Relationship between Academic Stress and Academic Achievements of the Undergraduate Students in Sri Lanka - A Case Study of Undergraduates in Uva Wellassa University

By H.M.W.M. Herath

Uva Wellassa University

Abstract- This study observed the sources of academic stress and its relationship with academic success in university undergraduates in Sri Lanka. To conduct the research,256 students in three faculties of the Uva Wellassa University of Sri Lanka were selected. Of those surveyed, 143 were male and 113 were female students. Ages ranged from 20 to 25, with a mean of 23.78 (SD=1.22), and the class rankings were as 64 (32.7%) first-year students, 60 (30.6%) second-year students, 55 (28.1%) third-year students and 16 (8.2%) final (fourth) year students. Self-administrated questionnaires were distributed among the participants that assessed the students' academic stress, academic achievements, and general demographic information. There is a particular emphasis on how the students use stress management strategies to achieve academic success.

Keywords: stress, academic stress, academic achievements, undergraduates.

GJHSS-A Classification: FOR Code: 130399

RELATIONSHIPBETWEENACADEMICSTRESSANDACADEMICACHIEVEMENTSOFTHEUNDERGRADUATESTUDENTSINSRILANKAACASESTUDYOFUNDERGRADUATESINUVAWELLASSAUNIVERSITY

Strictly as per the compliance and regulations of:

Relationship between Academic Stress and Academic Achievements of the Undergraduate Students in Sri Lanka - A Case Study of Undergraduates in Uva Wellassa University

H.M.W.M. Herath

Abstract- This study observed the sources of academic stress and its relationship with academic success in university undergraduates in Sri Lanka. To conduct the research,256 students in three faculties of the Uva Wellassa University of Sri Lanka were selected. Of those surveyed, 143 were male and 113 were female students. Ages ranged from 20 to 25, with a mean of 23.78 (SD=1.22), and the class rankings were as 64 (32.7%) first-year students, 60 (30.6%) second-year students, 55 (28.1%) third-year students and 16 (8.2%) final (fourth) year students. Self-administrated questionnaires were distributed among the participants that assessed the students' academic stress, academic achievements, and general demographic information. There is a particular emphasis on how the students use stress management strategies to achieve academic success. Pearson and partial correlations were calculated between all study variables. The results indicated a significant relationship between academic performance and academic stress. Higher levels of academic stress was correlated with lower performances. The highest degree of academic stress indicated among first-year students and the top factor of stress was work overload (M=3.11; SD.0.96) while personal matters reported as the least stressful (M=2.27; SD. 0.86). The most common stress management strategy used by the students was Self-Motivation (M = 6.52; SD = 1.18), while talking with teachers/lecturers was found to be the least common stress management strategy (M = 3.86; SD = 1.35). The findings of this study highlight the need of introducing advanced stress management strategies for university undergraduates to increase their academic achievements.

Keywords: stress, academic stress, academic achievements, undergraduates.

I. Introduction

Although Stress is a natural phenomenon, it is known as a common problem among almost all professionals, students, and the general public as well. Stress affects the peoples' career and day-to-day life activities. As many researchers have shown, learning and memory can be adversely affected by stress, although an optimal level of stress can enhance the learning ability (Kalpan & Sadock, 2000). Stress has become a significant issue in academic settings. Hence,

a number of researches have done looking at the correlation of experience and effects of stress on their GPA (Hatcher and Prus, 1991; Hammer, Grigsby and Woods, 1998; Trockel, Barnes and Egget, 2000; Calderon, Hey and Seabert, 2001; Kelly, Kelly and Clanton, 2001), and these studies have shown that Stress has an impact on students' academic achievements. However, a review of the literature indicates that very few researches have been done in Sri Lankan context and that is also limited to medical students. Therefore, it is highly important to conduct a study to examine the situation in - state universities in Sri Lanka. Accordingly, this study was conducted in the Uva Wellassa University of Sri Lanka, located in Uva province of Sri Lanka. Students of the university consist of different ethnic groups, different religion and different cultures. All these undergraduates have entered the university from all over the country by facing an aptitude test after getting through a highly competitive examination called Advanced Level.

