Socio-Demographic Predictors of Occupational Stress Among Secondary School Teachers in Anambra State, Nigeria, Counselling Implications

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Abstract

The study examined socio-demographic determinants of occupational stress among secondary school teachers in Anambra State - Nigeria. Five hypotheses were formulated to guide the study. The population of the study was six thousand and thirty six (6,036) teachers from public schools in the state. The sample of the study consisted of one thousand teachers, made up of four hundred and fifty males and five hundred and fifty females. Stratified random sampling technique was used to draw the sample. The instrument used in this study was a structured questionnaire–Job Related Stress Inventory (JSI). The JSI was developed after a careful and critical identification of the possible factors that could be associated with stress as highlighted by earlier researchers. The instrument was duly validated and had a reliability co-efficient of 0.82. This was done through test – retest method at three weeks interval. The mean, standard deviation, t-test and analysis of variance. (ANOVA) were used to test the hypotheses at 0.05 level of significance. The results show that the level of stress is related to the teachers' gender. Teachers' age significantly influence their level of stress exhibition. Marital status is not a predictor of occupational stress among teachers. Teachers' income does not significantly influence the level of stress exhibited by them. There is significant influence of family size on the level of stress exhibited by teachers. Based on the findings it is recommended that teachers should be exposed to positive stress management and copying techniques. Both group and individual counseling sessions, seminars, and workshops should be organized for teachers to minimize the debilitating effects of occupational stress. Pre-retirement counselling should be mounted for the middle-aged and old-aged teachers.

Key words: Teachers, occupational stress, level of stress exhibition, counseling



Introduction

Teaching profession is one of the helping professions in which practitioners are normally committed to giving their best for the welfare of those entrusted in their care. A teacher is a kingpin in the entire system of education. The work of a teacher is physically and mentally challenging. A teacher needs to use a lot of energy in his daily chores in the classroom coupled with his personal and family commitments. This trend which is a routine for a teacher forwards a lot of stress to the teacher (Kaur, 2011). Wayne (2001) defines stress as any circumstance that threatens or is perceived to threaten one's well-being and that thereby taxes one's coping abilities. According to Gelvin (2007), teacher stress is a response syndrome of negative affects resulting from aspects of a teacher's job and mediated by the perception that the demands constitute a threat to self-esteem, and coping mechanisms activated to reduce the perceived threat. Occupational stress is a term used to define ongoing stress that is related to workplace. Kaur (2011) defines occupational stress as the physical and emotional response that occurs where a worker perceives an imbalance between the work demands and his/her capability and/or resources to meet these demands. According to Kokkinos, Panaviotou and Dazoglous (2005), negative aspects of the teaching job such as disciplinary problems, students' apathy, overcrowded classrooms, preparing lesson notes, involuntary transfer, inadequate salaries and lack of administrative support are among the stressors that confront teachers in both developed and developing nations of the world.

A number of factors (environmental, organizational and individual) moderated by individual differences cause an employee to be vulnerable to stress. The researcher is interested in ascertaining socio-demographic determinants of occupational stress among secondary school teachers in Anambra state, Nigeria. Some researchers such as Arroba and James (2002) and Shailaja and Sunagar (2012) found that female teachers have higher level of stress when compared to male teachers of secondary schools. On the other hand Kalika and Alpana (2012) found that there is a significant difference between occupational stress of male and female teachers. Male teachers showed higher stress than female teachers (\bar{x} for male teachers = 37.091 while \bar{x} for female teachers 31: 59). Yadav and Verma (2012) in their study of occupational stress among higher secondary school teachers in India found a significant difference between occupational stress of male and female teachers. Also Jeyaraj, (2013) found an association between gender and teachers' level of stress but Eric (2012) found that stress is in no way related to individual characteristics such as age, gender and number of family members. Also Mohanraj (2013) found no close relationship between gender and teachers' level of stress.

Age has been found by researchers to be a predictor of stress. A study by Noor Suhaida (2002) of secondary school teachers in Malaysia revealed that teachers between the ages of 31 and 40 years old had high stress levels. Antoniou, Polychroni and Ulachakis (2006), found that younger and older teachers perceive stress at work differently. Azlihanis, Nyi, Aziah, Rusli and Mond (2009) in their study on prevalence and factors associated with stress among secondary school teachers in Malaysia found that younger teachers had more stress than older teachers. Also Jeyaraj (2013) found that there is a significant relationship between age and stress among the aided higher secondary school teachers in Madurai district India. However,

Manhanraj (2013) found no close relationship between age and teachers' level of stress.

