

PERSONALITY TRAITS AS PREDICTORS OF STRESS AMONG FEMALE LECTURERS IN NIGER DELTA UNIVERSITY, BAYELSA STATE NIGERIA

Maciver E. Johnson, Ph.D.

Abstract

This study investigated the level of stress among female lecturers in Niger Delta University, Bayelsa State and determined the relationship between stress and each of the personality traits of self concept, extraversion, locus of control and achievement and motivation. A sample of 60 female lecturers was drawn from 12 randomly selected departments from 6 faculties of the University. The data were collected using four standardized personality instruments and a stress assessment inventory (SAI). The results showed that 76% of female lecturers had low level of stress and that there was no significant relationship between stress and each of the personality traits. And that marital status of female lecturers significantly influenced the stress experienced by them ($F=P<0.05$). Divorced ones experienced more stress ($x = 8.39$) than those who were single ($x = -2.97$) or married ($x = 6.21$). In conclusion, personality traits were not substantial predictors of the level of stress experienced by female lecturers.

For all workers, especially female lecturers, the phenomenon of stress is a global burnout. Infact, for many decades now, mostly in physical, educational, social, and psychological research fields, the issue of stress has given scholars special attention. Not until the late 1920s, the concept "stress" was not popular. An Austrian endocrinologist (Hans Selye) who was then working in Montreal Canada, brought the concept into the field of Biology and Medicine. Physiologically, Hans Selye opined that the concept "stress" was a cankerworm in man's life. After his death, the term spread to other fields, especially "psychology". In psychology, the word "stress" is a process in which environmental stimuli threaten man's living physiologically. Thus, stress is a non-specific response of the body to any demand contingent on the environment.

The resultant effects of the above factors have led to many female lecturers leaving the job or resigning their appointments blaming it on the stressful nature of the job instead of the true reality that this study unfolded. But the main stressors according to Evers, Tomicand Brouwers (2005), include; poor pay, overpopulated classrooms, lack of administrators' encouragement, to mention but a few.

In the same vein, other causes of lecturers' stress, especially in Nigeria, include the monotony of the job, inadequate and irregular wage payments, overpopulated lecture halls and rooms, societal poor look on lecturers, etc [Akande, 1989]. The fact is that the sources of female lecturers' or teachers' stress generally are many and divergent.

Be that as it may, some known factors that predispose individuals to the burnout of stress include the interplay of personality of the individual and the stress itself. Depending on individual's personality traits, while some are stress friendly, others are not [Akinboyeand Adeyemo, 2005]. Kokkinos [2007] is in support of the transactional model of psychological distress because, personality traits are synonymous with burnout syndromes and thus, recommended that personality traits and environmental stimuli should be assessed in individuals stress state.

In the interim, many studies show that men are less stress prone than their female counterparts. This is probably due to the fact that the females engage more in duties than the males considering the bulk of the home chores in addition to their regular official jobs which the men do not do (Arroba & James 2002).

Purpose of the Study

The purpose of the study was to examine the major personality factors such as self concept, locus of control, achievement motivation and extraversion as appropriate and relevant for these findings so as to determine their potency as predictors of stress among female lecturers.

Hypotheses

1. There is no significant difference between female lecturers' level of stress and each of the personality traits of extraversion, locus of control, self concept and achievement motivation.
2. There is no significant difference in prediction of the stress level of female lecturers and the four mentioned personality traits.
3. There is no significant difference in influence between the level of female lecturers' stress and their marital status.

Methodology

Design

This study adopted the descriptive survey design because most of the variables required thorough description for effective comprehension by readers.

Population

All the female lecturers of Niger Delta University, Bayelsa State formed the total population of the study. Figures from the bursary unit of the University showed that there were about 107 female lecturers in all the faculties of the university as at the end of 2011 academic session.

Sample

For this study, a sample of 60 selected lecturers from 6 departments; out of 12 faculties were used. The university has over 11 faculties, some with more than two departments. The multi-stage sampling procedures were adopted in the selection. At the beginning, 6 faculties were selected out of which 12 departments were purposively used. And 60 female lecturers were randomly selected to form the sample for the study, i.e 10 lecturers from each faculty.

Instrumentation

To collect data for the study, five research instruments were used; viz: Stress Assessment Inventory (SAI) and four personality inventories (Tennessee self-concept scale (TSCS), Rotter's Internal-External Locus of Control Scale (LCS), Questionnaire measure of Need Achievement (QMNA) and Eysenck Personality Inventory (EPI).