II. Literature Review

Various decisions regarding academic life, social life and leisure activities are made by students when they enter to the university (Baker, 2003). The students have to struggle to fulfill their hopes and expectations of their parents including expectations related to their academic performance (Smith & Renk, 2007). In addition, society's' believes such as graduating from a high-ranking university is a "passport" to a good job, high salaries, and high social status are also has to be think of (Ang & Huan, 2006). As a result, the students are subjected to a variety of stressors. Specially linked to academic success (Sreeramareddy, Shankar, Binu, Mukhopadhyay, & Menezes, 2007). According to some surveys, in the academic environment, information overload, high competitiveness unrealistic ambitions, high expectations, limited opportunities, and academic pressure, are some of the common sources which create stress in students (Sinha, Sharma, & Nepal, 2001). Misra, Mckean, West, and Russo (2000) pointed out that meeting the assessment deadlines is a major source of stress. As

Author: Uva Wellassa University of Sri Lanka.
e-mail: wasanamaithree@gmail.com

Students reports the greatest sources of academic stress arise because of the exams, and because of grade competition, and the large amount of content to master in a limited time (Kohn & Frazer, 1986).

III. METHODOLOGY

a) Objectives of the Study

This study attempt to discover the relationship between academic stress and academic achievements of undergraduates. With this primary objective, there are several sub-objectives such as to explore the most common sources of stress, to know the degree of stress concerning gender among students, and also to analyze the stress concerning the current academic level of the students.

b) Targeted Population Sampling

Out of the total 300 students, (N=300) only 256 students responded answering and returning the questionnaires. The responded rate was 85.3%. The questionnaires were distributed among all the students selecting the last week before study leave for the examination. Before the distribution of the questionnaires, the purpose of the study was briefly introduced to the students for better understanding of questionnaire. The time allocated for completing the questionnaire was about 20-minutes. This time was perfect for filling the questionnaire that was consisting of only two pages.

c) Instrument

Instrument used in this research based on previous research done in Botswana University by Agolla in February 2009. We are using a previously used and tested questionnaire, its validity is already tested. To ensure the reliability, a reliability test Cronbach alpha showed 0.73 results for all items. Questionnaire consists of three parts, demographics, symptoms of stress, and sources of stress. The second questionnaire was also administered on all the subjects to measure their coping strategy.

Academic performance was measured using the students' current GPA

Undergraduate academic performance is categorized based on a 5-point scale, as first class honors (4.00-5.00), second class upper division (3.60-4.39), second class lower division (2.80-3.59), and a pass degree (2.00-2.79).

d) Data Analysis

SPSS 16 was used to analyze the study data. Pearson correlation was used to explain relationships among the study variables.
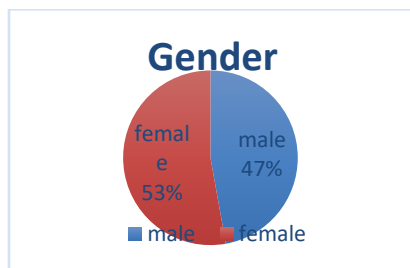

Figure 1: Sample – Gender-Wise Distribution

As Figure 1 shows, the sample of the study consisted of 143 female and 113 male students. The majority of the respondents represented by females, i.e. 53%.
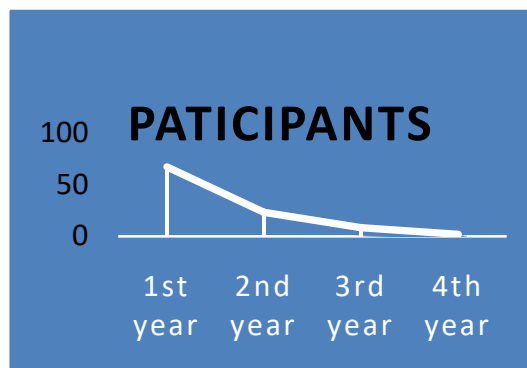

Figure 2: Sample – Year-Wise Distribution

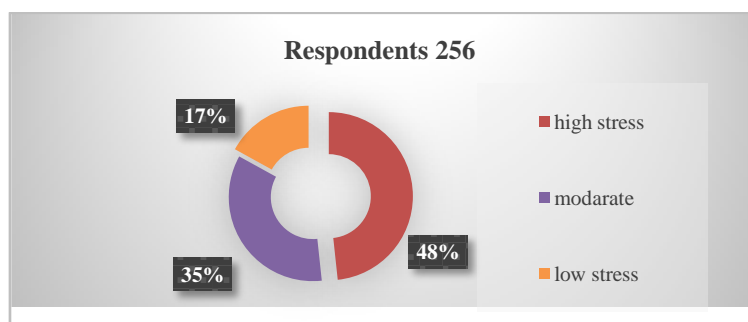As Figure 2 shows, the sample included first year, second-year, third-year and fourth-year students.

