

Stress Management Among Students in Universiti Teknologi Malaysia

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ABSTRACT

Stress is an unavoidable reality of life that everyone must deal with. Some stress is good where it can trigger our fight-or-flight mechanism to help in case of emergencies but too much stress can harm our health and body. Different people will have different responds to stress, therefore, it is important to learn what stresses us out and how to cope with it. The purpose of this research is to study stress management among UTM students. After a thorough survey, the following aspects were identified and are briefly discussed here: level of stress, causes of stress, effect of stress, methods to relieve stress and ability to cope with stress. These are all evidence-based techniques with good results in individual with or without stress.

Keywords: Stress management; fight-or-flight mechanism; acute stress; episodic acute stress; chronic stress

1. INTRODUCTION

Body reaction to any changes that requires adjustment or response is stress [1]. According to [2], the body reacts to this change with physical, mental, and emotional responses. Stress is a norm in life where might experience it from the surrounding environment, body and thoughts. Indeed, stress can affect one's body, thoughts, feeling and behaviour. This may lead to serious health problem such as heart disease, obesity and diabetes. There are several factors of stress such as finances, work, relationships, and other situations. Stress can be positive source of energy and essential to survival. When facing challenge, human react physically to protect us by activating "fight-or-flight" mode [3]. According to [4], human's body produce a large quantity of adrenaline, noradrenaline and chemicals cortisol. The factors of the environment may trigger this reaction. The stress level is determined by the environment or situation we face and tend to feel. Moreover, there is different type of stress such as acute stress, episodic acute stress and chronic stress [5]. Acute stress is common short-term stress that occurred. It is caused by keep thinking about the pressures of situations or events recently occurred, or upcoming in future.

Once the situations are resolved, the stress will be reduced or removed. The frequent occurrence of acute stress may lead to chronic stress that is more harmful. Besides, episodic acute stress is the people who frequently experience acute stress, or whose lives present frequent triggers of stress. A person who has too many commitments and poor organization has episodic stress

symptoms. It causes irritable and tense which can affect relationships. Apart from that, chronic stress is the most harmful type of stress. Occurrence of devastating events or situation such as major financial problem, dysfunctional family or unhappy relationship with loved one can cause chronic stress. It also can be caused by a traumatic experience early in life. Chronic stress can continue unnoticed. According to [6], people with chronic stress are likely to experience final breakdown that may lead to serious consequences such as heart disease, violent actions, strokes and even suicide. However, there are several stress managements according to [7] such as exercise, talking with family or close friends, meditation and healthy balanced diet. Techniques for stress management can be learnt from various sources such as self-improvement book, online resources or professional course. Besides, a counsellor or psychotherapist can cope with stressful individual.

2. LITERATURE REVIEW

Stress is a normal part of life. We can experience stress from our environment, emotion, body and thought. [8] defines stress as "harmful physical and emotional responses that occur when requirements of a job do not match the capabilities, resources or needs of the worker." [9] stated that stress is "perceived dynamic state involving uncertainty about something important". [10] defines stress as occurring when demands on an individual exceed his resources. He views that stress is generally considered to have an adverse effect on health and performance. Nevertheless, recent research has revealed that a slightest level of stress is crucial for having effective function. The

fact is the individual's reaction to stress which makes all the difference and may prove to be harmful.

There are many factors that can caused stress. [11] defined stress as any reaction of a body to a demand. Demands can be anything ranging from physical injury or tension to extreme heat or cold. Stressors are either internal or external stimuli that an individual believes to be demanding. Stressors can be psychologically, physically or socially inflicted. The body reacts to stress in sequence, according to three stages based on Selye's theory. The first is the alarm stage. Change in hormone levels with the expansion of the adrenal cortex, which is movement of the body's defense mechanisms is a typical physical reaction to the alarm stage. Meanwhile, psychological reactions to the alarm stage occur in three steps: alertness to the stressor, augmented anxiety levels, followed by task and defense-oriented behaviours [11].