Marital status is another variable considered in this study. One might argue that being married offers one social support which acts as a buffer during stressful periods. Papoola and Ilugbo (2010) in their study on personality traits as predictors of stress among female teachers in Osun state teaching service, Nigeria, found that female teachers' marital status had a significant influence on their level of stress as married female teachers reported less stress than teachers who are single or divorced. Shailaja and Sunagar (2012) in their study of stress of secondary school teachers in relation to gender and marital status found that married and unmarried teachers of secondary school differ significantly with respect to dimensions of stress. Married teachers have higher occupational stress when compared to unmarried teachers t = 5.8760 P < 0.05 at 0.5 level of significance. On the other hand, Aravinthon and Velnampy (2012) and Mohanraj (2013) found no significant relationship between marital status and teachers' level of stress.

Income refers to teachers' salary. The positive association between poverty and mental health problems is one of the most established in all psychiatric epidemiology. However, not much work has been done to establish the relationship between income and teachers' occupational stress. Aravinthon and Velnampy (2012) in an empirical study on occupational stress and job satisfaction found that there was no significant difference between monthly income and occupational stress. Mohanray (2013) in his study found no close relationship between annual income and level of stress exhibited by teachers. Rajarajeswari (2013) in his study of work stress among lecturers in Madurai-India found income to be significantly related to work stress t = 3.113.

The last variable considered in this study is family size. The size of a family reflects the number of dependants a teacher has to cater for with his/her salary. Aravinthon and Velnampy (2012) in their study on occupational stress and job satisfaction found no significant difference between family size and occupational stress. In contrast Jeyaraj (2013) in his study on occupational stress among teachers in Madurai India concluded that there is an association between the number of dependents and their level of strss. X² calculated value 2.71 was more than the table value. Also Rajarajeswari (2013) in his study on work stress among lecturers in Madurai-India found that family size is significantly associated with stress t = 2.909.

The Problem

Teachers today face stress that can compromise their well-being, longevity in the profession and the quality of interactions with students. At work place teachers experience unpleasant, negative emotions such as anger, frustration, anxiety and nervousness resulting from some aspects of the job. Teachers' occupational stress may lead to severe negative consequences such as job abseentism, teacher turn over, reduced output and health problems. Heath (2008) observed that prolonged unresolved stress is associated with psychosomatic illnesses which include asthma, ulcers, hypertension, strokes and heart attack. The issue is whether guidance counsellors and psychologists can afford to remain complacent while teachers express debility which sometimes leads to untimely death. The purpose of this study is to

identity the socio-demographic predictors of stress among secondary school teachers in Anambra state, Nigeria and to make some recommendations.

Research Hypotheses

The following null hypotheses guided the study:

- 1. Gender does not significantly influence the level of stress exhibited by teachers
- 2. Teachers' age does not significantly determine their level of stress.
- 3. Married teachers do not exhibit higher level of stress than single teachers.
- 4. Teachers income does not significantly influence their level of stress.
- 5. Teachers family size is not significantly related to their level of stress.

Method

Design: The type of research design used in this study is the descriptive design which attempts to describe such things as possible behaviour, attitudes, values and characteristics.

Population of the Study: The population of the study covers the entire 6,036 teachers in 265 public secondary schools in six education zones in Anambra state (Post Primary Schools Services Commission Statistics Division, 2013).

Sample and Sampling Technique: A sample of 1, 000 teachers was used for the study. This was made of 450 male and 550 female teachers. The sample was drawn from the six education zones in the state as follow: Awka zone 277 teachers, Nnewi zone 149 teachers, Aguata Zone 131 teachers, Ogidi zonze 133 teachers, Onitsha zone 260 teachers, Otuocha zone 50 teachers. Multi-phase sampling technique was used to draw the sample.

Research Instrument: The instrument used in the study was a structured questionnaire designed by the researcher -the Job related Stress Inventory (JSI). The JSI consisted of two sections, the first section dealt with demographic data of the respondents such as age, gender, marital status, income and family size. The second section was a 30-item index of stress level and job related stress with the items that are structured. The respondents were expected to react to the items on a four point scale of Strongly Agree, Agree, Disagree and Strongly Disagree with assigned values of 4, 3, 2, and 1 point respectively.

Validation of the Instrument: The instrument was duly validated by two experts in educational psychology and two in measurement and evaluation. All the corrections given were affected. The reliability co-efficient of .80 was obtained by the use of split half method. The scores of even-numbered items and those of odd-numbered items were correlated with the use of Pearson Product moment correlation.

Data Analysis: The data collected were analysed using t-test and analysis of variance (ANOVA) to test the hypotheses at 0.05 level of significance.

Results

Out of the 1,100 copies of questionnaire distributed, 1,050 were retrieved but only 1,000 were found good enough for analysis. The results of data analysis are presented in tables 1, 2, 3,4 and 5.

