

Personality Correlates of Job Stress Among University Lecturers in South Western Nigeria

Dr. (Mrs) M.K. Soetan

Senior Lecturer, Department of Educational Foundations and Counselling,
Adeyemi College of Education, Ondo, Ondo State, Nigeria
Email - m.ksoetan@yahoo.com

Abstract: This study examined the relationship between lecturer stress level and personality characteristics of Type A behaviour pattern, locus of control, self-esteem and extraversion. The study adopted the descriptive survey design. The population consisted of all university lecturers in Southwestern Nigeria. A sample of 1358 university lecturers was selected using stratified random sampling technique. Data for the study was collected using five research instruments. These are “Questionnaire on Stress Assessment” (QSA), “Type A Personality Inventory” (TAPI), “Rotter’s Internal-External Locus of Control Scale” (LCS), “Self Esteem Scale” (SES) and the “Eysenck Personality Inventory” (EPI). Data collected was analysed using Pearson’s Product Moment Correlation, Analysis of Variance (ANOVA) and Multiple Regression Analysis. The results showed that lecturer stress level had significant positive relationship with the personality characteristics of Type A behaviour pattern ($r = 0.94, p < 0.05$) and extraversion ($r = 0.15, p < 0.05$) but a significant negative relationship with self esteem ($r = -0.35, p < 0.05$). The results also showed that the stress level of introverted lecturers was significantly different ($t = -3.81, p < 0.05$) from the extraverted lecturers. Also, the stress level of lecturers with high self esteem was significantly different ($t = 9.65, p < 0.05$) from that of lecturers with low self esteem. The stress level of lecturers with Type A personality was significantly different ($t = -2.91, p < 0.05$) from the stress level of lecturers without Type A personality. However, locus of control did not significantly influence lecturer stress level ($r = 0.03, p > 0.05$).

Key Words: Job Stress, Stress, Personality Characteristics, Lecturers, Stress Assessment

1. INTRODUCTION:

Job stress is defined by (1) as the harmful physical and emotional responses that occur when the requirement of the job do not match the capabilities, resources or needs of the workers. (2), and (3) reported that two out of every five teachers are highly stressed as against one in every five in other occupations such as nursing, management, road haulage and security. (4) Asserted that teachers are highly stressed and that stress impacts greatly on teacher retention. (5) cited a number of U.K. studies reporting high levels of teacher stress in the tertiary sector, but echoed the comments of (6) and (7) that relatively little research has been conducted on job stress among tertiary teachers. (8) Referred to two competing conceptualizations of job stress as personal trouble and stress as public trouble. As personal trouble, it means that stress originates in the individuals’ attitudes, abilities, personality and so on, or as public trouble, it is caused by the work environment and therefore a matter of public responsibility. They asserted that the difference between the two conceptualizations are crucial in the development of work place interventions and presumably, national policy and legislation.

Stress as personal trouble emphasizes the extent to which an individual’s personality influences his or her perceptions and experience of stress. It has been observed that people differ in their reactions to stressors. A situation that is stress arousing for one person might be a neutral event for another depending on the personality make-up of the person. Personality characteristics identified as having probable influence on teacher stress include Type A behaviour pattern (9), locus of control (10),(11);(12) and self-esteem (11). Extraversion is another well-known personality characteristics which may need to be investigated for empirical evidence. It makes intuitive sense that individuals perceive and respond to identical stressors in different ways, because of differences in personality; however, the dimensions of these personality variables and the nature of their interrelationships need to be established. (13) Argued that while there is good evidence that people vary in their experience of stress, the case for variations in reaction to stress is less clear, and needs further investigations. This is why the present study seeks to determine the variations in reaction to stress by university lecturers by investigating. The contributions of some personality characteristics to lecturer stress. To guide the study, an hypothesis postulated was

- There is no significant relationship between lecturer stress level and each of the personality characteristics of Type A behaviour pattern, locus of control, self-esteem and extraversion.