Figure 3: Results

According to the results, out of all 256 respondents, only 17% had indicatedlow-stress. 35% had indicated moderate-stress, and the majority of the sample had indicated high-stress. (Figure 3)
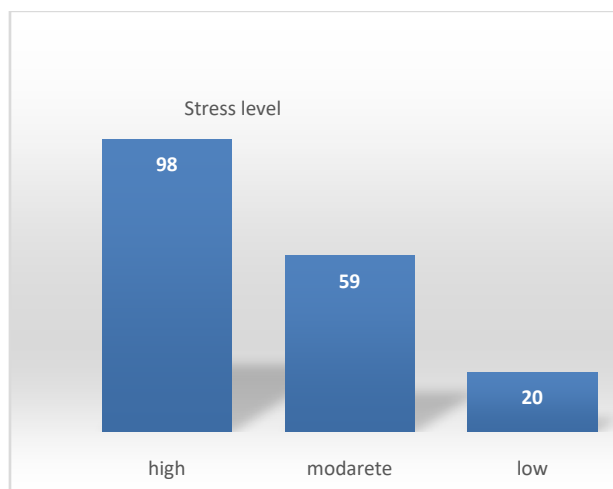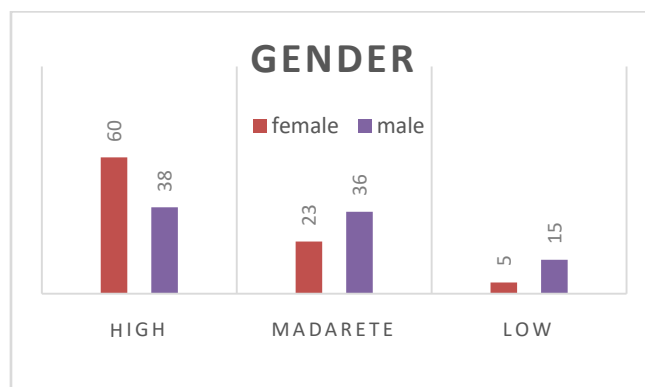

Figure 4

Figure 5

When the first year students are considered, 98 students had a high level of stress and, it included 60 females and 38 males. Moderate level of stress was indicated by 23 female and 36 male students. The students who had a low level of stress were only 20 and it included five females and 15 males. (Figures 4 & 5)
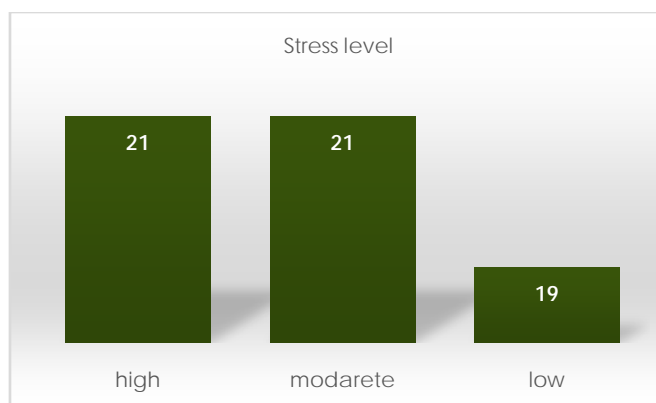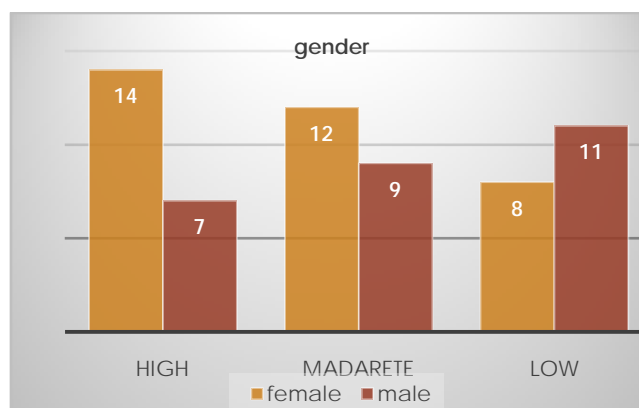
Figure 6

Figure 7

The sample size of the second year students was Sixty one (61), and out of them, high stress was indicated by 21 students, moderate stress level was indicated by Twenty one (21) students and nineteen (19) students have showed low-stress. Out of high-stress indicated students, fourteen (14) were females and seven (7) were males. Out of moderate-stress indicated students, twelve (12) were females and nine (9) were males. Low-stress was indicated by eleven (11) male and, eight female students. Accordingly, second year female students have indicated more stress than male students. (Figures 6 & 7)

