

COGNITIVE SCIENCES AND HUMAN DEVELOPMENT

A Study on Stress Level and Coping Strategies among Undergraduate Students

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ABSTRACT

Feelings of stress are a part of university students' life. Stress is simply the body's response to changes that create taxing demands. There is a difference between eustress, which is a term for positive stress, and distress, which refers to negative stress. Coping mechanism plays a significant part to overcome or reduce the stress experienced by individuals. People use different types of coping strategies to overcome their stress. The purpose of the study was to study the relationship between stress and coping strategies among university students. Eighty- six university students participated in the study. A quantitative study utilizing a cross sectional non-probability sampling research design was used to gather data. The data was collected using a questionnaire with the addition of Perceived Stress Scale (PSS) and the Adolescent Coping Scale (ACS) were administered. The result of this study indicated that majority of the university students have moderate level of stress. There was a significant inverse relationship between stress level and coping strategies among undergraduates. In conclusion, some levels of stress can be good, as the right kind of stress encourages them towards change and growth. However, when students are unable to cope with stress, they can become a burden. It is recommended that students should be encouraged to take part in extra-curricular activities such as sports to reduce stress.

Keywords: Stress; coping strategies; university students

INTRODUCTION

Many people around the world experience stress irrespective of their age, race,

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© Faculty of Cognitive Sciences and Human Development, Universiti Malaysia Sarawak (UNIMAS) religion, colour, profession, academic background or surrounding environment (Esia-Donkoh, Yelkpieri & Esia-Donkoh, 2011). A study by Anspaugh, Hamrick and Rosato (2003) opined that stress comes in different forms and affects different types of people at different ages and walks of life. Environmental and personal events that cause stress are known as stressors. Different people perceive and react to stressors differently from other people. Stress has become part and parcel of life and it is unavoidable. It is known that life itself is stressrelated dependent on the individual's lifestyle and the type of their cultural development. In the opinion of Waghachavare, Dhumale, Kadam and Gore (2013), stress can be defined as "any challenge to homeostasis or to the body's internal sense of balance". Yusoff (2010) stated that stress is the "emotional disturbance or changes that are caused by the stressors". The level of stress could range from mild stress to severe stress depending on the individual.

In general, there are two categories of stress; eustress and distress. Eustress is a positive stress that motivates an individual to continue to work. This good stress encourages and facilitates learning where an ideal level of stress can boost learning ability (Yusoff, 2010). On the other hand, distress is a negative stress which occurs when the good stress becomes too much to handle. This negative stress prevents and suppresses learning and must be stopped and avoided.

Esia-Donkoh and colleagues (2011) found that workload at workplace and the demands of an individual's job sometimes exert too much pressure than a person can bear which directly leads them to stress. It is notable that over exposure of stress causes an individual to undergo emotional problem, physical and mental health problem, fatigue and even mental breakdown (Yusoff, 2010). The negative effects of stress can cause headache, sleep problems, anxiety, restlessness, sadness, drinking problem, falling into depression and many other health problems (Pariat, Rynjah, Joplin & Kharjana, 2014).

The Transactional Model of Stress and Coping Theory are the theoretical frameworks which emphasize appraisal to evaluate harm, threat and challenges, which results in the process of coping with stressful events (Lazarus & Folkman, 1984). The level of stress experienced in the form of thoughts, feelings, emotions and behaviours, as a result of external stressors, depends on appraisals of the situation which involves a judgement about whether internal or external demands exceed resources and ability to cope when demands exceed resources (Lazarus & Folkman, 1984).

Coping mechanism plays a significant part to overcome or reduce the stress experienced by individuals. Adler and Park (2003) stated that appropriate and effective coping may buffer the effect of stressful circumstances on physical and mental health of individual. People use different types of coping to overcome their stress. For example, Shaikh and colleagues (2004) reviewed that some people cope with the aid of drugs, alcohol, over-eating and smoking which are counterproductive while some cope by exercising, meditating and listening to music and it is proven to help reduce stress.

According to Lazarus and Folkman (1984), appraisal is a complex, high level cognitive activity and they posed that individuals evaluate a situation for relevance to their personal well-being (primary appraisal), and whether there is

anything they can do to cope with possible benefits or threats (secondary appraisal). Primary appraisal is the motivational significance of the situation and can be divided into three categories: irrelevant, where the stimuli has no implication for the person's well-being; benign-positive, where the outcome is deemed as positive with pleasurable emotions; and stressful, characterised by harm or loss, threat and challenge (Lazarus & Folkman, 1984).