The second phase of the body's reaction to stress is the resistance stage where the body tries to adapt to the stressor. Physical reactions induced during the alarm stage returns to normal and psychological reactions turn to coping mechanisms. If the person is ineffective in coping and this resistance stage is prolonged, the body moves into the next stage of exhaustion.

In the exhaustion stage, the body cannot resist stress any further. Swelling and depletion of adrenaline glands are the physical reactions which could damage to the lymphatic system. Psychological symptoms disorganize perceptions and thoughts. The body exhibits stress symptoms in biological and psychological symptoms. These indications are anxiety, irritability, headaches, gastrointestinal upset, high blood pressure and depressive symptoms [11]. Stress are categorized as acute and chronic stress. According to [12], chronic stress includes stress that is not short-term. The sources of chronic stress may be due to health concerns, lingering problems and financial difficulties. On the other hand, acute stress is caused by a reaction to a short-lived, urgent threat where this threat can either be real or perceived [13].

Research about stress among students has been established in order to help authority involved understand more about stress in students' life. [14] reported from their studies involved college students that female students were more stressed than men; there were no statistically significant differences between traditional and non-traditional students. In order to cope with stress, the most often used activities included talking to family and friends, involving leisure activities, and exercising. Less desirable coping strategies were drinking alcohol, smoking, and using illegal drugs. Stress among students gives out an adverse effect on physical and psychological health [15]. They add on that higher emotional intelligence was associated with lower perceived stress, and this association was partially mediated by both adaptive and maladaptive coping responses. Higher emotional intelligence was associated with greater use of adaptive coping and lower use of

maladaptive coping. In turn, these were negatively and positively (respectively) associated with perceived stress. Their findings suggest that interventions aimed at increasing emotional intelligence may help to reduce perceived stress for students in the helping disciplines.

Apart from that, [16] reported from their research, their participants stated that exercise and social events positively affected their ability to manage stress. Behavioural-based counselling techniques help individuals build social support, encourage productive activity and exercise greatly benefit those experiencing stress. Psychoeducation regarding stress and its effects on mental and physical health would also increase students' awareness and their motivation to use positive health behaviours to prevent stress.

Attending university can be a very exciting yet stressful time. It is crucial for students to master both mental and physical wellness as they attend school and make decisions that will affect their future. Therefore, the aim of this study is to study stress management among UTM students in term of their level of stress, causes and effect of their stress, methods to relieve stress and their ability to cope with stress.

3. METHODOLOGY / MATERIALS

A set of questionnaires are created and its data are analysed, come out together with the conclusion.

3.1. Instrumentation

The survey instrument for this study is a set of questionnaires filled in through google form. Firstly, a whole bunch of questions related to stress are created. All the questions created are multiple choices answers. The link of questionnaires is then being spread through WhatsApp group to be filled by the respondents as shown in Figure 1. The questionnaire is divided into two sections. The first part consists of general questions of students' background information. Meanwhile, the second part consists of the main questions that are related to the level of stress, causes of stress, effects of stress, methods to relieve stress and ability to cope with stress. Respondents can choose more than one option and they are not limited to how many options to choose for the causes of stress, effects of stress in different aspects, and methods to relieve stress only.

