Relationship between Stress Management Skills and Undergraduate Students' Academic Achievement in Two Nigerian Universities

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Jimoh Wale, Owoyele - Department of Counselling Psychology, College of Applied Education and Vocational Technology, Tai Solarin University of Education Ijagun, Ijebu-ode, Nigeria.
owotopbest@yahoo.com

Abstract
This study investigated the relationship between stress management skills and academic achievement of undergraduate students in two Nigerian universities. A total of 800 undergraduate students randomly selected from two universities participated in the study. Three null hypotheses were tested using data generated from research instruments. The instruments included a modified stress management scale adopted from its original form found in Blonna (2005). It has reliability co-efficient of 0.81. Data generated from this instrument were correlated with current students' grade point average scores (G.P.A) using Pearson product moment correlation method. Results showed strong positive relationship between stress management skills and academic achievement. The relationship still exists when the data for each of the two genders were processed separately. It was recommended that stress management skills training should be given prominence in universities' guidance and counselling programmes while concerned authorities should endeavour to provide facilities that may help to reduce academic stress.

Background to the Study
There are various potential stressors that students face on a daily basis. These include the challenge of properly adjusting to the campus life which is quite

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different from their home environments. Lifestyle change is quite challenging. The more life changes an individual experiences, the more the stress the individual faces and the more likely it is that illness and disease will result (Greenberg, 1999). The enormity of academic work, the rush for space in lecture rooms, the harsh economic conditions which makes procurement of basic needs almost impossible and the need to achieve academic excellence against all odds are some of the major potential stressors to the Nigerian students. Others are the incessant power outage which makes relaxation almost impossible after a highly stressful day. The challenges of developing necessary competence, managing emotions, time management, managing relationships, reacting to a noisy environment and coping with a highly tensed social situation on campuses are also stress inducing.

Stress is variously defined. For instance, Blonna (2005) defined stress as a holistic transaction between the individual and a stressor that results in the body's mobilization of a stress response. Stress is also defined as a combination of a stressor and stress reactivity. A stressor has only the potential of eliciting a stress reaction. A stressor reactivity is the tough processes which interprets the stressor as a cause of stress (Greenberg, 1999). These definitions show that what is considered a stressor for one person may not be a stressor for another. Thus, a stressor is any physical, psychological, or environmental events or condition that initiates the stress response (Fortner, 2002).

A stressful person is prone to several health problems and psychological disorders. Stress has been cited as a cause of major illnesses, such as migraine, ulcer, backache and rheumatoid arthritis (Payne & Hahn, 2002). Stress is also found to upset peoples' self-esteem, attitude, interest and general intellectual ability (Fortner, 2002). Stress is a common problem to male and female students in schools and the way it is managed may reflect in their academic performance (Salami, 2001). The effects of stress can be positive or negative. Positively used, stress can be a motivator for an improved quality of life. Stress can be negative, when it becomes destructive as a result of how an individual negatively perceived it and reacted to it. Stress, especially one that is noise induced can lead to increased blood pressure, increased heart rate, increased fatigue, depressed mood and decreased mental and physical performance (Blonna, 2005).

Academic achievement points to the extent to which individuals have gained from a particular curriculum, subject or task based on relatively standardized experiences, such as a class test (Akinade, 2001). Effective learning and sound academic achievement are said to constitute an integral part of the goal of schooling (Hassan 2006). Academic achievement is something of great importance to parents, teachers and students themselves. Even the larger society is aware of the long term effects of high or low academic achievement since graduates from educational institutions are expected to shape the destiny of the society (Salami, 2001). Intense pressure and stress have however been found to impair students' academic achievement (Carey, 2006). Unfortunately, academic achievement is on the downward trend and this has remained a matter of grave concern to many educationists (Aremu, 2000).

Could it be that the level of stress being experienced by Nigerian students has a bearing with the reported downward trend in their academic achievement? Some researchers have reported a strong relationship between level of stress and academic interest (Fortner, 2002), between stress level and mental performance (Blonna, 2005), and between stress level and academic performance (Fortner, 2002). Therefore, this study investigates the relationship between students' stress management skills and their academic achievement.

Statement of Problem
Since researchers have reported strong relationship between stress and academic achievement (Blonna, 2005; Fortner, 2002), could there be any relationship between students' ability to manage stress and their academic achievement? This study is an investigation of the relationship between stress management skills and students' academic achievement.

Research Hypotheses
The following null hypotheses were tested in the study:
HO1: There is no significant relationship between stress management skills and academic achievement of Nigerian undergraduate students.

HO2: There is no significant relationship between stress management skills and academic achievement of male undergraduates.

HO3: There is no significant relationship between stress management skills and academic achievement of female undergraduates.

Significance of the Study
This study is meant to provide empirical evidences which will serve as useful guides to school counsellors, educational psychologists, teachers, school administrators, parents and policy makers who may be working to improve students' academic achievement. The findings of the study apart from adding to available literature on the subject matter have the potential to generate more research interests that could enhance an understanding of the problem of stress management and academic achievement.

Methodology
This study employs the descriptive research design meant to clearly depict any relationship between stress management skills and academic achievement. The target population comprised of all the undergraduate students in two of the universities located in Ogun State, Nigeria.

