

## Levels of Stress, Anxiety, Depression and Thoughts of Non-Suicidal Self-Injury Behavior among University Students

Mohamad, M. S., Subhi, N., Chong, S. T. & Kamaluddin, M. R.  
Center for Research in Psychology and Human Well-Being, Faculty of Social Science and Humanities, The National University of Malaysia, 43600 Bangi, Selangor, Malaysia  
Corresponding Author Email: msuhaimi@ukm.edu.my

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### Abstract

Students are often exposed to various types of stress that lead to the occurrence of extreme anxiety leading to the occurrence of non-suicidal self-injury (NSSI). This study aimed to examine the relationship between stress levels, anxiety levels and self-injurious behaviours among students. This quantitative study uses a survey approach on a total of 100 university students selected as respondents using a simple sampling technique. For data collection using a questionnaire that contains two instruments, namely the Depression, Anxiety and Stress Scale (DASS-21) and the NSSI Thinking Scale. The results of the study found that the students' anxiety level was higher than the students' stress level and depression level. While the tendency to NSSI shows that the majority of students have never think about the NSSI behaviour. Significant difference can be seen between the level of anxiety and the level of depression between the genders of students. However, there is a significant differences between gender and NSSI thinking. It is hoped that this study can be used as a guide to students and university management in developing mental health policies and programs that can increase awareness of mental health, especially on stress, anxiety, depression and self-injurious behaviour among students in order to live a better campus life.

**Keywords:** Stress, Anxiety, Depression, NSSI, University Student

### Introduction

Mental health problems in Malaysia are becoming more and more worrying every day. This problem usually stems from the problem of excessive stress among students in educational institutions. The stress experienced by students can also be linked to the relationship of trauma experiences that they have experienced. A trauma experience is a situation or event that is painful, frustrating, painful and hurtful experienced by an individual in life. This traumatic experience may be something that has just happened or has been around for a long time that is often remembered by individuals. It can also be a source of fear for a person to do something that leads to memories of past events. These traumatic experiences disrupt

emotions that can affect mental health. The traumatic experience that a student may experience is like an individual who has seen his mother beaten and abused by his father to the point of leaving bruises thus has affected the family institution. Also, the event of seeing a good friend being bullied to death and more. Typically, these traumatic experiences leave a deep impression and can lead to problems of stress, anxiety and depression to a person. Students who have past experiences leading to emotional disorders can leave an impact on lessons and learning on campus. According to Ain et al (2016), university students indeed experience high stress when showered with various assignments given by lecturers and at the same time, they also review the lessons of each subject for test and quizzes.

Stress can be experienced by every human being so that it can cause changes in the human automatic nervous system. This is due to mental tension or physical conditions that occur in a person. Stress can be seen from two angles namely physical and psychological. The body of a human being can be seen as a physical definition. While, as for the psychological definition it can be seen through the way human sees and gives picture of their lives through an event that occurs in their environment and see how they accept those situations in reality. Thus, there is a gap faced by humans between physical or psychological demands with biological resources, as well as psychological and social systems whether realistically occurring or belief alone has led to the result of internal stress (Branon & Feist, 2010). Stress can be defined as a non-specific reaction by an individual's self-due to the load that befalls him or her (Santrock, 2003). While psychological stress refers to a general concept in maladaptive psychological functioning to cope with stressful life events (Ridner, 2004).

According to Mirowsky and Ross (2007), psychological stress is defined as a state of emotional distress characterized by depressive symptoms (e.g., loss of interest, sadness, hopelessness) and anxiety (e.g., fatigue, feeling tense). Among students, their stress particularly stem from financial problems. This is due to their need to pay for the tuition fees, rental, living allowances and other related cost in acquiring an education. According to a study from Jogaratnam and Buchanan (2004) shows that financial problems are a source of stress among students. The results of the study found that students allocate 10 to 40 hours for work to finance daily expenses and tuition fees. In addition, stress can also be caused by career factors. This can be proven through a study conducted by Mastura, Fadhilah & Nor Akma (2007) which aims to analyse the factors that cause stress among students at Universiti Teknologi Malaysia (UTM). This study shows that the main factor that causes stress among students is securing a career. This is due to students who lack knowledge on career preparation, how to write a resume, English proficiency when working, career challenges and career opportunities in the future.

Student who experienced a lot of problems during campus life can trigger anxiety and depression due to constant stress. The mental health problems of university students are due to the low level of mental health knowledge (Nurhaila et al., 2011). According to Suhaimi & Rozita (2018), male students are seen to have higher levels of depression than female students and female students have higher levels of mental health. In other words, female students have better mental health compared to male students in the university. The issue of mental health between the sexes of both male and female students is highly relevant nowadays due to the dominance of female students and the reduction of male students in universities across the country. According to Suhaimi & Rozita (2018) anxiety is an

interpretation made of the form of stress or burden found in the environment either before, after or during the individual facing the stress. Gould and Krane (1992) in turn say that anxiety is an emotional or cognitive dimension of awakening. According to Tseng (2001), anxiety is a branch of the process that encompasses threats, situations of anxiety and stress. These anxiety processes begin with a sequence of cognitive, physiological, effective and even behavioural. Therefore, when the internal and external pressures are high, then it will drive the process until the feeling of anxiety starts to dominate the person and the person will start to feel uncomfortable. Such individuals will live in a depressed state and not be able to live their lives perfectly so they tend to experience anxiety and depression problems that lead to self-harming thoughts without suicidal intent (NSSI).

