RELATIONSHIP OF STRESS AND ACADEMIC PERFORMANCE AMONG UNIVERSITY STUDENTS: A CASE STUDY OF GENDER COMPARISON

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Abstract: A student can be stressed due to many factors such as problems with family, friends, financial, and study. Stress level also differs between male and female students. Many studies proved that stress problem has a negative impact on academic performance. As a university student, academic performance is measured by the cumulative grade point average (CGPA). Stress problem among students should be faced in a positive manner. Hence this study focuses in determining (i) the stress level among students by gender, (ii) the effect of being stressed, (iii) the relationship of stress and academic performance by gender and (iv) their ways of handling stress. Population in the study is all students in UiTM Cawangan Melaka. 145 students were selected as sample using convenience sampling. Data was collected using an online questionnaire. Descriptive and chi-square test were used to analyse data. Findings show that generally, stress is not related to academic performance. Somehow, stress caused by a problem with friends is related to academic performance for male students while stress caused by the financial problem is related to academic performance for female students Most of the students prefer having sleep, listening to music, and having food to handle stress.

Keywords: Stress, Academic Performance, CGPA, Gender

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Introduction
A student can be stressed due to many factors such as problems with family, friends, financial, and study. Some students have problem with family relationship and bullying problem among friends. The others may have small allowance which leading students to have less choices in

choosing daily food and prefer instant noodle rather than balanced food. Too many assignments and presentation also causing stress among students if time cannot be well managed. These stress factors are also may correlate to other factors, for example, financial stress may be related to family problem. This interrelationship among stress factors also may differ according to gender. All these stress level and factors may differ among male and female students. In some studies, female students facing higher stress level compared to male students (Ruby et al., 2009 & Sahana et al., 2014).

Regardless of the stress level differences among gender, this study is important as many studies proved that stress problem has negative impact on the academic performance (Bennett, McCarty & Carter, 2015). Hence being stressed is not good for a student. Somehow, stress is unavoidable and skill of handling stress is a need for every student.

This study is done to determine (i) the stress level among students by gender, (ii) the effect of being stressed, (iii) the relationship of stress and academic performance by gender and (iv) their ways of handling stress.

As a university student, academic performance is measured by the cumulative grade point average (CGPA). Job hunting will be easier with a good CGPA and positive personality. Both criteria can be achieved with a good skill in handling stress. Stress problem among students should be faced in a positive manner.

Literature Review

Stress has a different meaning for different people under different conditions. Stress is the body's nonspecific response mechanism towards demands or strains made on itself or the environment (Selye, 1974). In the Webster new world dictionary, stress can be defined as "a condition typically characterized by symptoms of mental and physical tension or strain, as depression or hypertension, that can result from a reaction to a situation in which a person feels threatened, pressured, etc." Stress may occur when one cannot meet the expectation.

Stress level among male and female students are different in many studies as well as their coping strategy for their stress problem. Ruby et al. (2009) found that female students were having higher overall stress level compared to male students. In other study among third year medical students by Sahana et al. (2014) also found that female students had more academic stress than male students.

Many studies have been done to reveal the relationship between stress and academic performance. Elias, Ping & Abdullah (2011) found a significant relationship between stress and academic performance in both genders while Rafidah et al. (2009) found a relatively weak negative correlation between perceived stress levels and overall grade point average among students in Malaysia.

Looking at the effect of stress among students, some studies proved negative effect of stress on academic performance (Stewart et al., 1999; Bennett, McCarty & Carter, 2015). Somehow, Harlina et al. (2014) denied the negative effect of stress towards their academic performance as UKM medical students are highly resourceful to manage their stress well.

Level of stress gives a significant impact on academic performance where Rafidah et al. (2009) found that students of moderate degree stress performed to have satisfactory GPAs while

experiencing higher levels of stress during the examination period was found to be associated with poorer average grades (Antonio et al., 2016).

Common factors of being stressed among students are family problem, social or problem with friends, financial problem and study activities. Hence, interpersonal skills are needed for every student so that they can socialize and have a good relationship with the people around them (Yusoff & Ahmad Fuad, 2010). Financial support also important for students as several studies reported that students feel that financial stress has negatively affected their academic performance. (Ross et al., 2006; Perez-Pena, 2012; Trombitas, 2012). It is proven by Bennett, McCarty & Carter (2015) who reported that financially stressed students were more likely to received significantly lower grades in principles of economics courses.

Factors of being stress or stressors are correlated to each other. Lakyntiew et al. (2014) did interrelationship study among stressors among college students in Shillong city found that social and financial stress are highly correlated with academic stress.