2. METHOD:

This study adopted a survey research design. The population comprised all lecturers in Southwestern Nigeria. Six universities were purposively selected on the basis of ownership. Two each of the federal, state and private universities were selected in order to have equal representation. Using (14) sample size formula, a sample of 1358 lecturers was used, and they were distributed using stratified random sampling technique. Data for the study was collected using five research instruments. These are “Questionnaire on Stress Assessment” (QSA), “Type A Personality Inventory” (TAPI), “Rotter’s Internal-External Locus of Control (LCS), “Self Esteem Scale” (SES) and the Eysenck Personality Inventory” (EPI). All the instruments were validated and reliability determined using test re-test reliability method. Data collected was analysed using Pearson’s Product Moment Correlation, Analysis of Variance (ANOVA) and Multiple Regression Analysis.

3. RESULTS:

3.1. Hypothesis: There is no significant relationship between lecturer stress level and each of the personality characteristics of Type A behavior pattern, locus of control, self esteem and extraversion.

To test this hypothesis, data collected from the administration of the four personality inventories were correlated with data obtained on lecturer stress level using Pearson Product Moment Correlation Statistics. The results are presented in Table 1.

Table 1: Correlation Matrix between Personality Characteristics and Lecturers Stress Level

Variables	LOS	TAP	LOC	SE	Extravert
LOS	1	0.094*	0.029	-0.353*	0.150*
TAPI	0.094*	1	0.131	0.113	0.183*
LOC	0.029	0.131	1	0.019	0.015
SE	-0.353*	0.113	0.019	1	0.007
Extravert	0.150*	0.183	0.15	0.007	1

* Significant (P < 0.05)

- LOS - Level of stress
- TAP - Type A Personality
- LOC - Locus of Control
- SE - Self Esteem
- Extravert - Extraversion

From Table 1, the correlation coefficients between lecturer stress level and each of the personality characteristics of Type A behavior pattern, locus of control, self esteem and extraversion are 0.094, 0.029, -0.353, 0.150 respectively. On the one hand, the Table 1 reveals negative but statistically significant correlations between lecturer stress level and self-esteem (r = -0.353, p < 0.053). This indicates that the higher the self esteem of a lecturer, the lower the stress level. On the other hand, a positive but significant correlation is found between lecturer stress level and each of Type A behaviour pattern and extraversion. However, there is no significant relationship (r = 0.29, p > 0.05) between lecturer stress level and locus of control.

The summary of these findings is that while the personality characteristics of Type A behavior pattern and extraversion have significant positive relationships with lecturer stress level, a significant negative relationship exists between lecturer stress level and self-esteem. However, lecturer stress level and locus of control are not significantly related.

3.2. Extraversion and Lecturer stress level:

A further attempt was made to analyse the stress level of lecturers vis-a-viz each of extraversion, self-esteem and Type A Personality. First, the respondents were classified into two groups of introverts and extroverts based on their scores on extraversion. Respondents who scored between 0 and 12 were classified as introverts while those who score between 13 and 24 were classified as extroverts.

A t-test analysis was carried out to analyse the differences between the stress levels of the two groups. The results are presented in Table 2.

Table 2: Difference between the Stress Level Scores of Introverts and Extroverts

Subjects	N	X	SD	df	T	P
Introverts	990	34.6879	8.85466	1233	-3.808	0.000
Extroverts	245	37.1184	9.30265			

From Table 2, the means and standard deviations for the two groups of introverts and extroverts show that the mean stress level of introverts is less than the mean stress level of extroverts. For instance, while introverts (n = 990) have a mean score of 34.69 which comes under the category of moderate stress level and a standard deviation of 8.85, the corresponding mean score of extroverts was 37.12 which falls into the category of high stress level with a standard deviation of 9.30. The results were subjected to t-test analysis, which yielded a t-value of -3.808. The value is significant at the 0.05 level This implies that there is a significant difference between the stress level of introverted and extraverted lecturers with the introverts scoring significantly lower than the extroverts.

