seminars and workshops to aid job stress coping strategies. Both government and school principals should motivate Basic Science teachers in terms of intrinsic and extrinsic rewarding to boost their moral and enhance their job satisfaction and that social amenities should be provided to rural areas to make the place conducive and inviting for teachers.

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