



Impact of Stress on Students' Academic Performance in Zanzibar's Higher Learning Institutions

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

In today's highly competitive world, students face various academic problems including stress, which result in an increased prevalence of psychological and physical problems like anxiety, depression and nervousness which in turn affect their academic results and performance. The main aim of this study was to explain the impact of stress on the students' academic performance in Zanzibar Higher Learning Institutions. A cross sectional survey research design was utilized and a quantitative approach used to analyze primary data from the respondents. Data was collected from 100 respondents using structural questionnaire and descriptive statistical technique was used for data analysis. The study was focused on three independent variables (Course work, Teaching methods and Course content). The key findings revealed that, long course work is the leading factor which gives academic stress to higher learning Institution students as majority 49 (49.0%) of respondents, on the other hand majority 30 (30%) of respondents said that, sometimes they are unable to study because of course content and the majority 52 (52%) of respondents also said that, they are getting high stress level because of academic performance. The findings also revealed that, the majority of the respondents 66 (66%) agreed that, teaching methods affect academic performance of the students in a very high way, 34 (34%) of the respondents said that teaching methods do not have any effect on academic performance.

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1. INTRODUCTION

Stress is a common phenomenon that affects all people regardless of age, gender, civil status, political affiliation, religious belief, economic status and profession. It affects politicians, managers, religious class, employees, housewives, students and even the jobless to mention but a few. In today's highly competitive world, students face various academic problems including stress, which result in an increased prevalence of psychological and physical problems like anxiety, depression and nervousness which in turn affect their academic results and performance [1].

The modern day stress issues to the students of higher learning institutions seem to be more widespread than ever and many of the reasons as to why these exist are quite obvious such as more work, financial uncertainty, constant demands for high performance, the increase requirement for information, impossible targets, health issues, the downsides of cyberspace and technology, time management, sleep deprivation, social activities and the means to manage stress when they face them [2].

According to statistics published by National Crime Records Bureau in India, there is one student every hour that commits suicide [3]. The bureau registered 1.8% students who committed suicide due to failing in examinations and an 80% rise in suicide rates during a one time frame. A 2012 Lancet report also quoted that the 15-29 age group bracket in India has the highest rate of suicide in the world.

2. PROBLEM OF THE PAPER

Academic performance is the one of the most vital requirement for the students. Despite living in the millennium era where education is accessible to all, there are still some differences in performance among students. There are factors which are related to academic performance inside of university, stress being one among the factors that has negative impact on the students' academic performance [4].

Stress is considered as one among the irritating problem that face students during their academic career when they are struggling to get good performance and good academic achievements for their future life. The study of Makdhali [5]

reported that, (70%) among non-medical students in Tanzania achieved poor academic performance because of academic stress related factors. Therefore, the main aim of this paper is to explain the impact of stress on the students' academic performance in Zanzibar Higher Learning Institutions.

3. EMPIRICAL LITERATURE REVIEW

Bulo and Sanchez [6] assessed sources of stress among college students at Cagayan Valley Computer and Information Technology College in Penang, Malaysia. The descriptive-purposive research was used in this study. A questionnaire on Student-Life Stress Inventory was adopted to gather the needed data from 150 college students. For qualitative equivalents of the data gathered, a 5-point scale was utilized. Pearson-r correlation was also used to test the hypothesis set forth. The findings showed that, College students are exposed to many problems from family, financial, peers, and school environment. The study recommended that family should learn to support and be helpful for adolescents faced with stress, no matter how they are adapting to the stress. Parents and other family members should try to support and be open to them concerning the family income situation.

A study conducted by Manjula [7] who identified the factors causing academic stress and intervention of Pre University College Youth in India. The respondents were randomly selected from four colleges; the data was collected using Social Demographic Data Sheet, the Inventory of College Students' Recent Life Experiences, Coping Checklist and Self-Assessment of Study Skills. The data was analysed using SPSS 14 where descriptive statistics was used to describe the data. The results of the study indicated that majority of students reported poor time management skills, lack of confidence, distractions, meeting standards set by self and others regarding future career as causes of stress.