There are many ways to cope with stress. Ruby et al. (2009) in the study found that emotion-focused coping strategy is the strategy used by all students regardless of gender differences while Lakyntiew et al. (2014) found that meditation, prayer, pursuing hobbies and interest, having drugs and sleep are very helpful to overcome academic stress. Since there are positive and negative effect of stress on academic performance, it is always preferable to see the positive side of it. In other study, Sahana et al. (2014) found that coping strategy between male and female students are different where female students prefer support seeking (emotionally) while male students prefer self-blame and humour to cope with academic stress.

Students may achieve good performance in academic if they can manage their stress well. Students should be exposed to various personal and professional developmental activities so that they able to face everyday challenges and manage stress well and thereby achieve better academic performance.

Methodology
This study involved accounting students in UiTM Cawangan Melaka. 145 sample was selected in the survey using convenience sampling. Online questionnaire is used to collect data from respondent. Questionnaire was constructed using google form. Link of the form was distributed and forwarded to all accounting students through class WhatsApp groups. Data was analysed using SPSS.

Variables of interest are students' gender, CGPA, stress level, effect of stress and ways of handling stress by students. CGPA data was collected in numerical form and recoded into 4 categories while stress level data was collected in four categories (1-Not at all; 2-Sometime; 3-Often; 4-All the time). Stress level data collected from 4 different questions based on the factors (family, friends, financial and study).

Descriptive and chi square test were used in the analysis part. Pearson correlation and Chi Square test is used to determine the significant relationship between stress and academic performance.

Findings

Demographic of respondents are shown in Table 1. 79.3 percent of them are female students (Table 1). CGPA by category is shown in Table 1 where 40 percent of the students are in the 1st class category while only 4.8 percent of them in the 3rd class category.

Table 1: Gender * CGPA Crosstabulation

			CGPA Group				
			1st Class	2nd Class Upper	2nd Class Lower	3rd Class	Total
Gender	Male	Count	11	12	7	0	30
		% within Gender	36.7%	40.0%	23.3%	.0%	100.0%
		% within CGPA_group	19.0%	21.8%	28.0%	.0%	20.7%
		% of Total	7.6%	8.3%	4.8%	.0%	20.7%
	Female	Count	47	43	18	7	115
		% within Gender	40.9%	37.4%	15.7%	6.1%	100.0%
		% within CGPA_group	81.0%	78.2%	72.0%	100.0%	79.3%
		% of Total	32.4%	29.7%	12.4%	4.8%	79.3%
Total		Count	58	55	25	7	145
		% within Gender	40.0%	37.9%	17.2%	4.8%	100.0%
		% within CGPA_group	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	40.0%	37.9%	17.2%	4.8%	100.0%

By numerical CGPA data distribution, CGPA of 145 students vary in the range of 2.09 to 4.00 with average CGPA of 3.30. CGPA distribution is skewed to the left. 75 percent of the students score CGPA more than 3.00.

The 1st objective of the study is determining the stress level among students. Stress level is shown in four (4) categories which are stress caused by family, friends, financial and study. Referring to Figure 1, findings show that only 6.9 percent of the respondents are stressed caused by their family. 19.3 percent of students stressed all the time with friends while 22.1 percent of students stressed all the time with their financial problem. Lastly, 35.2 percent of the students stressed at all time with the study activities. This may cause by the assignment, projects, assessments and presentations need to complete during the semester. Average stress level among students according to the factors are 1.69, 2.30, 2.43 and 2.83 respectively.
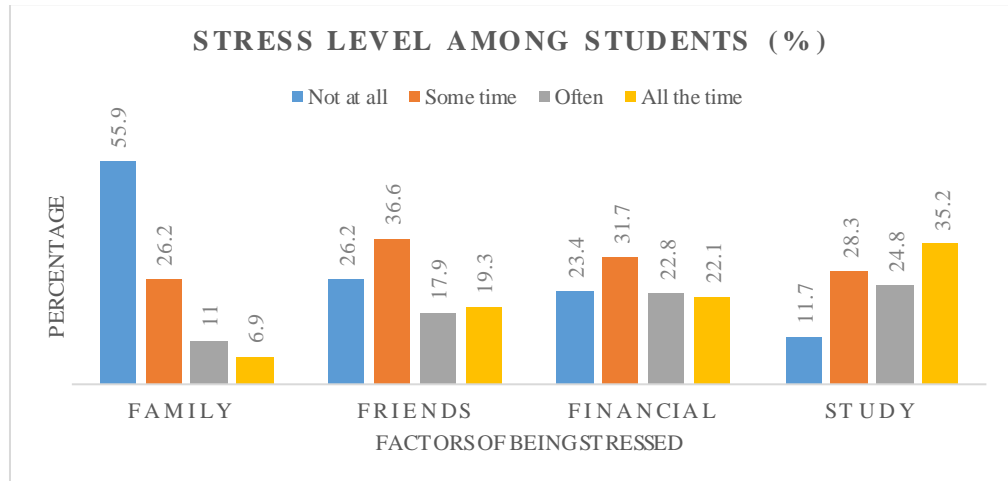
Figure 1: Stress Level Among Students Based on The Factors Causing Stress

Some studies proved that stress level of female students is significantly higher than male students. This study shows that there is a relationship between gender and stress caused by family and friends (Table 2). Male students tend to face stress problem with family (Table 3) and friends (Table 4) compared to female students. Since there is a correlation between gender and stress level, gender is be considered for further analysis in this study.