3.3. Self-esteem and Lecturer stress level:

The lecturers were further classified into two groups according to their scores on the Self-Esteem Scale. Those who scored 1-30 were classified as having low self-esteem while those with 31-50 were classified as having high self esteem. The mean scores of both groups were subjected to t-test analysis. The results are presented in Table 3.

Table 3: Difference between the Stress Level of Lecturers with Low and High Self Esteem

Types of Self Esteem	N	x	SD	df	T	P
Low Self Esteem	279	39.54	10.150 8.209	1225	9.646	0.000
High Self Esteem	948	33.83				

As shown in Table 3, when the mean score and standard deviation of lecturers with low self-esteem (x = 39.54, SD = 10.150) were compared with those with-high self esteem using the t-test statistical analysis, a t-value of 9.646 was obtained. This value is significant at the 0.05 level. This implies that lecturers with low self esteem have significantly higher stress level than those with high self-esteem.

Type A personality and Lecturer stress level

Also, the lecturers were classified into two groups based on their scores on Type A Personality Inventory. Lecturers who scored 11-33 were classified as not having Type A behaviour pattern while those who scores 34-55 were classified as having Type A behavior pattern. A t-test analysis was carried out to determine whether or not the differences between the stress level of the two groups were significant. The results are presented in Table 4.

Table 4: Difference Between the Stress Level of Lecturers with Type A and non-Type A Personality

Personality Type	N	x	SD	df	t	P
Not Type A Personality	574	34.3362	7.967	1222	-2.910	0.004
Type A Personality	650	35.8308	9.765			

From Table 4, the means and standard deviations for the two groups of Type A and non-Type A personality show that the mean stress level of lecturers with Type A personality is higher than the mean score of those without Type A personality. For instance, while lecturers without Type A personality (n = 574) have a mean score of 34.3362 and a standard deviation of 7.967, the corresponding mean score of those with Type A personality is 35.8308 with a standard deviation of 9.765. These results were subjected to t-test analysis which yielded a t-value of -2.910. The value is significant at the 0;05 level. This implies mat there is a significant difference between the stress level of lecturers without Type A personality, with those with Type A personality having higher level of stress than those without Type A personality. A further attempt was made in this study to ascertain the contributions of all the personality characteristics to the prediction of lecturer stress level. Table 5 shows the descriptive statistics of the variables.

Table 5: Descriptive Statistics of Independent Variables and Lecturer Stress Level

	Mean	Standard Deviation	N
Stress Level Inventory	35.1700	8.993	1235
Type A Personality Inventory	33.835	7.417	1235
Rotter's Locus of Control Scale	11.183	3.768	1235
Self Esteem Scale	36.382	7.399	1235
Eysenck Personality Inventor	10.774	2.897	1235

Data obtained from personality instruments and stress level inventory were subjected to multiple regression analysis. Table 6 shows the summary of the analysis of variance of the independent variables in the regression procedures.

Table 6: Summary of Analysis of Variance of Independent Variables and Lecturer Stress Level

Sources of Variance	Sum of Squares	df	Mean Square	F	P
Between group	18016.086	4	4504.022	67.724	0.000
Within group	81802.205	1230	66.506		
Total	99818.291	1234			

The results in Table 6 show that the combination of the independent variables has a significant influence (F= 67.724) on lecturer stress level. These results are also subjected to regression analysis to determine the contributions of the personality variables to the prediction of lecturer stress. The results of the regression analysis are presented in Table 7.

Table 7: Summary of Multiple Regression Analysis of the Relationship between Lecturer Stress Level and a Combination of Independent Variables

Variables Entered	R	R	Adjusted R square	Standard Error	P
Extraversion Type 'A' Personality Self Esteem	0.425	0.180	0.178	8.15511	0.000

Table 7 shows that using the three independent variables (Self-esteem, Extraversion, Type A Personality) to predict lecturer stress level yielded a coefficient of multiple regression (R) of .425 and a multiple correlation square (R²) of .180. These are statistically significant at 0.05 level which suggests that only 18.0 percent of the variance of lecturer stress level were explained by the combination of the four independent variables.