A study conducted by Haider et al. [8] exploring the relationship between stress and academic performance of medical students in Pakistan, A total of 200 medical students were selected to be the respondents of the study among them 90 were male and 110 were female. The study found that undergraduate medical students

experience considerable stress in their third year and academic related factors were major source of stress in students. Pearson correlation coefficient was used for statistical correlation amongst different variables. Stress shows beneficial effects in females when compared to males. High attendance and better day to day performance in female medical students was associated with more amount of stress when compared to male students. Thus, stress among medical students should be acknowledged and attempts should be made to alleviate it.

According to the study of Saqib [9] exploring the impact of stress on students' academic performance at Secondary School level in Pakistan. The questionnaire was used to collect data and was analysed by using SPSS version 20. The respondents were chosen through simple random technique. The data collected for this topic, has been gathered from all the secondary schools in District Vehari. The finding of the study revealed that there are significant impacts on stress and students' academic performance and the teacher can play a vital role in removing student's academic stress. The study recommended that in order to minimize the effect of students' academic performance in secondary schools, all concerned have to work on the issue seriously. The teachers should provide good teaching methodologies to enhance the learning skills and ideas for students. Seminars and workshops should be convened so that traditional as well as modern ways of teaching is explored.

The study investigated the relationship between stress and academic performance done by Oketch et al. [10], at the University of Nairobi in Kenya. The study consisted of 319 selected using stratified random sampling techniques from all six colleges of the University. The study was carried using across-sectional survey design and the data was collected using questionnaire that measured stress and locus of control. The analysis was done using SPSS computer program. The finding of the study revealed that most of the students (64.4%) reported that they experienced between moderate to high level of stress while just over third (35.6%) reported low stress.

A study done by Mehfooz et al. [11], aiming to explore the relationship between stress and academic performance of medical students and identify sources of stress effecting academic performance for medical students of

undergraduate third year at Sheikh Zayed Medical College, Rahim Yar Khan, Pakistan. Medical Student Stressor Questionnaire (MSSQ) was used for the assessment of the effect of stress on academics performance of the students. All domains of MSSQ are reliable showing Cronbach's alpha greater than 0.7. Female students showed higher level of stress than males before and after exams. The major source of stress experienced by students was related to academics (2.78), followed by teaching and learning (1.88), while the domain derive and desire domain caused minimum stress to students (1.30). Undergraduate medical students experience considerable stress in their third year. Academic related factors are the major cause of stress in students. It is important that students should be counseling and trained to manage stress effectively otherwise it can adversely influence their health and academic performance.

According to study of Muteti [12] which was to determine factors attributed to primary schools adolescents' stress and common stress coping strategies they use. Four research questions guided the study. The descriptive cross-sectional design was used. The respondents of the study were 225 primary schools' adolescents and 15 primary class teachers and five primary heads of schools. Data were collected through structured questionnaire, semi structured interviews and focus group discussion. Data were analysed using both content and thematic analysis. The findings of the study revealed that, most of adolescents had experienced stress even though some of them were not sure whether they were stressed or not due to lack of knowledge regarding stress and the sources of stress. Furthermore, the study found that two thirds of primary school adolescents often experienced symptoms of stress implying that they had high stress levels. Similarly, the study found that majority of the pupils often employed positive coping strategies. The study recommended that, Ministry of Education and Vocational Training (MoEVT) should put more emphasize on the issue of stress and coping strategies in primary schools by introducing well-structured formal support systems.

4. RESEARCH METHODOLOGY

The cross sectional survey research design was used to get information from the respondents. The rationale of taking this design was necessitated due to the fact that, the design was

considered one of the best available designs to the researcher who was interested in collecting data in comparison of many different variables at the same time. The target population was made by first year students of the academic year 2018/2019 at diploma, degree and postgraduate level at the State University of Zanzibar (SUZA) and Zanzibar University (ZU). The rationale of this selection is because during the first year, the students are not much familiar with university environment especially in terms of coursework, teaching style and course content provided by university and this is due to the experience of researcher as one among the higher learning student.

A total of 100 respondents were involved to provide information about the study investigation using simple random sampling technique. The reason behind selecting this technique was to help a researcher to select respondents randomly from the students with different courses and from the different faculties of the entire population of the study. Primary data was collected using questionnaire survey from the targeted respondents in order to know the reality of what is happening to them at a point in time is preferred Descriptive statistics such as frequencies mean and standard deviation as well as inferential statistics such as multiple linear regressions was used for data analysis. The data were analysed by the assistance of the Statistical Package for Social Sciences (SPSS) software version 23.