Sample and Sampling Technique
A total of 800 students randomly selected constituted the sample. The stratified random sampling technique was employed in selecting the sample. Students were stratified based on gender such that equal number of participants represented each of the two genders (male or female).

Instrumentation
The Stress Management Scale adapted from Blonna (2005), with slight modifications to reflect the reality of the Nigerian environment was used to collect data on students' stress management skills. The current Grade Point Average (GPA) scores collected from students' academic records served as measures of academic achievement.

Psychometric Properties of the instrument
The Stress Management Scale (SMS) was trial tested to establish its validity and reliability. The major construct measured by the SMS was stress management skills and nothing else. Through test re-test method, the Pearson Product moment Correlation analysis of the scores generated from repeated administrations indicated 0.81 co-efficient of reliability.

Scoring and Method of Data Analysis

The SMS was scored on a 4 point scale Likert format, whereby Rarely =1 point, Sometimes= 2 points, Usually = 3 points and Always = 4points. The scores were collated for analysis using the Pearson Product Moment Correlation method.

Results

The results of data analysis are presented in the following summary tables:

HO1: *There will be no significant relationship between stress management skills and academic achievement.*

Table 1 shows a correlation co-efficient of 0.82 significant at $p<0.05$. Hence, the null hypothesis stated above is rejected in favour of the alternative hypothesis. This means that there is a strong positive relationship between stress management skills and undergraduates' academic achievement.

HO2: *There is no significant relationship between stress management skills and academic achievement of male undergraduates.*

Table 2 depicts a correlation co-efficient of 0.67 significant at $p< 0.05$. This empowers the researcher to reject the null hypothesis in favour of the alternative hypothesis. This means that there is a strong relationship between stress management skills and academic achievement of male undergraduates.

HO3: *There is no significant relationship between stress management and academic achievement of female undergraduates.*

Table 3 reveals a correlation co-efficient of 0.76 significant at $p< 0.05$. Therefore, the null hypothesis stated above is rejected in favour of the alternative hypothesis. This means that there is a strong relationship between stress management skills and academic achievement of female undergraduates.

Discussion

The findings of this study are quite informative and plausible. The finding that there is a strong positive relationship between stress management skills and undergraduates' academic achievement further revealed the prevalence of stressors in educational institutions (Carey, 2006). Undergraduates face several challenges that are quite stressful in Nigerian universities. These include incessant disruption of academic work as a result of strikes by

students, academic or non-academic staff, social insecurity due to fear of cult activities, the harsh economic condition and incessant power outage which often make lecture rooms quite uncomfortable. It is also interesting that the relationship between stress management skills and academic achievement is still strong when the data for males and females were treated separately. The finding that there is strong relationship between stress management skills and academic achievement of male undergraduates and that of female undergraduates as revealed by the results of the testing of the second and third null hypotheses suggest that gender difference did not moderate the relationship between stress management skills and academic achievement. These results buttress the opinion that both male and female students are prone to stress in Nigerian schools and its management is necessary to ensure progressive academic achievement (Salami, 2001). The extent to which undergraduates (male or female) are able to manage these challenges may determine their academic growth. This lends credence to Blonna (2005) who reported a strong relationship between stress level and mental performance. The results also corroborate Fortner (2002) who found a strong relationship between stress and academic performance. This suggests that whether one is a male or female, the way the individual manages stress has a bearing on his or her academic achievement.

Implications for Counselling

The findings emanating from this study again bring into fore, the need to provide adequate guidance and counselling services to students in order to assist them manage stress effectively. The findings also imply that stress management skills should form part of the training which counsellors should give to students whose academic achievements fall short of the expected standards.

Recommendations Conclusion

It is quite imperative for students to learn stress management skills so as to be able to cope with the highly stressful academic environment in Nigerian universities. These skills should form part of the orientation services to be rendered by university counselling centres. It is also recommended that genuine effort should be made by concerned authorities to provide adequate facilities such as lecture rooms, relaxation centres and secured social environment so that stress can be reduced to the bearest minimum.

Conclusion

This study revealed significant positive relationship between stress management skills and undergraduates' academic achievement. Hence, it was recommended that stress management skills should be learnt by undergraduates. It is hoped that a careful consideration and implementation of the recommendations will be of immense benefit to the education system.

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Table 1: Relationship between Stress Management and Academic Achievement

	Stress Mgt	Academic Achive
Pearson Correlation Stress Mgt	1.000	.823
Academic achive	.823	1.000
Sig. 2 tailed	.021	.021
N	800	800

Table 2: Relationship between Stress Management Skills and Academic Achievement of Male Undergraduates

	Stress Mgt	Academic Achive
Pearson Correlation Stress Mgt	1.000	.823
Academic achive	.671	1.000
Sig. 2 tailed	.024	.024
N	424	424

Table3: Relationship between Stress Management Skills and Academic Achievement of Female Undergraduates.

	Stress Mgt	Academic Achive
Pearson Correlation Stress Mgt	1.000	.762
Academic achive	0.762	1.000
Sig. 2 tailed	.032	.032
N	376	376