The Akinboye and Adeyemo (2002) 40-items four dimensions stress measurement (Stress Assessment Inventory-SAI) was used. The instrument has a five point Likert scale type ("never present", "always present", "very much unlike me", "very much like me" and "never always". There are 40 items in the scale measuring the four dimensions of stress, which the respondents will respond to; with 1 to 5 scores (minimum -40 and 200 maximum). The higher the respondent's scores the higher the person's stress level. The test-re-test reliability procedure was used after the scale has been subjected to content validity. For two weeks, the scale was used for a sample of 30 female lecturers producing 0.74 reliability coefficient showing that the scale was highly justifiable for the study in the environment.

Fitts (1964) developed the Tennessee Self-Concept Scale (TSCS) which measures an individual's self-perception. About 35 out of the 100 item scale was adopted for the study to minimize boredom on the respondents during responses. The higher the respondent's score the more positive the self-concept. And according to Popoola and Ilugbo (2010), the adopted TSCS is a valid measure of self concept in Nigeria already used severally by many other researchers.

The standardized scale for measuring Locus of Control- "Rotter's Locus of Control Scale-LCS" was used by this researcher. The instrument has a relatively stable internal consistency and highly significant construct validity (Rotter, 1966).

For the "Achievement Motivation" of the female lecturers in this research work; Eye's (1966) adaptation of Herman's (1970) "Questionnaire Measure of Need Achievement was used. The scale

Personality Traits as Predictors of Stress among Female Lecturers in Niger Delta University, Bayelsa State Nigeria

has 29 items with 2 components mainly made for Nigerians. And these researchers who have used it in Nigeria attested to this fact.

The last instrument that was used in this study is the 'Eysenck Personality Inventory'. It is used in measuring individual's placement on the introversion-extraversion continuum; and it is a standardized scale. The scale was made by Eysenck in 1956. It has 24 items. There are 3 response alternatives of "Yes", "No" and "Undecided" for each item of which the respondent is required to tick one. For its scoring; yes (1); No (0) and Undecided, (½). Thus, the minimum is "24" scores. The undecided is extraverted if the scores are higher.

Data Collection

The various instruments were administered to the female lecturers of the different faculties and departments so selected for this study. And this researcher personally went to collect them after four days. The visitations in most cases were made for up to two or three times. In all, it was at the end of 1½ weeks that the researcher was able to collect all the questionnaires.

Results

Hypothesis 1: There is no significant difference between female lecturers' level of stress and each of the personality traits of extraversion, locus of control, self concept and achievement motivation.

To test this hypothesis, the level of stress of the female lecturers was ascertained from their responses on the Stress Assessment Inventory (SAI). From the collected data, the respondents were classified into four levels of stress ("No Stress",-0-49, "Low Stress",- 50-99; "Medium Stress",-100-149 and "High Stress",-150-200). This table shows the levels of stress of the respondents (female lecturers).

Table 1: Levels of Stress of the Female Lecturers

Level of Stress	N	%	Mean	SD
No Stress	5	8.3	51.23	3.17
Low Stress	42	70.1	83.77	14.14
Medium Stress	11	18.3	112.34	11.03
High Stress	2	3.3	141.01	7.45
Total	60	100		

From table 1 above, out of the 60 female lecturers used in the study, 8.3% had no stress, 70.1% were with low stress, 18.35 were with medium stress level and 3.3% were in the high stress level; showing that many of the female lecturers in Niger Delta University are not with high stress level.

To determine the relationship between the female lecturers' personality characteristics and level of stress they experienced, the same hypothesis 1 was subjected to a second test. This is to correlate the lecturers' scores on the SAI with those of their personality traits. And the Pearson Product Moment Correlation Statistics was used as shown in table 2 below.

Table 2: Relationship between Stress and Personality Traits

Variable	N	X	SD	R	P
Stress Extraversion	60	77.01	20.04	-0.06	>0.05
	60	49.21	7.68		
Stress Locus of Control	60	77.01	20.04		

	60	38.92	2.97	0.05	>0.05
Stress Self-Concept	60	77.011	20.04		
	60	121.10	13.13	0.11	>0.05
Stress Achievement	60	77.01	20.04		
Motivation	60	51.22	5.10	<0.02	>0.05

From the table above, the correlation coefficient (r) between stress and extraversion is -0.6 which is not significant at 0.05 probability level showing a non-significant relationship between stress and extraversion (N=60, r=-0.06 P>0.05). Again, the correlation coefficient (r) between stress and locus of control is 0.05 showing a non-significance at the 0.05 probability level (N=60, r=0.05, P>0.05). Furthermore, the result shows that the hypothesis is accepted, and the relationship between female lecturers in Niger Delta University, Bayelsa State level of stress and each of the personality traits is not significant.