5. RESULTS AND DISCUSSION

5.1 Stress Related Factors

In order to achieve the academic goals which is making great performance on the academic years students are supposed to be in a good condition physically and mentally. Researcher asked students concerning the stress related factors which causes academic stress and the responses were as shown in Table 4.

Table 1 shows that, long course work is the leading factor which gives academic stress to higher learning students as 49 respondents suggested which is (49.0%) and this is due to the fact that long course work include a lot of assignment which need to be accomplished and not just accomplished but accomplished with time and also course work in many universities is

set with certain amount of marks which give permission whether to sit for university examination or not. Also, teaching style was selected by 31 respondents which are (31.0%) and this is because higher learning institutions' medium of instruction is English language while many students are not proficient in the language of instruction which resulted not to understand the content provided.

Table 1. Course work related factors which causes stress

Stress factors	Frequency	Percent
Long Course work	49	49.0
Teaching style	31	31.0
Course Content	20	20.0
Total	100	100.0

Source: Field data, 2019

5.2 Performance Rate of Higher Learning Students

The respondents were also asked by the researcher to rate their performance since they join the university depending on their learning abilities and the results are as shown in Table 2.

Table 2 shows that, most of the student joining higher learning institutions are striving to get good grades which is success in the academic performance, from the results obtained 45 respondents which is (45.0%) responded that they are getting average grade which means not good not bad which is among the factor for stress because it needs either to work hard or work smart in order to achieve good grades. Also 20 respondents which is (20.0%) responded in the questionnaire that their academic performance is GOOD which means that they are in the stress free zones academically. 30.0% respondents replied that they are obtaining FAIR performance which means that they are not happy with their academic performance which is the beginning of stress in their academic life.

5.3 Course Content and on the Academic

From the questionnaire provided by the researcher in the process of data collection from the field students were asked on how they feel when the course content is unexpectedly in the day to day university life and the result are as shown in Table 6.

Table 2. Performance rate of higher learning students

Students Performance	Frequency	Percent	Valid Percent
GOOD	20	20.0	20.0
AVERAGE	45	45.0	45.0
FAIR	30	30.0	30.0
POOR	5	5.0	5.0
Total	100	100.0	100.0

Source: Field data, 2019

Table 3. Impact of Course content that higher learning students are facing

Impact of Stress	Frequency	Percent	Valid percent
Upset for unexpected assignments	12	12.0	12.0
Unable to study	30	30.0	30.0
Nervous during lesson	17	17.0	17.0
Sickness during exams	16	16.0	16.0
Work pilling	11	11.0	11.0
Academic related irritation	10	10.0	10.0
Total	100	100.0	100.0

Source: Field data, 2019

Table 3 shows that, due to various academic activities which are going on in the universities' campus higher learning students are affected with the impact of stress. This situation highly affects their academic performance in the universities. From the result it was shown that 30 respondents which are (30.0%) responded that sometimes they are unable to study totally. Also getting nervous during lesson in this case including presentation in the classroom whereby 17.0% of respondents fall under this impact of stress.

5.4 Academic Stress level that Students are Facing Basing on Academic Performance

Researcher asked students concerning the level of stress that they are facing basing on the course content in the university life in striving for good performance and the results were as follows in Table 4.

Table 4 shows that, basing on the academic stress that students are facing due to academic performance there are levels of stress and this is because of the ability of the students in learning various courses. 52 respondents equal to (52.0%) responded that they are getting high stress levels because of academic performance simply due to various universities learning activities while other 32 respondents equal to (32.0%) replied that they are getting moderate stress levels. This means that based on

academic performance most higher learning students face various kinds of stress in their universities.

5.5 Teaching Methods and Academic Performance

In this particular aspect, the researcher wanted to know if course contents and teaching style have impact on higher learning students' academic performance respondents provided the following results.