Secondary appraisal is the evaluative judgement of the situation in terms of the significance of the event for their wellbeing and what can be done to alleviate and manage the situation with regards to possible coping and expected outcome. Secondary appraisal depends on how much control a person feels they have, actions likely to improve the situation, and the stakes involved (Lazarus & Folkman, 1987).

Primary and secondary appraisal cannot be considered as separate processes but are interdependent and influence each other. Another form of appraisal is reappraisal, which, on the basis of new information, can sometimes mediate the evaluation of the situation (Lazarus & Folkman, 1984), resulting in the outcome being modified to be less, or more, threatening.

University life is one of the most fun and exciting phase of young adulthood. It is a place where students gain opportunity to educational as well as intellectual growth. Unfortunately, young adults seem to be having difficulty in handling

life. Students encounter a lot of challenges in their daily life hence the idea of a vibrant university life is disclosed by these challenges which contribute to stress (Pariat et al., 2014). Many of them face hardship and difficulties in their studies and working life. For some university students, stress has become a way of living. Students are often challenged with many different personal and interpersonal challenges and the disability of these students to embrace the challenges and demands in university has turned into one of the most common reasons for students to withdraw from their tertiary education (Gerdes & Mallinckrodt as cited in Abdullah, Elias, Uli & Mahyuddin, 2010, p. 378).

Aysan, Thompson and Hamarat (2001) in their study found that the juniors tend to have higher reaction to stress compared to the seniors and this is due to their adjustment to the new university life. Some causes of stress among the students including heavy workload, unclear assignments, having difficulty to understand the context, feeling of incompetence, poor motivation to learn, participation in class presentation, relationship with family and friends, time pressures, and sleeping habits may affect some students' mental health. Mori (2000) reported that for those students who hail from a low socioeconomic background, financial support does not always come easy for them and this in turn causes them to feel pressured and experience stress. High level of stress among undergraduates can cause a drop in the educational endeavours and can affect both the mental and physical

health of the university students. Relationship problems that students face both in university and at home is one of the factors that contributes to stress (Shaikh et al., 2004).

David's study indicated that university students are more stressful than those individuals at any other stages of their life (David as cited in Kumar & Bhukar, 2013, p. 6). These stressful students were also found to be more likely to be engaged in negative activities such as binge drinking, eating junk foods and not exercising regularly (Ostwald & Riddock, 2007). Certain students find it difficult to cope with the stress that they experience and tend to lag behind while some other students see it as a challenge for them to work hard. Coping is seen as a stabilizing factor that may support an individual in psychosocial adaptation during stressful situations (Bamuhair et al., 2015). Using the correct coping style effectively will help students in reducing their stress level (Yusoff, 2010). It is also known to influence an individual's experience of stress. Turashvili and Japaridze (2013) penned that university students will be able to decrease the negative effect of stress if they know how to cope with them well.

PROBLEM STATEMENT

Many students experience some form of stress depending on their environment and academic work load. Researchers found that attending tertiary education for the first time is a stressful period for many university freshmen (Dyson & Rank as cited in Abdullah et al., 2010, p. 378). Stress could adversely affect both mental and physical well-being of students, besides the deterioration of their academic performance. A research by Randall et al. (2000) indicated that high stress levels had not only interfered with the students' performance, but also exposed many of them to mental and physical health risks. Most of the students undergo excessive assignments, time pressure, personal problems, finance difficulties and relationship with faculty which also causes stress (Ross, Niebling & Heckert as cited in Oswalt & Riddock, 2007, p. 25).

Furthermore, some of the findings on this topic were contradicting. For example, some researchers stated that females are more stressed and scored higher in stress inventory than male (Thawabieh & Qaisy, 2012; Kumar & Bhukar, 2013). Yet, other studies showed that male were more stressful due to poor coping strategies (Shaikh et al., 2004; Pariat et al., 2014). There were also little to no research conducted on the stress level and ethnicity among university students in Malaysia (Madlan, Bahari & Ardillah, 2012; Johari AB & Noor Hassim, 2009).