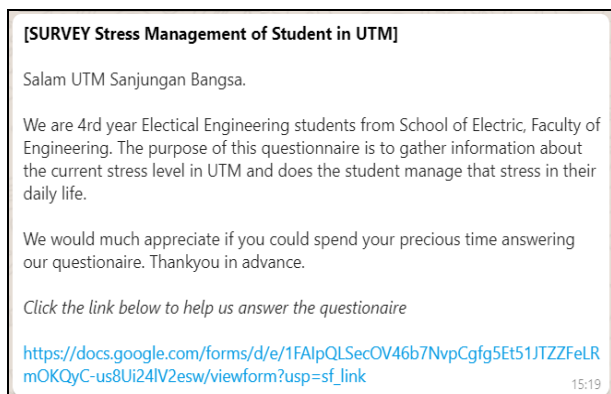


Figure 1 Link of questionnaires through WhatsApp group

3.2. Data Collection

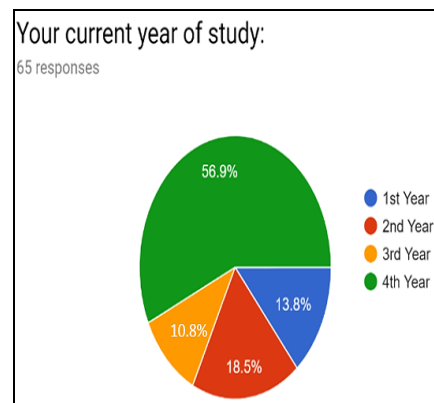
The data were collected from the respondents at Universiti Teknologi Malaysia. The data collection was involved into three phases. First, brainstorming, creating questions and its suitable possible answer for the set of questionnaires. Then, distributing the link of questionnaires to the respondents through WhatsApp group after finalization. Each respondent will only take 5 to 10 minutes to complete the survey. Finally, reviewing and analyzing the data collected, it comes out with the conclusion. The target is to gain as much responds as possible from the students. The time spent to spread the questionnaires to the respondents is about two weeks.

4. RESULTS AND FINDINGS

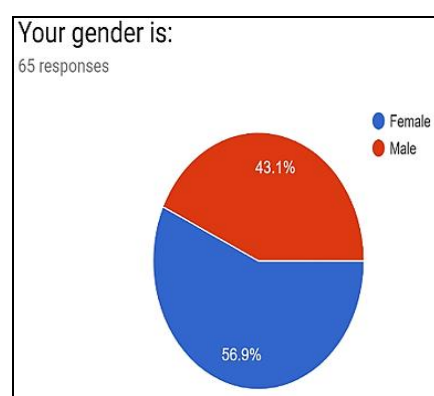
The results of the collected data are discussed. The findings that are based on surveys are presented.

4.1. Respondents' Background

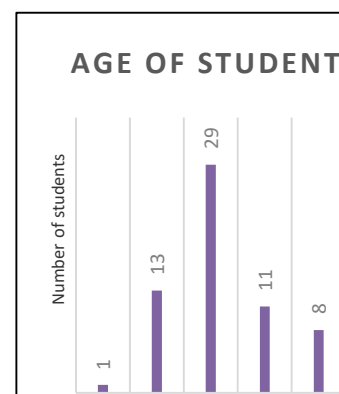
A total of 65 UTM students were involved in this study. Students who participated in this study are 1st year, 2nd year, 3rd year and 4th year students. According to Figure 2(a), majority students who is involved in this study are mostly 4th year students. Overall, most of the female students participated in this study, as depicted in Figure 2(b). As shown in Figure 2(c), all 65 respondents were of different age which is a range of 20 to 25 years old. The median of the respondents is 23 years old.



(a)



(b)



(c)

Figure 2 (a) Current year of study (b) gender and (c) age

4.2. Level of Stress on Daily Basis

It was found that the stress level among the respondents are quite severe as most of them had chosen the stress level value with a range of more than 5, with a sum up of

72.3%. Based on Figure 3, the highest stress level chosen by students are Level 7 with 24.6%, which is very close to the highest stress Level 10. It is then followed by Level 8 with 18.5%, Level 5 with 16.9% and Level 6 with 13.8%. In short, majority of students are stressed.