Table 5 shows that, teaching methods effects academic performance of the students in a very high amount as 66 respondents which is (66.0%) responded YES. This means that this part of curriculum in the higher learning institutions does have impact on their academic performance while 34 respondents which is (34.0%) replied NO which means that this teaching methods do not have any effects on the academic performance and simply because it is university level that students can study by using books without attending class sessions as open universities and online do. Students can also learn ways to adapt to the different teaching methods of an instructor. These findings are important because they lend strong support to those of earlier studies in this area [11]. If students and teachers are aware of their differences in learning and teaching methods, and try to make adjustments for their differences, they will all benefit.

Table 4. Academic stress levels that students are facing

Academic stress level	Frequency	Percent	Valid percent
Low Stress	16	16.0	16.0
Moderate Stress	32	32.0	32.0
High Stress	52	52.0	52.0
Total	100	100.0	100.0

Source: Field data, 2019

Table 5. Effects of teaching methods on students' performance

Effects on Performance	Frequency	Percent	Valid percent
YES	66	66.0	66.0
NO	34	34.0	34.0
Total	100	100.0	100.0

Source: Field data, 2019

5.6 Correlation Analysis

Correlation is a term that refers to the relationship between two variables. A strong or high correlation means that two or more variables have a strong relationship with each other while a weak or low, correlation means that the variables are hardly related. The value of -1.00 represents a perfect negative correlation while a value of +1.00 represents a perfect positive correlation [13]. Pearson's correlation reflects the degree of linear relationships between two variables. It ranges from +1 to -1. A correlation of +1 means there is a perfect positive linear relationship between variables [14].

Table 6 indicated that, the strongest correlation was between Academic Performance and Coursework ($r(100) = .82, p < .05$), followed by Teaching Style and Academic Performance ($r(100) = .75, p < .05$) and relatively weaker correlations were found between Course Content and Teaching style ($r(100) = .24, p < .05$); Interestingly, the results revealed a weak positive correlation between Course Content and Coursework ($r(100) = .21, p < .05$). There was no significant correlation between academic performance and course content ($r(100) = .09, p < .05$). This finding is in line with the past researches [3,15].

Table 6. Correlations between variables under the study

		Academic performance	Coursework	Course content	Teaching methods
Academic performance	Pearson correlation	1			
	Sig. (2-tailed)				
	N	100			
Coursework	Pearson correlation	.82*	1		
	Sig. (2-tailed)	.040			
	N	100	100		
Course content	Pearson correlation	.09	.21	1	
	Sig. (2-tailed)	.013	.036		
	N	100	100	100	
Teaching methods	Pearson correlation	.75*	.69*	.24	1
	Sig. (2-tailed)	.042	.144	.01	
	N	100	100	100	100

*. Correlation is significant at the 0.05 level (2-tailed)

Table 7. Regression coefficients^a results

Model	Unstandardized coefficients		Standardized coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.509	2.449		1.025	.345		
1 Teaching style	.434	.306	.239	1.420	.001	.916	1.092
Course work	.959	.177	.876	5.420	.000	.995	1.005
Course content	.015	.081	.031	.183	.004	.916	1.091

a. *Dependent Variable: students' academic performance*

b. *Predictors: (Constant), coursework, course content and teaching style*

5.7 Multiple Regression Model

From the SPSS outputs of regression coefficients for the variables is given in Table 7. There is a strong positive relationship between the variables as expected and highly significant at $\alpha = 0.05$ since their p-values were below 5%.

The results show that, there is statistical significant effect of coursework on students' academic performance. Findings revealed that coursework had coefficients of estimate which was significant basing on $\beta = .959$ (p-value = 0.000 which is less than $\alpha = 0.05$) which implies that coursework had highly positive and significant effect on students' academic performance, that is in increase in a unit of coursework may contribute 95.9% of students' academic performance.

Also the findings explain that there is a statistically significant effect of course content on students' academic performance. Findings showed that course content had coefficients of estimate which was significant based on $\beta = .015$ (p-value = 0.004 which is less than $\alpha = 0.05$) which indicates that positive and significant effect on students' academic performance. As compared to the amount of course work, course content has a small contribution to the students' academic performance.

The results showed a statistically significant effect of the teaching method on the students' academic performance. Findings showed that the teaching method had coefficients of estimate which was significant based on $\beta = 0.434$ (p-value = 0.001 which is less than $\alpha = 0.05$) and infer that teaching style has positive and significant effect on the students' academic performance. This implies that the good the teaching style, the higher the students' academic performance.