Table 2: Chi Square Result of Gender and Stress Level Relationship

		Pearson Chi Square	
	Stress caused by	Value	Asymp. Sig (2-sided)
Gender	Family	20.925	0.000**
	Friends	6.793	0.079*
	Financial	2.265	0.519
	Study	3.552	0.314

**Significant at 5% significance level
*Significant at 10% significance level

Table 3: Crosstabulation Between Gender and Stress Level Caused by Family

		Stress Level Caused by Family				Total
		Not at all	Sometime	Often	All the time	
Gender	Male	11	11	1	7	30
	Female	70	27	15	3	115
TOTAL		81	38	16	10	145

Table 4: Crosstabulation Between Gender and Stress Level Caused by Friends

		Stress Level Caused by Friends				
		Not at all	Sometime	Often	All the time	Total
Gender	Male	5	8	7	10	30
	Female	33	45	19	18	115
TOTAL		38	53	26	28	145

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Determining the effect of being stressed among students is the 2nd focus in the study. Major effect of being stressed among students are mood swings, followed by depression, over eating and anxiety (Figure 2). Depression is a serious problem which may lead to suicide in some cases. Positive environment is important in supporting students with stress problem.
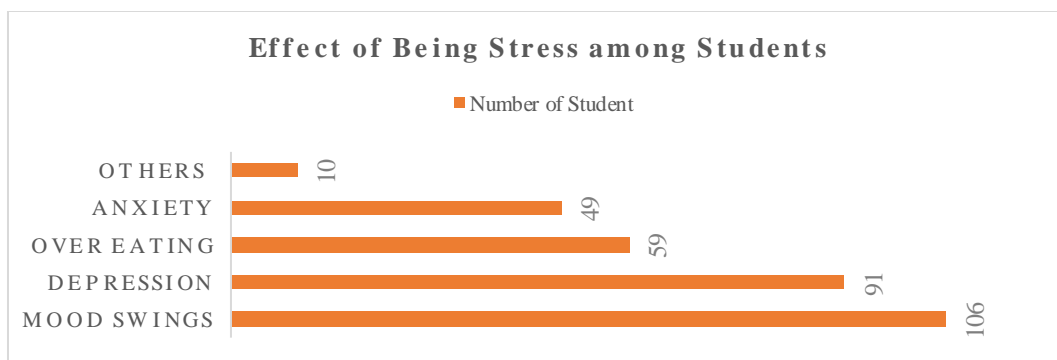

Figure 2: Effect of Being Stress among Students

Stress may affect academic performance among students. 3rd objective in the study is to determine the relationship of stress and academic performance among students. Chi square test shows that generally, stress caused by family, friends, financial and study is not related to academic performance. Further analysis is done to determine whether there is a relationship between stress and academic performance among male and female students. Results show that stress caused by friends is related to academic performance for male students (Table 5).

Table 5: Chi Square Result of CGPA and Stress Level by Gender Relationship

Academic Performance	Stress caused by	Gender	Pearson Chi Square	
			Value	Asymp. Sig (2-sided)
CGPA	Family		6.234	0.716
		Male	6.059	0.417
		Female	4.381	0.885
	Friends		13.809	0.129
		Male	16.234	0.013**
		Female	7.178	0.619
	Financial		13.681	0.134
		Male	7.490	0.278
		Female	15.149	0.087*
	Study		9.858	0.362
		Male	6.841	0.336
		Female	7.182	0.618

**Significant at 5% significance level
*Significant at 10% significance level

Table 6 shows that six (6) male students who are stressed all the time caused by friends score in 2nd class lower. Suitable supportive activity should be done to support these six (6) male students so that their problem with friends can be solved and score better CGPA in coming semester.

Table 6: Cross Tabulation of Stress Caused by Friends and CGPA among Male Students

Stress Caused by Friends	1st Class	2nd Class Upper	2nd Class Lower	Total
Not at all	3	1	1	5
Some time	2	6	0	8
Often	3	4	0	7
All the time	3	1	6	10
Total	11	12	7	30

Since stress caused by friends among male students is correlated to the academic performance, hence further analysis is done to investigate to correlation with other stress factors. Table 7 shows that other stress factors are correlate to stress caused by friends. Male students who are facing stress problem with friends are those who are having problem with the family, hence facing financial problem too. This situation leads to stress problem caused by study or academic stress as they cannot concentrate on their study.