Finally, an attempt was made to determine the relative power of each of the independent variables to predict lecturer stress level. Table 8 shows, for each of the variables, the standardized Regression Weights (B), Standard Error of Estimate (SEE), Beta, T-ratio and the level at which T-ratio is significant.

Table 8: Significant Tests of Regression Weights of Independent Variables

Variables	B	Standard Error	Beta	T	P
Self Esteem	-0.436	0.032	-0.359	-13.780	0.000
Extraversion	0.405	0.082	0.130	4.968	0.000
Type 'A' Personality	0.154	0.032	0.127	4.769	0.000
Locus of control	0.031	0.979	0.043	0.641	0.101
Constant	39.066	1.751		22.305	0.000

From Table 8, self-esteem, extraversion and Type 'A' Personality had t-values of -13.780, 4.968 and 4.769 respectively. Also, the values of the Beta weights for the three variables are -0.359, 0.130 and 0.127 respectively. These values are significant at 0.05 level of confidence, which suggests that the three variables contributed in no small way to the prediction of the dependent variables. It is shown that self-esteem had the highest contribution in the prediction of the dependent variable followed by extraversion and Type A personality. Locus of control had t-value and Beta weight which are not significant at the 0.05 level. The sum total of these results is that while self-esteem, extraversion and Type A personality made significant contributions to the prediction of lecturer stress level, the weight of locus of control in the regression analysis is negligible. In the light of these findings, the appraisal of the hypothesis may be resolved as follows.

- There is a significant relationship between lecturer stress level and each of the personality characteristics of self-esteem, extraversion and Type A personality.
- Introverted lecturers have lower stress level than extraverted lecturers.
- Lecturers with high self-esteem have lower stress level than those with low self-esteem.
- Lecturers with Type A personality have higher stress level than those without Type A personality.
- The personality characteristic of locus of control does not have significant influence on lecturer-stress level.

4. DISCUSSION:

This study revealed that there is a significant relationship between lecturer stress level and certain personality characteristics. In more specific term, the personality characteristics of Type A behaviour pattern and extraversion have significant positive relationships with lecturer stress level, while a significant negative relationship exists between lecturer stress level and personality characteristic of self-esteem. The finding of this study on the relationship between Type A personality and lecturer stress level finds support in the conclusion of many previous studies including those of (15), (17) and (17). Though, these studies did not use university lecturers as their subjects but they are confirming the finding on this study that Type A personality has a significant influence on lecturer stress level. The finding of this study on the relationship between extraversion and lecturer stress level finds support in the conclusions of few studies like (18) and (19). Some studies also advocated for work place social support in moderating teacher stress probably to help the extroverts in teaching profession (20; and 21). The finding of this study on negative relationship between the personality characteristic of self-esteem and lecturer stress level is in consonance with the findings of previous studies such as (22), (23) and (24). (18) Reported that high self-esteem leads to weaker connections between stress and strain. (11) also noted the possibility that stress may affect self-esteem, as well as vice versa.

The result of the study also revealed a non-significant relationship between the personality characteristic of locus of control and lecturer stress level. This result would seem contrary to the popular belief and expectation that workers' locus of control orientation would affect their stress level. (25) pointed out that individuals who have an external locus of control and believe that they have little control if any control over their lives are more likely to experience stress. The variation in the findings of this study could be attributed to the fact that the subjects are in different occupational group from those considered in the previous studies. Nonetheless, more studies could be carried out to confirm or refute this finding.

5. CONCLUSION:

From the findings of this study, it is concluded that

- There is a significant relationship between lecturer stress level and each of the personality characteristics of self-esteem, extraversion and Type A personality
- Introverted lecturers have lower stress level than extraverted lecturers
- Lecturers with high self-esteem have lower stress level than those with low self esteem
- Lecturers with Type A personality have higher stress level than those without Type A personality
- The personality characteristics of locus of control does not have significant influence on lecturer stress level.

Based on these findings, there should be the creation of awareness among university lecturers on possible personality characteristics that could predispose them to high level of stress so that they could seek for counselling assistance to overcome or manage such characteristics.

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