The relationship between stress and academic performance was found to be statistically significant among all variable such that their p-value were less than 0.05 (Teaching style has 0.001, course work has 0.000 and course content has 0.004). This implies that coursework, course content and teaching style will affect academic performance of students. The findings concur with some studies [16] they drew the conclusion that course load, sleep problem and social activities were the major source of stress affecting academic performance of the students. In nutshell, perceived stress was found to be an important factor that needs university administration, faculty and parent's focus on effective psychoanalysis services along with stress management programs that could be useful for achieving academic success.

6. CONCLUSION

Course work is the leading factor which accelerates stress to higher learning students in the university environments. Students are striving harder in order to reach the required pass marks so as to sit in the examination room as 49 respondents suggested which is equal to (49.0%). This result is supported by Phinney and Haas [17] stressed out sources of stress more specifically as a unique set of stressful encounters among students which includes: difficult financial challenges, domestic responsibilities, responsibilities related to holding a job while in school, and a heavy academic load. First year students for the first time of joining university most of them are not getting good grades and most of them get average grades which is not good and not bad and this is because of not being familiar with the university life including academic performance as 45 respondents which is (45.0%) responded in the questionnaire. This result was supported by Britz and Pappas [18] found that 50.8% of the 124 participants reported being often or always

stressed, with academics, time management, making future plans, and sleep being the top indicated sources of stress.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Anushka Thakkar. Students Academic Stress. Journal at One Future Collective, Pakistan; 2018.
2. Kelly C. Impact of Stress on Students Academic Performance Psychology Essay.UK. 2018;16.
3. Choi YB, Abbott TA, Arthur MA, Hill D. Towards a future wireless classroom paradigm. International Journal of Innovation and Learning. 2007;4(1).
4. Devanik Saha. A student commits suicide every hour in India. Institute of Development Studies, University of Sussex, India; 2017.
5. Makdhali AH. Factors affecting non medical students academic performance in Tanzania. Unpublished; 2012.
6. Bulo JG, Sanchez MG. Sources of stress among college students. CVCITC Research Journal. 2014;1(1):16-25.
7. Manjula M. Academic stress management: An intervention in pre-university college youth. Journal of the Indian Academy of Applied Psychology. 2016;42(1):105.
8. Haider MS, Kurjogi MM, Khalil-Ur-Rehman M, Fiaz M, Pervaiz T, Jiu S, et al. Grapevine immune signaling network in response to drought stress as revealed by transcriptomic analysis. Plant Physiology and Biochemistry. 2017;121:187-195.
9. Saqib M, Rehman KU, Campus LUN. Impact of Stress on students' academic performance at secondary school level at District Vehari. International Journal of Learning and Development. 2018;8(1):84-93.
10. Oketch-Oboth JWB. Relationship between Stress Level Academic Performance and Psychosocial Adjustment among University of Nairobi Students. (Doctoral Dissertation, Department of Psychology, Faculty of Arts, University of Nairobi); 2018.
11. Mehfooz QUA, Sonia IH. Effect of stress on academic performance of undergraduate medical students. J. Commun. Med. Health Educ. 2017;7:566.
12. Muteti CM. Assessing the stress factors and coping strategies among primary school adolescences in Moshi District. The International Journal of Social Sciences and Humanities Invention. Tanzania. 2018;5(7).
13. Orodho AJ. Essential Educational and Social Science Research Methods. Mazola Publishers, Nairobi; 2003.
14. Young GA. Route to higher order accuracy in parametric inference. Australia & New Zealand Journal of Statistics; 2009.
15. Rafidah K, Azizah A, Norzaidi MD. Stress and academic performance: empirical evidence from university students. Academy of Educational Leadership Journal; 2009.
16. Talib N, Zia-ur- Rehman M. Academic performance and perceived stress among university students. Educational Research and Reviews 2012;1227-132.
17. Phinney JS, Haas K. The Process of coping among ethnic minority first generation college freshmen. A narrative approach. The Journal of Social Psychology. 2003;143.
18. Felix Kamuche. Do learning and teaching styles affect students' performance. Journal of Business and Economics Research. 2005,2011;3(9).

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