

Perceived Sources Stress: A Cross Sectional Survey among Urban and Rural Public Secondary School Teachers in Ebonyi State, Nigeria

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Abstract

Work-related stress as an imbalance between working demands and environmental or personal resources at work. Workers, especially teachers, can experience stress when the work demands placed on them do not match their skills or ability to cope at work. The aim of the study was to determine the perceived sources of stress among urban and rural public secondary school teachers in Ebonyi state, Nigeria. A sample 436 teachers was investigated. The instrument used for data collection was a 36-item valid and reliable ($\alpha = 0.81$) questionnaire developed by the researcher. The questionnaire was administered on the participants on face to face approach. Out of 436 copies of the questionnaire given out, 405 copies (Urban 159, Rural 246) representing about 92.9% return rate, were used for analysis. Data were analyzed using percentages, mean, standard deviation and independent sample t-test statistic. The results of the study showed stress among secondary school teachers was high, no matter location of school, and the difference existing in the stress levels was significant ($p < 0.05$). The stress suffered by the teachers is a serious problem that requires serious attention. Secondary school teachers may need to adopt positive coping strategies, such as regular physical activities and rest in order to ward off stress.

Keywords: Stress, cross sectional, urban and rural, secondary school teachers

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1. Introduction

The World Health Organization (WHO) defined work-related stress as an imbalance between work demands and environmental or personal resources at work. Workers can experience stress when the work demands placed on them do not match their knowledge, skills or ability to cope at work. Teachers' occupational stress is the negative reaction teachers have when presented with work demands and pressures that are not matched to their knowledge and abilities. These responses manifest themselves in emotional or social problems, and/or physical health issues (Kyriacou, 1987). This definition is restricted to stress reactions related to the workplace and occupation and does not include general anxiety or stressful life-events. Important consequences for teachers are physical and emotional exhaustion, the sacrifice of social lives, increasing instances of sick leave, the reduction of teachers' employment with economic consequences for the individual teachers, and early retirement, with disability pension for some teachers. However, if teachers could manage their stressful situations successfully the state of affairs can be ameliorated bringing about an increasing versatile result with fewer demoralizing effect.

It is a general belief that stress is unavoidable as long as one is living. It occurs in every setting, including secondary schools. The secondary school system is an actual environment for teaching and learning activities. Teaching at secondary school level can be hard, monotonous and challenging because some students at this level are still adolescents characterized by physical and emotional changes that put them at risk of all sorts of behavioral quandary. Apart from this, these young people may experiment drug taking, aggressive behavior, hooliganism, truant behavior and other antisocial behaviors. In spite of all these behavioral mal-adjustments, teachers still carry out their chosen classroom duties in this social context, teaching children from a wide gamut of racial, religious and economic backgrounds which pose a huge stress on them. Stress is a serious threat on teachers' abilities to meet up the demands of their assignments in the school. They are faced with disrupted emotional, cognitive and psychological functioning which could be a barrier to the attainment of educational goals at this level. This may be the reason why teachers are subjected daily to excessive job demands which probably increase the level of job stress they suffer which results to unpleasant health problems. The above may be the reasons why teachers in a study reported that they suffer a number of maladaptive consequences due to workload and the accumulation of numerous stresses (Skaalvik & Skaalvik, 2015).

Studies (Curry & O'Brien, 2012) reported common educational stressors facing teachers. These stressors are linked to both work-related and institutional factors. These factors include, but not limited to, schools and the system becoming more and more bureaucratic and political, expectations on teachers to manage difficult student behavior, greater service delivery demands with fewer materials, a lack of planning time, an increased emphasis

on accountability measures, and the exclusion of teachers from policy-making procedures (McCallum & Price, 2010; McCallum et al., 2017).

Teaching profession has traditionally been regarded as low stress occupation but during the past two decades the situation changed (Olivier & Venter, 2003). Teaching tends to become a more demanding profession around the globe. Globally, surveys revealed widespread concern about the effects of stress on teachers' sense of well-being and their willingness to stay in the profession. Cotton and Hart (2003) had reported that occupational stress is a growing problem worldwide, which results in significant loss both to employees and employers.