The sample size of third-year students was twenty two (22). Out of them, nine had indicated high level stress, including eight (8) females and one male. Ten (10) had indicated moderate-stress, including Four (4) females and Six (6) males. It has to be noted that only one female and 2 male students have indicated low stress level. (Figures 8 & 9)
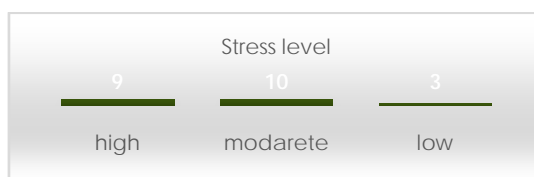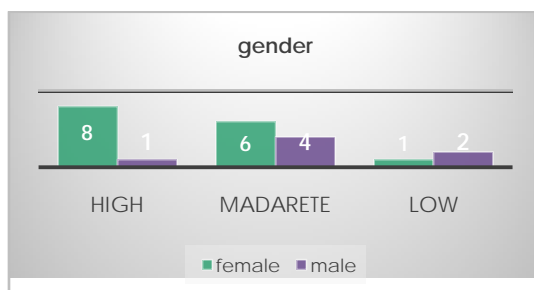

Figure 8

Figure 9

When the fourth year students are considered, out of Five (5), Two (2) had indicated moderate stress and they were female students. Low level of stress had indicated by one (1) female and two (2) male students. (Figures 10 & 11)
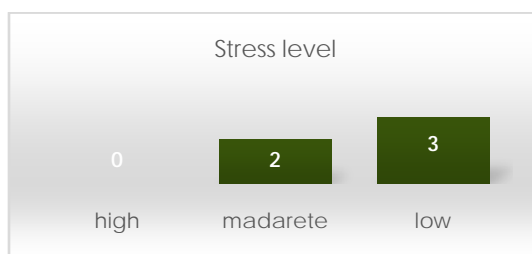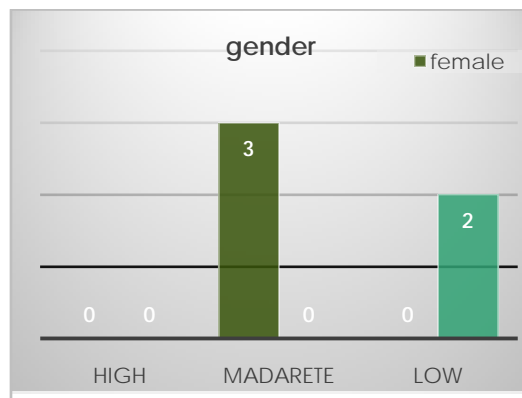

Figure 10

Figure 11

The Most Common Sources of Stress

Table 1

	Student Stress Factors n(264)	Frequency	Percentage
1	Work load	233	88.0
2	Lower grade that anticipated	200	75.0
3	Missed too many classes	112	42.0
4	Anticipation of graduation	102	38.4
5	Search for a job	03	1.13
6	Change of major	09	3.3
7	Arguments with instructors	03	1.13

According to the Table 1, the most common source of stress was workload (88%) and, the least common sources were searched for a job and arguments with instructors. As students' point of view, they have too many assignments, presentations, and other works to finish in a limited time.

Only the workload and stress relationship are significantly different. The P value is 0.026. The other sources are not significance of P value->0.05.Among the symptoms, the majority (more than 50%) had indicated trouble concentrating while studying. The most widely used stress management strategy by students was time management (more than 60%)

Table 2

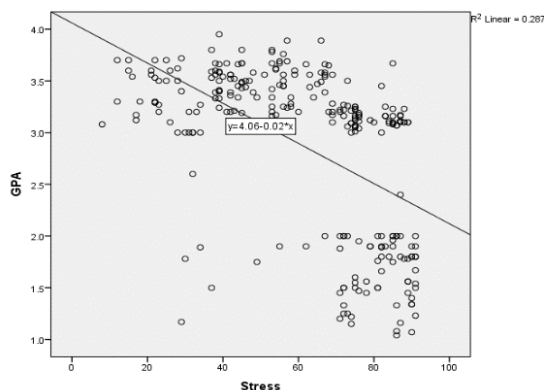| Correlations		Stress	GPA
Stress	Pearson Correlation	1	-.536**
	Sig. (2-tailed)		0.000
	N	264	264
GPA	Pearson Correlation	-.536**	1
	Sig. (2-tailed)	0.000	
	N	264	264

According to the Table2, Pearson correlation values is .0536 which, is a significant correlation.