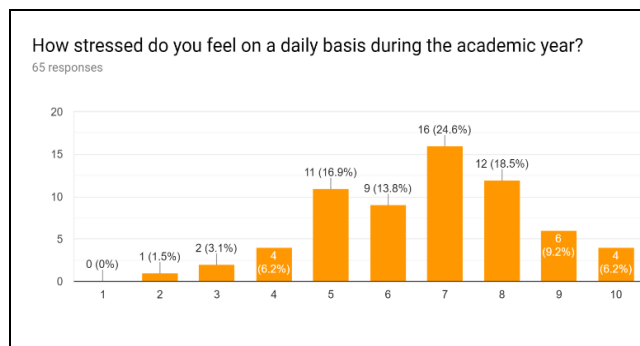


Figure 3 Stress Level on daily basis among students

4.2. Causes of Stress

Respondents can choose more than one option and they are not limited to how many options to choose the causes of

stress for this subsection, effects of stress in different aspects, and methods to relieve stress for the next two subsections, as mentioned before. Table 1 shows the causes of stress in the students' life. Based on the tabulated results in Table 1, almost all students find out their life to be stressful when it comes to studies issues, with a percentage of 90.8%. They might be stressed with their assignments, exams, tutorials, projects and lab experiments. The second highest cause of stress in their life is followed by financial issues which is by 44.6%. They might have difficulties in financial due to poor family background and poor spending habits. There are about 29.2% of students find that their involvement in clubs and organizations in university life to be stressful. From these results, students who are involved in clubs and organizations might have difficulties in balancing their life between studies and organization activities. However, there are only 1.5% of students who find it is stressful with future, time management and lecturer issues. From these, most of the students tend to have a neutral thinking of their future, time management and relationship with lecturers. Overall, the major issues that causes students to become stressful is their studies.

Table 1 Causes of Stress

Causes of Stress	No. of student	Percentage (%)
Studies issues	59	90.8
Financial issues	29	44.6
Family issues	10	15.4
Friends issues	17	26.2
Issues with the significant other (partner)	10	15.4
Work (job-related) issues	13	20.0
Health Related issues	6	9.2
Sports / Athletics activities issues	2	3.1
Involvement in clubs and organizations	19	29.2
Future	1	1.5
Time management issues	1	1.5
FYP	2	3.1
Lecturer issues	1	1.5

4.3. Effects of Stress

There are five different aspects in the effects of stress that will be discussed in this paper, which are behavioural, psychological, physical, cognitive and social. The students are allowed to choose more than one option of effects of stress in different aspects and they are not limited to any number of choices from the options in the questionnaire.

4.3.1. Behavioural effects

Figure 4 shows the result for the behavioural effects of stress among students. From the data, majority of the students tend to have changes in their sleeping patterns and are having the inability to rest, relax or let down. Both of these effects contribute to almost half of the percentage which is 46.2% with 30 student out of 65. Aside from that, there are about 23 students who tend to outburst in anger when they are stressed and 21 students experienced changes in eating habits. There is only 1 student stays quiet when stressed. He or she is not easily driven by outburst emotion. However, while being silent, it is

important that stressed persons go to find the ways to resolve their problems that are caused by the stress. In short, majority of students suffer from the behavioural effects of stress.

4.3.2. Psychological effects

Figure 5 shows the result for the psychological or emotional effects of stress among students. Based on Figure 5, feeling sad, moody, grief and depression is the highest psychological effect of stress chosen by 35 students. The second highest effect is followed by feeling of fear and anxiety which is experienced by 33 students out of 65. Besides that, 26 students felt helpless or hopeless when they are stressed. From these data, there is only 1 student who did not have any psychological effects of stress. Hence, this particular person is great in controlling his or her emotions and does not let the negative emotions to take over when stressed. Overall, stress indeed give out psychological effects to students.