Hypothesis 2: There is no significant difference in prediction of the stress level of female lecturers and the four mentioned personality traits in hypothesis 1 above.

Table 3: The Summary of Multiple Regression Analysis on the Predictive Contributions of Independent Variables to the Stress of the Female Lecturers

S/N	Variables	R	R- Square	Adjusted R. Square	Standard Error	P
1	Self-Concept	0.11	0.02	0.03	20.17	>0.05
2	Locus of Control					
3	Achievement					
4	Extraversion					

This table above reveals that the four independent variables used in predicting the female lecturers' stress level produced a co-efficiency of Multiple regression (R) of 0.11 and a multiple correlation square (R²) of 0.02 which were not significant at 0.05 level showing that the variables were not predictive of the female lecturers stress levels.

Table 4: Relative Contribution of the Four Variables to the Prediction of Stress Levels

S/N	Variables	B	Standard Error	Beta	T	P
1	Constant	91.45	21.11	-	3.93	.00
2	Self Concept	-.17	.13	-.07	-1.59	.08
3	Locus Control	.19	.37	.04	.54	.59
4	Achievement	425E-03	.26	.02	.19	.88
5	Extraversion	-.13	.12	-.08	-1.09	.27

Table 4 above has -1.59 and -1.09 t –values for self concept and extraversion respectively in values of the beta weights. Next, locus of control and achievement motivation had t-values and beta weights of .54, .19 and .04, .02 respectively; which are not significant at 0.05 level of confidence.

From the above results, self concept had the highest contribution predictively. While this was closely followed by locus of control and lowest was achievement motivation. In the final analysis, the combined four variables did not equally predict the female lecturers stress levels significantly.

Personality Traits as Predictors of Stress among Female Lecturers in Niger Delta University, Bayelsa State Nigeria

Hypothesis 3: There is no significant difference in influence between the level of female lecturers stress and their marital status.

For this hypothesis testing, the female lecturers were divided into three groups; viz, married, divorced and single. Mean and Standard Deviation were the used statistics.

Table 5: Female Lecturers Stress Levels Using Their Marital Status

Marital Status	Mean	SD	N
Married	73.16	17.23	42
Divorced	84.34	27.14	4
Single	81.95	21.32	14
Total	76.17	19.21	60

Table 5 above, shows that the married female lecturers had meanof 73.16 and SD of 27.14; while the single ones had mean of 81.95 and SD of 21.32.

The results were subjected to One-Way Analysis of Variance so as to know the influence of marital status on their stress level.

Table 6: Female lecturers’ marital status Influence on their stress levels.

Source of Variance	Sum of Squares	df	Mean	F	P
Between Groups	2713.57	2	1351.31	3.21	<0.05
Within Groups	135721.	342	374.13		
Total	138434.70	344			

The above table shows that the mean squares between groups and within groups had 2713.57 and 135721.23 respectively. And the product of these was F-value of 3.21 which is significant at 0.05. This means that female lecturers’ marital status had a significant influence on their stress level in their workplace.

Now, table 7 below (the Scheffe’s Post Hoc Comparison of the Mean) was used to determine the stress level of the married, divorced and single female lecturers in Niger Delta University, Bayelsa State.

Table 7: The Multiple Comparisons of the Stress Levels of the Female Lecturers Based on Marital Status (Married, Divorced, and Single)

Marital status	Mean	Mean difference	SD	Standard Error	Sig	
Married	Single	81.95	-6.17*	22.17	2.17	<0.05
	Divorced	84.34	-8.39	26.13	8.22	>0.05
Divorced	Married	73.16	8.39	18.71	8.71	>0.05
	Single	81.95	2.97	21.11	8.93	>0.05
Single	Married	73.16	6.21*	17.33	2.13	<0.05
	Divorced	84.34	-2.97	26.97	8.17	>0.05

*The Mean Difference is significant at the 0.05 level.

The table above (multiple comparisons of the mean values of the married, divorced and single marital status show a mean difference of 2.97 between single and divorced groups which is not significant at 0.05 level. Again, the mean difference of 8.39 had between married and divorced groups is not significant at 0.05 level of confidence. But, when the singled and married were compared, the mean difference of 6.21 was obtained which is significant at 0.05 confidence level. On the whole, the cumulative sum value of the results is that singled and married female lecturers' stress levels were significantly different from the other groups. Infact, married female lecturers had less stress than those single and divorced. Hence, the hypothesis which states that marital status has no significant impact on the stress level of female lecturers is rejected or not accepted.