Job stress is the most common psychological phenomenon that is prevalent among people who are in diverse jobs and professions. In order to believe that stress is prevalent among human service professions, particularly the teaching profession; various researchers (Pettegrew & Wolf, 1982; Cherniss, 1980; Griffith, Steptoe & Cropley, 1999; Nwimo, 2005; Nwimo, 2006; Nwimo & Ugwu, 2008; Nwimo & Onwunaka, 2015) over the years worked on this negative construct. These researchers reported that teaching is a complex process wherein the teacher is expected to exhibit many skills and this makes a teacher to experience stress in the profession. According to Griffith, Steptoe and Cropley (1999), the stress in the profession may have far reaching consequences on the entire education system.

In reality, the success of any nation's educational system depends on the availability of capable, well trained, painstaking, healthy, resourceful, highly motivated and industrious classroom teachers. The level of stress the teachers perceive could point up to the stress which they suffer on their job. It is against this backdrop that the study was initiated to find out the perceived sources of stress among urban and rural secondary school teachers in Ebonyi state, Nigeria.

2. Methods

2.1 Participants and Sampling

Between September and December 2022, a cross-sectional survey was conducted among 436 (Urban 175, Rural 261) secondary school teachers randomly drawn through the multi-stage procedure. The first stage involved the identification of all the public secondary schools in Ebonyi state. The second stage involved a purposive clustering of the schools into the three education zones in the state. The third stage involved the stratification of the teachers into urban and rural strata from which 10% of each location was selected using systematic random sampling technique. These procedures yielded a total sample of 436 (175 urban & 261 rural) secondary school teachers.

2.2 Inclusion criteria

All teachers in the public urban and rural secondary schools were qualified to be included in the study.

2.3 Exclusion criteria

Teachers in the private secondary schools, whether in the urban and rural setting, were excluded in the study.

2.4 Questionnaire

The questionnaire used in the data collection process was a 36-item instrument, titled: Sources of Stress Questionnaire (SSQ). The instrument was arranged in two sections A and B. Section A, contains one item on location of school. Section B contains 35 items meant to elicit information on the sources of stress in which items 1-11 elicited information on administrative sources of stress, 12-16 on workload related sources, 17-21 on interpersonal sources, 22-27 on environmental sources and 28-35 on economy related sources. The respondents were required to indicate on a 4-point scale the options that serve as sources of stress, namely: Always (AL) = 4, sometimes (ST) = 3, rarely (RE) = 2 and never (NE) = 1.

The instrument was validated by five experts in Health Education and Psychology. They were requested to certify the clarity of instructions to the respondents, proper wording of items in addressing the purpose of the study. The corrections and suggestions made by the experts were incorporated in the final draft of the instrument used for this study. In order to determine the reliability of the SSQ, it was administered on 30 secondary school teachers in Abia state. The internal consistency of the instrument was computed using Cronbach alpha procedure. The internal consistency of the SSQ was 0.81, which was considered high enough to adjudge the SSQ reliable for use in the study. This is because, according to Ogbazi and Okpala (2014), if the correlation coefficient obtained on an instrument is up to 0.60 and above, the instrument should be considered good enough to be used in the study.

3. Variables

3.1 Outcome variables

Sources of Stress Questionnaire (SSQ) included 35 items which were scored using a 4-point scale (1 = strongly disagree to 4 = strongly agree) with higher scores indicating greater levels of stress perception. For analysis,

these items were summed to create a continuous scale which could range from 1.0 to 4.0.

3.2 Explanatory variables

One explanatory variable of location of school was studied.

4. Procedure

The principal of each secondary school used in the study granted the researcher permission before data collection. A consent note with the explanation for the research purpose, method of response and assurance of anonymity was attached to each copy of the questionnaire. Four hundred and thirty six copies of the questionnaire were administered on the teachers in the staff room during a school recreation period and were collected immediately after completion.