Most studies reporting on stress level and coping strategies are from Western countries. There are few known studies on undergraduates in Sarawak, Malaysia. The differences in culture and age group play a difference in values and lifestyles which would influence the outcome of the measures of these variables. Numerous studies were conducted to study about stress but there is no emphasis on the effective coping strategies. It may be anticipated that this research will highlight the issue of identifying the stress level and coping strategies that university students adopt in order to challenge these stressful situations.

Hence, the objectives of the study are to assess the level of stress and coping strategies among undergraduates, stress level and coping strategy relationships and lastly identify stress levels and coping strategy based on their gender and ethnic group.

METHOD

A quantitative study utilizing a cross sectional non-probability sampling research design was used to gather data from eighty- six Cognitive Science undergraduates in a public university in Malaysia. Data was gathered using a self-administered questionnaire. Both English and Bahasa Malaysia versions of the questionnaire were provided to the respondents. The questionnaire took about 15 minutes to complete. Only those respondents willing to participate in the study were included. Participants were informed about the purpose of the study and was assured confidentiality.

The bilingual questionnaire consists of three sections. Demographic profiles of respondents were incorporated in Section A. Section B consist of the Perceived Stress Scale (PSS) which was developed by Cohen, Kamarck and Mermelstein (1983) and is used to estimate the level of perceived stress of an individual. Respondents were required to encircle the appropriate score based on a scale ranging from 0 (Never) to 4 (Very often). Section C contained the Adolescent Coping Scale (ACS) developed by Frydenberg and Lewis (1993) and is used to measure the coping process. It consists of three dimensions of coping strategies scale which comprises of productive coping, non-productive coping and reference to others coping. Respondents were required to choose the appropriate score for 35 statements based on a scale ranging from 1 (Doesn't do it at all) to 5 (Used great deal). SPSS was used for data analysis. Pearson correlation, Independent t-test and One-way ANNOVA were used for data analysis. One of the limitations of this current study is that this research involves only the final year Cognitive Science undergraduates, hence the findings may not be generalized.

RESULTS

Demographic profile

Majority (53.5%) of the respondents were in the age group of 23 and above, whilst 46.5% were 21 to 22 years old. There were 60 female respondents which takes up 69.8% whereas only 26 male respondents which takes up 30.2% in this study. Majority of the ethnic was Malay (45.3%), followed by Chinese (23.3%), Iban (12.8%) and other ethnics such as Melanau, Dayak, Bidayuh (12.8%). Indian respondents were the least in this study (5.8%).

Stress level among respondents



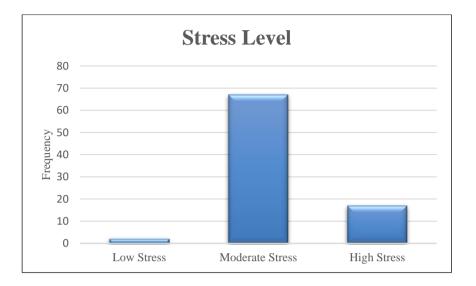


Figure 1: Bar chart of stress level among respondents

This bar chart depicts that among those students who have stress, about 67 of them were having moderate stress (46 of them were female and 21 of them were male) followed by 17 respondents with high stress (13 of them were female and 4 of them were male) and 2 respondents with low stress (1 male and 1 female).

Association between Stress Level and Coping Strategies among Respondents

A vast majority of the students experienced moderate levels of stress. Pearson's correlation between stress levels and coping strategies showed a significant negative correlation (r=-0.57, p<0.05). Therefore, the result of this study indicates an inverse correlation where it shows that the undergraduates who possess low stress level were likely to have a better stress coping strategy.

The correlation analysis shows that stress level has weak relationship with nonproductive coping (r = 0.431), stress level has moderate relationship with productive coping (r = 0.671), and stress level has strong relationship with reference to others coping (r = 0.773).

Findings of this study also indicates that the coping strategy most preferred by undergraduates is the reference to others methods of coping (e.g., meeting with friends, asking advice from others, talk to people to get emotional support) followed by productive coping (e.g., play sport to cope, looking on the bright side of things) and the least preferred is the non-productive coping (e.g., avoid being with other people, feel guilty, worry about current situation) when dealing with stress.