Discussion

Most of the female lecturers in Niger Delta University, Wilberforce Island, Bayelsa State are prone to low level of stress as this findings revealed. This research work showed that they had 70.1% number of lecturers with low stress level. While 29.9% of them were for No stress, Medium stress and High stress levels. This shows that most female lecturers are contented with the profession (Kriacou and Sutcliffe, 1979). One may opine from this finding that, unlike decades ago, the profession has become so subtle for female lecturers these days. Without mincing words, these findings show that women lecturers are more comfortable with lecturing because it affords them the time to care for the children, house chores and husbands. Rewardingly, they equally find time to engage in other money-making businesses.

Added to the above, this low level of stress exists because the government has recently improved the conditions of lecturers wage wise. There are allowances, study leave withpay and other subtle conditions of service in Bayelsa State, especially for the indigenes.

The second part of the study (Hypothesis two), had it that there was no significant relationship between stress and the four used personality traits of self-concept, extraversion, locus of control and achievement motivation. Bolger and Shilling (1991), in a similar finding had something different; that personality traits had corrosive effects on female teacher's perceptions of stress at work. But for this study, the personality traits of the female lecturers of Niger Delta University, Bayelsa State had no significant predictor of stress from the results of the findings. Possibly, if other non-personality traits are used in the future, a likely positive result may be made.

Lastly, the findings of the third hypothesis (the influence between the level of female lecturers' stress and the marital status) showed that their marital life influenced significantly their stress levels. From the results, the married female lecturers had less stress levels compared to their counterparts (singles and divorced). This is possibly so because of the contentment they had in their married lives. This is so, because their counterparts are prone to stress arising from their uncertainty in marital fulfillments, especially when their counterparts are supported by their partners. In addition, these groups are confidently aided in adjustments stress-wise at home in chores, responsibilities, etc in their matrimonies.

Conclusion

In the universities in Nigeria, and elsewhere in the World, the lecturers (female and males) are the prime movers of the educational growth. If they are stressful, they will be unproductive and this will adversely affect the students in the universities negatively. For the belief that the profession is stressful especially for the females, the above findings with this university have shown that the opposite is almost the case. Though, one may not generalize the findings with other universities with different economic, political and social differences may produce same or different results.

But one good thing about this study is that it had proved anti-clock, the held believe that female lecturers in the universities are possibly affected stressfully during the discharge of their duties.

Personality Traits as Predictors of Stress among Female Lecturers in Niger Delta University, Bayelsa State Nigeria

Lastly, the above is also true of the view held about the four personality traits of the female lecturers that would have possibly produced stress for these employers in our universities.

References

- Adeyemo, D.A and Ogunyemi, A (2005), *Emotional Intelligence and Self-Efficacy as Predictors of Occupational Stress among Academic Staff in a Nigeria University*. Retrieved March, 10, 2012 from www.weleadnlearning.org.
- Akinboye, J.O & Adeyemo, D.A (2002), *Stress at Home and at Workplace*. Ibadan. Sterling Horden Publishers.
- Akinboye, J.O, Akinboye, D.O & Adeymo, D.A (2005). *Coping with Stress in Life and Workplace*. Sterling Horden Publishers, Nigeria Ltd.
- Aroba, T & James, K (2002). *Pressure at Work: A Survival Guide* (2nd Ed.) Maidenhead: McGraw-Hill.
- Evers, W. Tomic, W. and Brouwers, A. (2005). Does Equity Sensitivity Moderate the Relationship Between Self-Efficiency Beliefs and Teacher Burnout? Representative. *Research in Social Psychology*, 25, 35-46.
- Gelvin, A.M (2009). Identifying the Types of Student and Teacher Behaviours Associated with Teachers Stress. *Teaching and Teacher Education*, 23(5) 624-640.
- Gomes, P.T.P.C (2006). *Workers' Stress and its Impact on Productivity: A Study of a Manufacturing Company in Sri Lanka*. ICBM University of Sri Yewardemepura.
- Jarris, M. (2002). Teachers' Stress: A Critics Review of Recent Findings and Suggestions for Future Research. Downloaded 10th February 2012. <http://www/isma.org.UK/stressnw/teachstress/.htm>.
- Jones, F. & Bright, J. (2001). *Stress, Myth, Theory and Research*. Halow-UK. Prentice Hall.
- Kokkinos, C.M. (2007). Job Stressors, Personality and Burnout in Primary School Teachers. *British Journal of Educational Psychology*. 77(1), 229-243.
- Munt, V. (2004). The Awful Truth: A Micro History of Teacher Stress at Westwood High. *British Journal of Sociology of Education*, 25(5) 577- 591.
- Oparah, O & Faloye, J. (2007). Influence of Occupational Stress and Organization Politics on Turnover Intention among Selected Workers in Ibadan. *Ogun Journal of Counselling Studies*. 1(1) 9-16.