5. Data Analysis

The completed copies of the questionnaire were examined for completeness of responses and copies that had incomplete responses were discarded. Out of 436 copies of the questionnaire administered; 405 (Urban 159, Rural 246) representing about 92.9% return rate, were used for analysis. In describing the data, percentages, means and standard deviations were used to describe the respondents' demographic characteristic and perception of sources of stress, respectively. In describing perception of sources of stress among the teachers, a mean value of 2.5-4.0 implied high sources of stress and a mean below 2.5 was adjudged low sources of stress.

Standard deviation was used to check how the means clustered around the central mean. T-test statistic was used to analyze data in order to ascertain whether the difference existing in the perception of sources of stress in relation to the only explanatory variable of location of school was significant at an alpha level of 0.05. All data analyses were done with IBM Statistical Package for Social Sciences Version 25.0 for Windows.

6. Results

Table 1: **Demographic Characteristic of Respondents**

Variable	Number	Percentage
Location of School		
Urban area	159	39.3
Rural area	246	60.7
Total	405	100

Data in Table 1 show the demographic characteristic of the respondents. Majority (246 or 60.7%) of the respondents are in the rural schools. Less than half (159 or 39.7%) are in the urban schools.

Table 2: **Mean and Standard Deviation on Perceived Source of Stress among Urban and Rural Public Secondary School Teachers**

Variables	N	Mean	SD	Dec.
Administrative				
Rural area	159	2.91	0.48	HL
Urban area	246	2.98	0.41	HL
Workload				
Rural area	159	2.90	0.69	HL
Urban area	246	2.98	0.54	HL
Interpersonal Relations				
Rural area	159	2.15	0.65	LL
Urban area	246	2.23	0.73	
Environment				
Rural area	159	3.24	0.89	HL
Urban area	246	3.45	0.57	HL
Economy				
Rural area	159	3.27	0.49	HL
Urban area	246	3.28	0.41	HL
Grand Mean				
Rural area	159	2.89	0.44	HL
Urban area	246	2.99	0.31	HL

HL = High Level, LL = Low Level

Table 2 shows the sources of stress among urban and rural public secondary school teachers in Ebonyi state. It can be seen that administrative (2.91±0.48), workload (2.90±0.69), environmental (3.24±0.89) and economic (3.27±0.49) sources of stress are high while interpersonal relations (2.15±0.65) sources of stress is low among the teachers in the rural areas. For teachers in the urban areas, administrative (2.98±0.41), workload (2.98±0.54), environmental (3.45±0.57), and economic (3.28±0.41) sources of stress are high while interpersonal relations sources of stress is low. On the overall level, rural secondary school teachers have a mean of 2.89±0.44 and urban teachers have a mean of 2.99±0.31. This implies that on the overall level, secondary school teachers in Ebonyi state have high level of stress regardless of whether they are in rural or urban areas.

Table 3: Summary of T-test on Source of Stress among Urban and Rural Public Secondary School Teachers

Variables	N	Mean	SD	t-value	p-value
Administrative					
Rural area	159	2.91	0.48	1.523	0.129
Urban area	246	2.98	0.41		
Workload					
Rural area	159	2.90	0.69	1.364	0.173
Urban area	246	2.98	0.54		
Interpersonal Relations					
Rural area	159	2.15	0.65	1.078	0.282
Urban area	246	2.23	0.73		
Environment					
Rural area	159	3.24	0.89	2.922*	0.004
Urban area	246	3.45	0.57		
Economy					
Rural area	159	3.27	0.49	0.643	0.521
Urban area	246	3.29	0.35		
Perceived Sources of Stress					
Rural area	159	2.89	0.44	2.484*	0.013
Urban area	246	2.99	0.31		

* $p < 0.05$

Table 3 shows the results of the independent samples t-test analysis of the statistically significant differences in the level of sources of stress among urban and rural public secondary school teachers in Ebonyi state. The results show that there is no significant difference between the teachers from rural areas and those from urban areas in the levels of administrative sources of stress ($t = 1.523$, $p = 0.129$), workload sources of stress ($t = 1.364$, $p = 0.173$), interpersonal relations sources of stress ($t = 1.078$, $p = 0.282$) and economic sources of stress ($t = 0.643$, $p = 0.521$). Whereas there is a significant difference in the level of environmental sources of stress between teachers from rural areas and those from urban areas ($t = 2.922$, $p = 0.004$). Overall, the hypothesis that states there is no significant difference in the level of sources of stress between teachers from rural areas and those from urban areas ($t = 2.484$, $p = 0.013$) is not accepted.