Table 7: Chi Square Result of Stress Caused by Friends and Stress Level Caused by Other Factors Relationship among Male Students

Gender	Stress caused by	Stress caused by	Pearson Chi Square Value	Asymp. Sig (2-sided)
Male	Friends	Family	23.327	0.006**
		Financial	30.687	0.000**
		Study	23.564	0.005**
Female	Financial	Family	25.506	0.002**
		Friends	24.560	0.003**
		Study	32.390	0.000**

**Significant at 5% significance level

Another significant result is that stress caused by financial related to academic performance for female students (Table 6). Table 8 shows that 19 of female students who are stressed by their financial all the time scored more than 3.00 in CGPA. This is better than those female students who are often stressed caused by their financial problem as nine (9) over 24 of these students score less than 3.00 in CGPA. This finding shows that student's mentality of students who are used with the stress problem due to financial problem all the time have strong encouragement in getting excellent performance.

Table 8: Cross Tabulation of Stress Caused by Financial and CGPA among Female Students

Stress Caused by Financial	1st Class	2nd Class Upper	2nd Class Lower	3rd Class	Total
Not at all	10	15	2	1	28
Some time	16	15	6	2	39
Often	12	3	5	4	24
All the time	9	10	5	0	24
Total	47	43	18	7	115

Since stress caused by financial among female students is correlated to the academic performance, hence further analysis is done to investigate to correlation with other stress factors. Table 7 shows that other stress factors are correlate to stress caused by financial among female students. Female students who are facing financial problem are those who are having problem with the family. Having financial problem may cause low self-esteem and creating barrier among friends as this group cannot follow activities among friends which required money spending. This situation leads to stress problem caused by study or academic stress as they cannot concentrate on their study.

Findings show that stress due to family and study are not related to academic performance (Table 5). It shows that students are good in handling stress problem. The 4th or last objective of the study is to determine ways of handling stress problem. Most of the students choose to sleep to release stress, followed by listen to music, go for eating, chatting with friends and do exercises. Somehow, some students choose to release the stress in negative way which nine (9) of the students choose smoking to release stress.
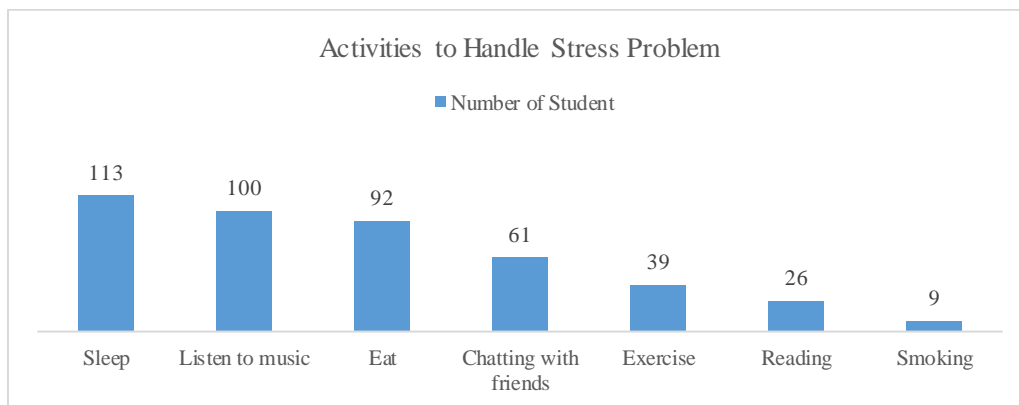

Figure 3: Activities to Handle Stress Problem by Students

Conclusion and Recommendation

There are 145 accounting students in UiTM Cawangan Melaka involved in the study including 30 male students and 115 female students.

Generally, there is no significant relationship between stress and academic performance among students. Somehow, looking deeply by gender, stress caused by friends' problem among male students is related to academic performance while stress caused by financial problem among female students is related to academic performance. Study on interrelationship between stress factors reveal that there are correlated to each other. Students who are facing problem with friends are those who are having problem with family hence having financial problem too. All these stress factors correlate with academic stress or stress caused by study as they cannot concentrate on study and do not have supportive surrounding around them.

Somehow, most accounting students are good in handling stress as it does not relate to their academic performance in general. Effect of stress such as mood swings, depression and others are handled wisely with sleep, listen to music, go for eating and other positive activities. Only some cases students choose to smoke.

As a recommendation, this study suggests a consultancy session for students who are facing stress problem with friends and financial support system for the students with financial problem such as scholarship, waqf and zakat.

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