Hypothesis One: Gender does not significantly influence the level of stress exhibited by teachers.

Table1: Independent t-test analysis of the influence of gender on teachers' level of stress exhibition.

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Gender	Ν	\overline{x}	SD	df	Cal-t	Crit-t	Decision	
Male	450	77.05	9.92					
				998	2.57	1.96	Ho rejected	
Female	550	75.70	8.90					
P<0.05								

Table 1 shows that the calculated t-value 2.57 is greater than the critical t-value 1.96. Hence the result therefore means that the level of stress is significantly related to gender. The mean for male teachers is 77.05 while that of female teachers is 75.70. This shows that male teachers exhibit a significantly higher level of stress than female teachers.

Hypothesis Two: Teachers' age does not significantly predict their level of stress.

In order to test this hypothesis, teachers' age was classified as follows: young teachers 21 -32 years, middle aged teachers 33- 49 years and old aged teachers 50 years and above. Analysis of variance was then used to analyse the data.

Table II: Analysis of variance of the influence of age on the level of stress exhibited by teachers

Sum of	df	Mean	F-Ratio	Sig	Decision
squares		square			
6360.42	2	3180.21			
			43.24	0.05	Ho rejected
73279.58	997	73.50			5
79640					
	squares 6360.42 73279.58	squares 6360.42 2 73279.58 997	squaressquare6360.4223180.2173279.5899773.50	squares square 6360.42 2 3180.21 43.24 73279.58 997 73.50	squares square 6360.42 2 3180.21 43.24 0.05 73279.58 997 73.50

Significant at 0.05 level df = 2 & 997 critical F-value = 3.02

The calculated F-value of 43.24 is greater than the critical F-value of 3.02 at 0.05 level with 2 and 997 degree of freedom. The result is therefore significant and the null hypothesis is rejected. This means that teachers' age significantly influences their level of stress exhibition. The significance of the result caused Fishers' Protected t-test analysis to be prepared which shows that the significant mean difference lies between the old and middle-aged workers (t = 7.37 < 0.05).

Hypothesis Three: Married teachers do not exhibit higher level of stress than single teachers.

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Marital Status	Ν	X	SD	df	t-cal	Table t	Decision
Married teachers	516	77.76	9.22				
				998	1.32	1.96	Ho rejected
Single teachers	484	75.99	9.60				-

Table III: t-test showing marital status and level of stress exhibited by teachers

Table 111 above shows that the calculated t- 1.32 is less than the table t - 1.96. This means that married teachers do not exhibit higher level of stress than single teachers. This implies that marital status is not a determinant of teachers' occupational stress. Hypothesis Four: Teachers' income does not significantly influence their level of stress. In order to test this hypothesis teachers' income was classified into three groups of high income, middle income and low income. Analysis of variance was then used to analyse the data.

Table IV: Analysis of variance of income and teachers' level of stress.

Source of	Sum of	df	Mean	F-Ratio	Sig	Decision		
Variation	squares		square					
Between	520	2	2.38					
groups								
				3.00	0.05	Ho accepted		
Within	79120	997	79.36			-		
groups								
Total	79640	999						
Not significant at 0.05 lovel $df 2.8 007$ aritical E value = 2.02								

Not significant at 0.05 level, df 2 & 997 critical F-value = 3.02.

The calculated F-value 3.0 is less than the critical F- value 3.02 at 0,05 level of significance with 2 and 997 degree of freedom. Hence, the result is not significant and the null hypothesis that teachers' income does not significantly influence the level of stress exhibited by them is accepted.

Hypothesis Five: Teachers family size is not significantly related to their level of stress.

Table V: Analysis of variance of the influence of family size on the level of stress exhibited by teachers.

Source of Variation	Sum of squares	df	Mean square	F-Ratio	Sig	Decision
Between	2167.93	2	1083.93			
groups						
				13.95	0.05	Ho rejected
Within	77472.07	997	77.71			
groups						
Total	97640	999				

Significant at 0.05 level df 2 & 997 critical F-value 3.02

The calculated F-value is 13.95 which is greater than the critical F-value 3.02 so the result is significant and therefore the null hypothesis is rejected. The fact that the result is significant caused fishers protected t-test to be prepared in order to reveal the groups between which the significant difference lied. The result of the Fishers' Protected t-test shows that the significant difference lies between large family size and small family size (t = 4.95). The result implies that the larger the family size, the higher the level of stress exhibited by teachers.