7. Discussion

Data on demographic characteristic of the respondents showed that majority (60.7%) of the respondents were in the rural schools as against less than half (39.7%) who were in the urban schools. The findings were expected because Ebonyi state, Nigeria where the study was conducted has more rural schools than urban schools. Therefore, the findings that more teachers were in the rural secondary schools were not surprising. The findings corroborate those of previous studies (Nwimo, Elom, Ilo, Ezugwu, Ezugwu, Nkwoka, Igweagu, & Okeworo, 2022; Elom, Nwimo, Ilo, Ngwakwe, Ezugwu, Alegu, Ojide, & Ogba, 2023).

The present study showed that, generally, the level of stress faced by both the rural and urban secondary

school teachers was high and there was a significant difference in the level of sources of stress between teachers in rural areas and those in urban areas ($t = 2.484, p = 0.013$) but the level of stress faced by the rural teachers was slightly lower (2.89 ± 0.44) than that faced by the urban teachers (2.99 ± 0.31). These findings were expected judging from the present economic situation in Nigeria where life in the urban cities seems to be difficult to comprehend, because they are living in an unnatural environment, exposing the dwellers to an unimaginable stress. Those in the rural areas are far much better since they seem to be living in the natural setting where communal life is enjoyable. These findings are in tandem with those of previous observations (Wainwright & Calnan, 2002; Robbins, 2007; Ravichandran, & Rajendran, 2007). However, the findings seem to be at variance with those of other studies (Akhlaq, Amjad, Mehmood, Hussan & Malik, 2010). The findings lent credence to those that indicated that the personal variables such as location of school plays a significant role in the perception of various sources of stress related to the teaching profession (Parray, Kumar, & Awasthi, 2016; Maduagwu, Nelson-Okarter, Ezekiel, 2019). On the other hand, Valkov and Peeva (2020) reported that there was no significant difference the stress levels experienced by teachers in urban and rural settings a finding which may have been as result of moderating factors such as age, sex, marital status, financial status, years of teaching, and physical activity that were included in the previous study.

8. Implications for Policy Makers

1. Teachers in public secondary schools continue to suffer increased threat of none payment of the small salary that tends to worsen their stress situation. Government is challenged to make payment of salaries of public school teachers prompt enough so that they could make effective planning of the meager amount they are paid.
2. This study described the level of stress suffered by the public urban and rural secondary school teachers. It applied a structured questionnaire to determine the perceived sources of stress among the teachers. The participants reported an overall high level of stress. One on the general observations in the school system is that teachers have enormous functions in the area of teaching mal-adjusted students. Managers of education are challenged to make guidance and counseling of students more effective in order to engineer the behavior of the students to abstain from disruptive behaviors in the school.
3. There is unavailability of programs that are meant to accommodate teachers and other members of the population by extension in stress reduction and management in Nigeria school system, therefore policy makers are challenged to organize stress reduction campaigns that could benefit teachers and community members through workshops, symposia and mass media campaigns.

9. Conclusion

The study concluded that the teachers suffered a high level of stress and there was a significant difference in the perceived levels of sources stress between the rural and urban public secondary school teaches; however, urban secondary school teachers experienced slightly higher levels of stress than rural secondary school teachers. Government can improve the working conditions of the teachers which might scale down the stress levels suffered by the teachers. Stress among secondary school teachers, no matter location of school, is a serious problem that requires serious attention. Secondary school teachers may need to adopt positive coping strategies, such as regular physical activities and rest.

The findings of this research may not be used in making over ridding generalizations regarding other public urban and rural school teachers in Nigeria and in other places; who may be different to a great dimension in social and economic circumstances. The teachers studied may represent an important group of the Nigerian public secondary school teachers; therefore, information generated will be useful in the stress reduction programs for public secondary schools in Nigeria and elsewhere that may have same cultural and social similarity with Ebonyi state.

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