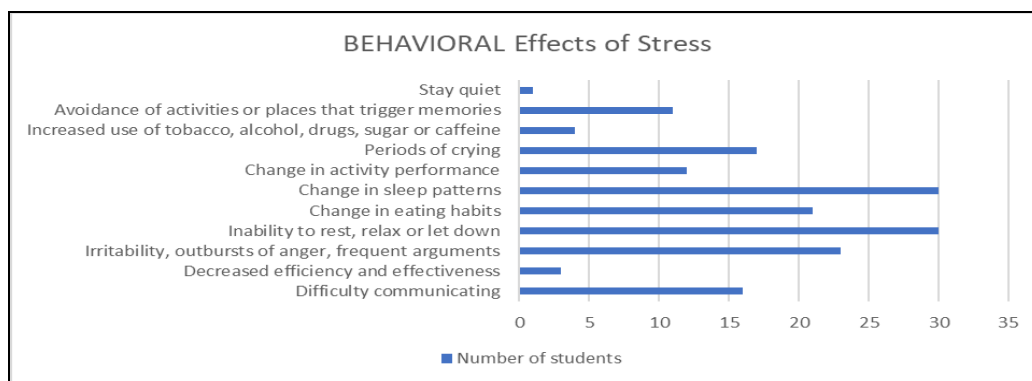


Figure 4 Behavioural effects of stress among students

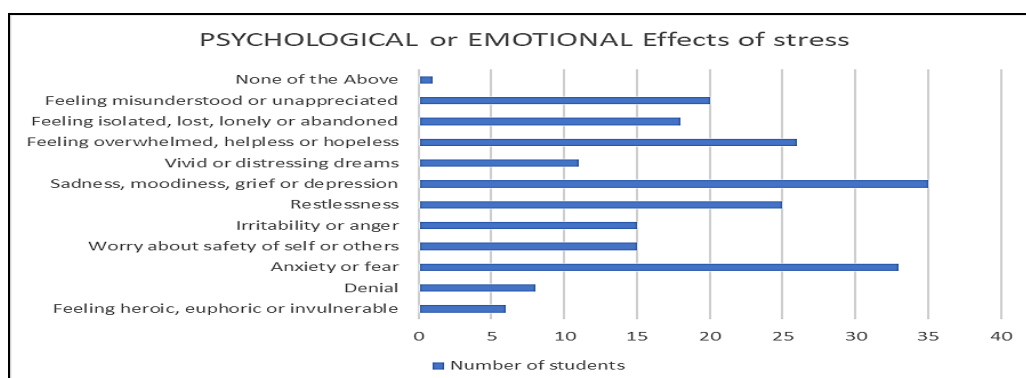


Figure 5 Psychological effects of stress among students

4.3.3. Physical effects

Figure 6 shows the result for the physical effects of stress among students. From the data shown, all students are having effects in term of their health. The highest physical effect is headache. There are about 30 students experiencing headache when stressed. The next highest effect is followed by fatigue by 25 students and increasing or decreasing in appetite by 22 students. These physical effects can lead to much bigger health problems. Hence, students should find ways to overcome them.

4.3.4. Cognitive effects

Figure 7 shows the result for the cognitive effects of stress among students. Cognitive is related to the process of thinking and reasoning. Based on Figure 7, the highest cognitive effect of stress chosen by students is slowness in

thinking or analyzing. Majority of the students are experiencing such effect with 37 students out of 65. The second highest effect is students tend to face difficulties in concentrating. Besides that, there are also 27 students that are facing memory problems or forgetfulness. However, there are also some students that does not face any of the cognitive effects which means that they are able to handle their stressful situations very well.

4.3.5. Social effects

The last effect that will be discussed is the social effects of stress among students as shown in Figure 8. Based on Figure 8, majority of students chose to withdraw or isolate themselves from people when they are stressed, with 30 students out of 65. We can say that they prefer to be alone when facing stressful situations. However, this action is unhealthy. It is better to search for friends or someone close to express feelings to.