Association between Stress Level and Gender among Respondents

Findings of association between stress level and gender showed that there is no significant differences found between male (M = 2.12, SD = .43) and female (M

=2.20, SD =.44) condition; t (84) = .819, p = .415.

Association between Stress Level and Ethnicity among Respondents

Findings of the association between stress levels according to ethnic group showed that respondents of the Iban ethnicity had the highest stress level as compared to respondents of other ethnicities followed by Malay, Indian, Others and Chinese. However, there is no significant difference was found between stress levels of each ethnic groups [F (4, 81) = .580, p = .678).

DISCUSSIONS

It can be said that most of the students who attend university face a lot of pressure in terms of workload, stress from family, friends and lecturers to work regularly and properly, to maintain their good quality work and also to complete their assignments on time without fail (Irshad, Saleem & Mahmood, 2015). These undergraduates are considered to be a fortunate generation because they are able to attend university, nevertheless it is time we face reality that these undergraduates are the ones who go through continuous stress due to changes and survival during their period of study in university. All of these stressors may put university students at a greater risk in developing some problems (Hung, 2011). The main purpose of this study is to investigate the stress level and the coping strategies that students use to deal and handle with the situations and resolve the issues.

The result of this study indicated that majority of the university students experienced moderate level of stress followed by high level of stress and low level of stress. There was a significant relationship between stress level and coping strategies among undergraduates.

Students used different coping strategies when under stress. The most preferred approach to deal with stress was meeting with friends, asking advice from others, talk to people to get emotional support (denoted as other methods of coping with stress). The next most preferred approach to deal with stress was to play games and involve in sports activities (denoted as productive coping). The least method to tackle stress was to avoid being with other people, feel guilty and to worry about current situation (denoted as non-productive coping).

It was observed in this research that stress level is a concern among undergraduates in this university. To assess the stress level among students, scores were categorized into 'low', 'moderate' and 'high' stress and this research indicated that moderate and high stress levels were present in majority of the students. This outcome is supported by a study done by Singh and Kholi (2015) among nursing students. According to Fan and Wang's study (as cited in Abdullah et al. 2011), the stress level amongst the final year students could be because of the higher level of university education which may cause more academic stress towards the students. Moreover, their contemplations about their job prospects as they graduate (Wang, 2005) and in search of for internships and jobs are the identified stressors among students (Li & Lin, 2003).

The outcome of this research also indicated that there is no significant relationship between stress level and gender among the undergraduates. This shows that both the male and female experiences an equal amount of stress. This result contradicts with past research (Shaikh et al., 2004; Pariat et al., 2014) which found that boys had higher level of stress compared to girls while some other studies proved that girls have higher level of stress compared to boys (Thawabieh & Qaisy, 2012; Kumar & Bhukar, 2013). This may have occurred due to the sample that was not large enough. The argument by Misigo (2015) that both male and female equally face a number of challenges in their everyday life as a result of social position and roles contribute to stress, could perhaps explain the finding of this study.

Present study shows that there is no significant relationship between stress level and ethnicity. Levels of acculturation and socio-demographic uniqueness for the students of each of these ethnics has its own distinctive issues and challenges to handle (Turner & Smith, 2015). In a study by Chavez and French (2007), they found out that stereotype, confirmation, discrimination and conformity within one's own subgroup are all stressors university students have acknowledged in the setting of their ethnicity or race. Student's view of discrimination, particularly discrimination from their faculty, staffs and administration members that is directed towards undergraduates of colour is a significant stress triggering factor for minority and underrepresented university undergraduates (Hwang & Goto, 2008).

A research by Shaikhand colleagues (2004), stated that the most common reasons of stress among undergraduates are usually related to exams and academics, relationship problems in university or family, homesickness and even due to financial problems. Pariat and colleagues (2014) in their findings, made a conclusion that those students with good coping skills tend to have low psychological problems and those who do not have healthy coping strategies are more likely to have a greater risk of health problems or even antisocial behaviours. In such cases, students might develop issues with anxiety, stress overload, depression, and social conflicts.

In conclusion, feelings of stress are a part of university students' life. Some levels of stress can be good, as the right kind of stress encourages them toward change and growth. However, when students are unable to cope with stress, they can become a burden. It is recommended that students should be encouraged to take part in extra-curricular activities such as sports to reduce stress.

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