Discussion

The findings of the study are discussed according to hypotheses. The first hypothesis is that gender does not significantly influence the level of stress exhibited by teachers. The study indicates that the level of stress is related to the teachers' gender. It shows that male teachers exhibit a significantly higher level of stress than female teachers. The mean level of stress exhibited by male teachers is $\bar{x} = 77.05$ while the mean level of stress exhibited by female teachers is $\bar{x} = 75.70$. The calculated t is 2.57. The finding of this study that the level of stress is related to teachers gender agrees with that of Kalika and Alpana (2012); Yadav and Verma (2012) and Jeyaraj (2013). The finding however disagrees with that of Mohanraj (2013) who found that there is no close relationship between gender and level of stress exhibited by teachers in school. The writer is of the view that males and females react differently to the same stressor, therefore it appears that stress is gender oriented.

The second hypothesis is on age and stress. The study reveals that teachers' age significantly influences their level of stress. The study shows that old-aged teachers are more vulnerable to stress than younger teachers. The mean score of the level of stress exhibited by old-aged teachers is $\bar{x} = 79.25$, middle aged teachers $\bar{x} = 72.75$ while that of younger teachers $\bar{x} = 77.79$. The calculated F-ratio is 43.24. The finding of this study supports the earlier findings of Noor Suhaida (2002), Antoniou, Polychroni and Ulachakis (2006); Azlihanis, Nyi, Aziah, Rusli and Homd, (2009) and Jevaraij (2013). However, the finding disagrees with that of Mohanraj, (2013), who found that there is no close relationship between age and level of stress exhibited by teachers. Age is one of the personal characteristics that has been studied by researchers as a predictor of stress. The present study indicates that both old aged teachers and younger teachers exhibit a significantly higher level of stress than middle aged teachers. This might be attributed to the fact that at middle age most teachers are trying to stabilize. The younger teachers probably exhibit higher level of stress because they are yet struggling for survival. On the other hand, the old-aged teachers exhibit higher level of stress probably because they have reached the peak of their career. At this point they are evaluating their successes and failures and looking forward to retirement. Naturally, this stage is saddled with thoughts and can generate stress.

The third hypothesis is on marital status and level of stress. The study shows that married teachers do not exhibit a higher level of stress than single teachers. This means that marital status is not a determinant of occupational stress among teachers. This finding agrees with the earlier findings of Aravinthon and Velnamph (2012), and Mohanraj (2013), who found no significant relationship between marital status and

teachers' level of stress. The finding however disagrees with that of Popoola and Ilugbo (2010), Shailajo and Sunagor (2012) who found that marital status had a significant influence on teachers' level of stress. The writer is of the view that marital status can either be a help or a hindrance as far as social support during stressful period is concerned. It all depends on the family relationships. Social support does not depend on marital status but a good network of relationship.

The fourth hypothesis is on teachers' income and level of stress. The study reveals that teachers' income does not significantly influence the level of stress exhibited by them. The mean score of the level of stress exhibited by high income teachers is $\bar{x} = 75.00$ that of middle income teachers is $\bar{x} = 77.00$, while that of low income teachers is $\bar{x} = 76.60$. This finding agrees with the finding of Aravinthon and Velnampy (2012); Mohanraj (2013), but disagrees with that of Rajarajeswari (2013) who found income to be significantly related to work stress. The researcher is of the view that income per se might not lead to stress, other variables such as age, family size, life style may interact with income to generate stress.

The fifth hypothesis sought to find out if family size influences the level of stress exhibited by teachers. The finding indicates that family size influences the level of stress exhibited by teachers. The larger the family size, the more level of stress exhibited by teachers and vice versa. The mean score of the level of stress exhibited by teachers with a large family size in this study is \bar{x} 78.67, teachers with a medium family size have a mean score of 76.00 while those teachers with a small family size have a mean score of 73.95. This finding agrees with the earlier findings of Jeyaraj (2013) and Bajarajeswari (2013), who found that family size, is significantly associated with stress. The finding disagrees with that of Aravinthon and Velnampy (2012) who found no significant difference between family size and the level of occupational stress. It must be noted that several dependants on a teacher often place an overwhelming pressure on him to cater for the material needs. At times this causes job instability. The teacher will only be stable if the job can take care of his family size. Again, the larger the family, the greater the number of interactional systems, the greater the friction in the home. All these lead to stressful situation.

Conclusion

On the basis of the above findings, it is concluded that socio-demographic variables such as gender, age and family size make teachers vulnerable to stress.

Recommendations

Based on the findings of the study, the following recommendations are made. It is strongly recommended that teachers should be exposed to positive stress management and coping techniques. Both group and individual counseling sessions; seminars and workshops should be organized for teachers to minimize the debilitating effects of occupational stress. Pre-retirement counseling should be mounted for middle-aged and old-aged teachers.

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