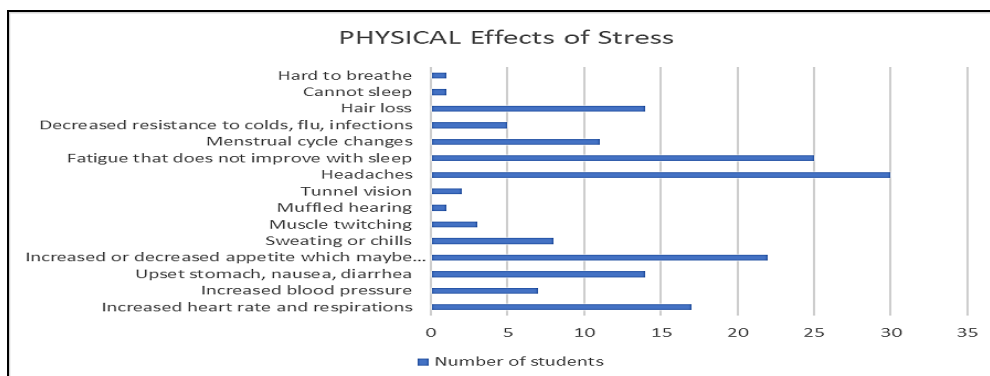


Figure 6 Physical effects of stress among students

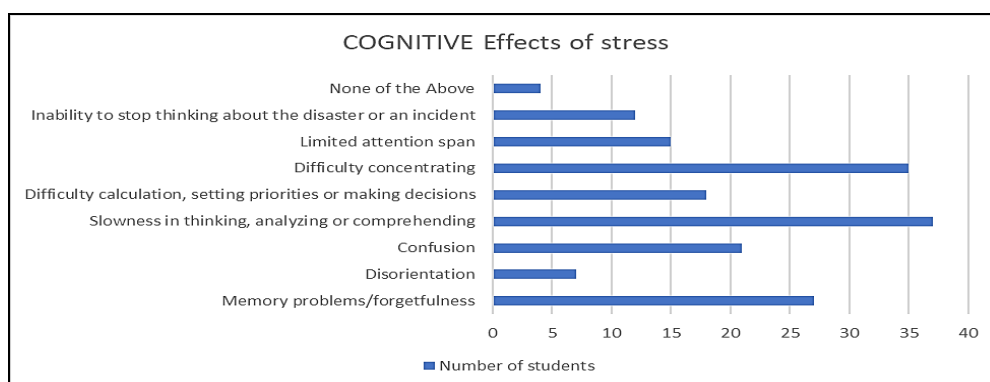


Figure 7 Cognitive effects of stress among studen

4.4. Method to Relieve Stress

There are many ways or methods to relieve stress. Figure 9 shows the personal methods to relieve stress among UTM students. Based on Figure 9, majority of students chose sleeping as their best method to relieve stress, with 46 students. Next, second highest alternative way of relieving stress is by talking to someone. This option is chosen by 38 out of 65 students. It is followed by eating which another method is chosen by 34 students. All in all, most students prefer to reduce the stress by sleeping.

4.5. Ability to Cope with Stress

The graph in Figure 10 illustrates the result of percentage of students' abilities to cope with stress when they are experiencing it. Based on Figure 10, most students are able to manage or handle their stressful situations as mostly students choose from a range that is more than 5, with a sum of 77%. Majority of the students are able to manage their own stressful situations by finding their own methods to relief stress in their daily life.