Correlation is significant at the 0.01 level (2-tailed). r=0.5 (p=0.00)

Probability of association between Stress and GPA is 0.000. It is less than the significance level of 0.05 and, it implies that the test is moderately significant.

IV. Discussion

This study attempted to examine the correlation of stress with the academic achievements of the university undergraduates in Sri Lanka. The hypothesis which stated that participants who have higher levels of academic stress would be predictive of lower semester GPA was supported. Academic stress has a significant effect on semester GPA, advanced and lower levels of academic stress correlated with lesser performances. It is similar to the previous research conducted by Felsten and Wilcox (1992), who found a significant correlation between stress and academic success. Unlike some other scholars, this study indicated that the majority had experienced large or moderate levels of academic stress. When considered the gender, it is clear that the female students experience large amount of stress. Regardless of the year of the students, female students have indicated the greater amount of stress as the male students have showed a lower level of stress compared to the female students. However, the results indicates that the majority of the students, i.e. both male and female, had high or moderate level of stress except the fourth-year students. First-year students have indicated the highest level of stress and this evidences the previous study conducted by Hurtado (1996), Leong (1997) and Halamandaris and Power (1999). According to those studies, the new adjustment problems first-year students' face are mostly related to academic stress. Fourth-year students have not indicated high-level of stress and that is probably due to less work they had at the time during the study is conducted. After they have submitted their final year project report, they were waiting to engage in their industrial training. When considered the symptoms of stress, both males and females perceived their symptoms of stress as trouble concentrating while studying.

V. Conclusions

This study has investigated a significant correlation between stress and academic achievements of Sri Lankan undergraduates. It draws the attention of students, administrators as well as academics regarding the importance of maintaining a balance between the academic career and the students' life for better learning. To develop a healthy body and mind and to enhance the students' academic achievements, Universities need to provide an understanding of stress and stress management strategies.

References Références Referencias

1. Ang, R. P., & Huan, V. S. (2006). Academic Expectations Stress Inventory: Development, factor analysis, reliability, and validity. *Educational and Psychological Measurement, 66,* 522-539.
2. Baker, S. R. (2003). A prospective longitudinal investigation of social problem-solving appraisals on adjustment to university, stress, health, and academic motivation and performance. *Personality and Individual Differences, 35*, 569–591.
3. Felsten, G. & Wilcox, K. (1992). Influences of stress and situation- specific mastery beliefs and satisfaction with social support on wellbeing and academic performance. Psychological Reports 70(1):291-190.
4. Halamandaris, K. F. and Power, K, G., Individual differences, social support and coping with the examination stress: a study of the psychosocial and academic adjustment of first year home student. Personality and Individual Differences, 26, 4, 665-685 (1999)
5. Leong, F. L., Coping styles as predictors of college adjustment among freshmen. Counselling Psychology Quarterly, 10, 211-221 (1997)
6. Hammer, L.B., Grigsby, T.L. & Woods, S. (1998) the conflicting demands of work, family and school among students at an urban university. The journal of psychology. 1323, 220-227.
7. Hatcher, L. & Prus J.S. (1991) A measure of academic situational constraints: Out of Educational & Psychological Measurement. 51, 953-963.
8. Hurtado, S., Latino student transition to college: assessing difficulties and factors in successful college adjustment. Research in Higher Education, 37, 2, 135-157 (1996)
9. Kalpan, H. I, & Sadock, B.J. (2000). Learning theory. In synopsis of Psychiatry; Behavioral Sciences/ Clinical Psychiatry (8th edition) Philadelphia; Williams & Wilkins. 148-154.
10. Kelly, W.E., Kelly, K. E. and Clanton, R. C. (2001). The relationship between sleep length and grade point – average among college students. College student Journal. 35, 84-88

11. Murphy, M.C., & Archer, J. (1996). Stressors on the college campus: A comparison of 1985-1993. Journal of College Student Development, 37(1), 20-28.
12. Smith, T., & Renk, K. (2007). Predictors of academic-related stress in college students: an examination of coping, social support, parenting, and anxiety. *NASPA Journal, 44*, 405-431.
13. Sreeramareddy, C. T., Shankar, P. R., Binu, V. S., Mukhopadhyay, C., Ray, B., & Menezes, R. G. (2007). Psychological morbidity, sources of stress and coping strategies among undergraduate medical students of Nepal*. BMC Medical Education, 7*, 26. Retrieved 11th May, 2012 from http://www. biomedcentral.com/1472-6920/7/26