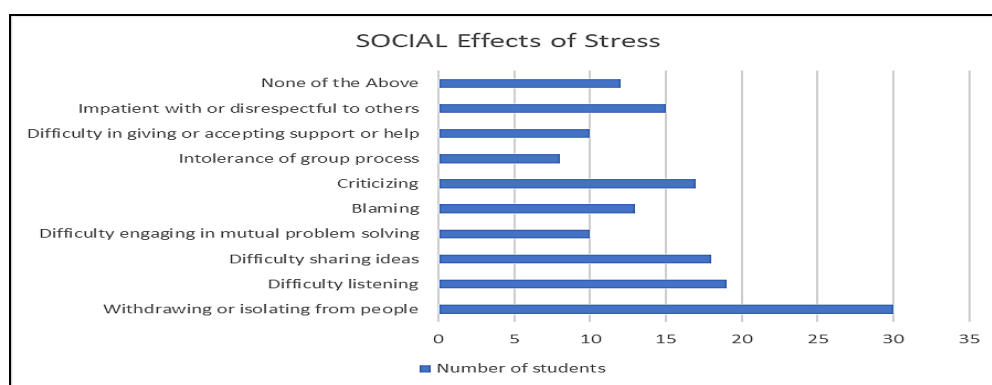


Figure 8 Social effects of stress among students

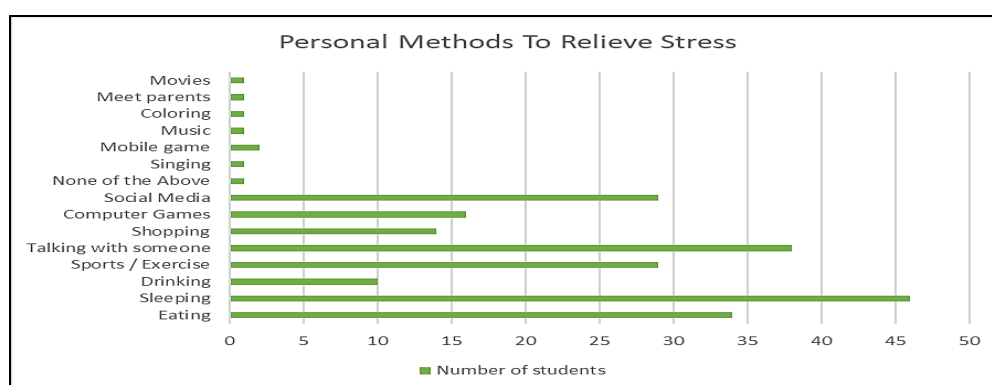


Figure 9 Personal methods to relieve stress among students

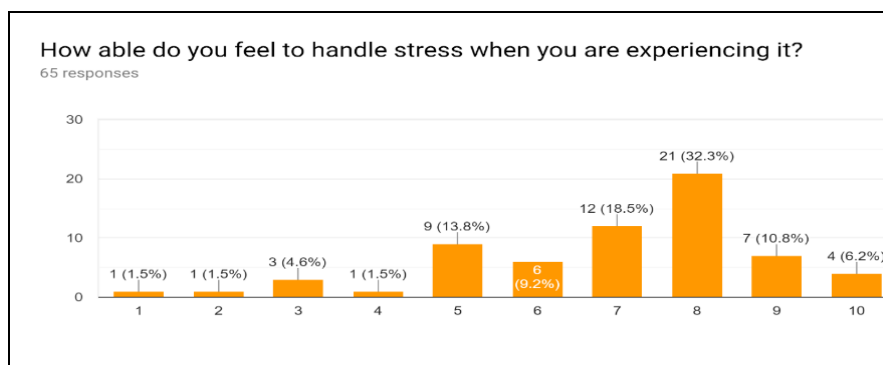


Figure 10 Ability to handle stress among students

5. CONCLUSION

Stress as a whole is a common issue in student life, it may be advantages to some but vice versa to others. If students are able to handle stress effectively, it can give them the motivation to strive for their betterment and goals. Otherwise, stress could exert problems to arise which will affect students' mentality and resulted harm to their well-being. As discussed in this paper, the cause of stress for students are related to their studies. Stress is causing them to be subjected to many bad effects towards their behaviour, psychology, physical, cognitive, and social aspects. This study also found that most students are able to cope with stress in their daily life. It is important for students to learn how to manage stress, otherwise it could influence their studies and incite bad grades. Lastly, stress can be good or bad and it depends on the person that is experiencing it including how well they cope with it. Students should always be vigilant with stress, so that they can better themselves and move forward in life.

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