Depression can be defined as a disease that greatly burdens individuals as it can affect their well-being and social cycle (Romer & Walker, 2007). All such individuals have a very large potential to suffer from depression which is a mental related illness (Carle et al., 2008). This depression can clearly be found at an early age as well as for a lifetime if not treated immediately. It also clearly disrupts the emotional stability and functioning of life which is declining and deteriorating due to depression. An individual's morale and self-efficacy can fade and lose motivation to move on (Romer & Walker, 2007). While self-injurious behaviour is increasing as the country develops and affects many members of society (Rodham & Hawton, 2009). NSSI is defined as intentional behaviour, socially unacceptable and without carrying intent to commit suicide, that causes direct damage to a person's body tissues (Nock 2010). NSSI among students, defined as behaviour that intentionally causes immediate injury and tissue damage, is performed without suicidal intent, and is not socially accepted (Taliaferro & Muehlenkamp, 2014).

Psychological distress is a common mental health problem in communities (Marchand, Drapeau & Beaulieu- Prévost, 2012). Psychological distress is seen as an emotional condition that involves a negative view of oneself, others and the environment. Another characteristic of psychological distress is feeling an unpleasant subjective state such as tense, anxious, worthless and irritable (Ross & Ross, 2003). These subjective conditions can reduce an individual's emotional resilience and have an impact on the ability to enjoy life as well as the difficulty of coping with pain, frustration and sadness. Psychological distress can be seen as a continuum in which a person can change from experiencing well-being to experiencing stress at any time throughout in life (Pratt et al., 2007). Vila Masse (2017) found that those who experience psychological stress can be explained in six general conditions namely pessimism about the future, pain and depression, self-deprecation, social isolation, somatization and isolation. According to Ridner (2004), psychological stress is a unique feeling of discomfort as well as an emotional state experienced by an individual in response to a specific stressor that affects the danger either temporarily or permanently to the individual. In turn, this experienced psychological stress can cause individuals to use maladaptive coping strategies by engaging in NSSI. According to Beatens et al (2014), his study findings indicate that there is a relationship between NSSI behaviour and psychological stress in which individuals involved in NSSI show higher levels of psychological stress than individuals not involved in NSSI.

Although there are many studies conducted regarding stress, anxiety levels, depression levels among students, there are no studies that emphasize the tendency of a person to think of self-harm when experiencing high stress, anxiety and depression. Therefore, the study to be conducted by this researcher is to find out whether there are differences between stress, anxiety, depression and NSSI thinking between the genders of university students.

### **Methodology**

This study used a quantitative research design particularly via survey method on students at the Faculty of Social Sciences and Humanities, The National University of Malaysia. A total of 100 undergraduate students were selected as study respondents through a simple sampling technique. Each respondent was given a set of questionnaires containing 2 instruments namely Depression Test, Anxiety, Stress Scale (DASS-21) and NSSI Thinking Scale.

#### *Depression, Anxiety, Stress Scale (DASS-21)*

The test contained 21 questions related to stress, anxiety and depression experienced. This test tool aims to measure students' level of stress or strain as well as anxiety and depression. Through this test, students can detect the level of stress, anxiety and depression experienced within 1 month. This test uses a 4-point Likert Scale where the options are 0 = Never, 1 = Sometimes, 2 = Often and 3 = Almost Always. There are 3 Sub-scales in this test namely Depression, Anxiety and Stress. Each sub-scale has 7 items. If the total score is higher it indicates worsening of the problem symptoms for each sub-scale. The Cronbach's Alpha value for this test instrument is 0.94.

#### *NSSI Thinking Scale*

The NSSI thinking scale was developed by the researchers themselves based on past studies to see rationally whether university students know that self-injury is wrong and has a negative impact on their lives. This scale has 20 positive items and uses a 5-point Likert Scale. Likert scale options are 1 = Strongly Disagree, 2 = Disagree, 3 = Not Sure, 4 = Agree and 5 = Strongly Agree. If the respondent has a high total score indicates the existence of irrational thinking towards NSSI behaviour. The Cronbach's Alpha value for this scale is 0.96.

#### *Data Analysis*

The data of this study were analysed descriptively and inferentially using SPSS software version 21. The frequency and percentage of demographic profiles of respondents were obtained through descriptive analysis, while inferential analysis involved t-test to see the differences between the variables studied.

### **Results**

#### *Descriptive Results*

Based on Table 1, the majority of respondents in this study are female, which is 73% and 27% male. Based on age, it was found that 39% of students were 22 years old, followed by 28% of students were 23 years old, 24% of students were 21 years old and only 6% were 20 years old. If we look at the year of study, it is found to be almost balanced where year 1 students are 33%, year 2 is 35% and year 3 is 32%. The majority of respondents are Malays which is 96% and only 2% are Chinese, 1% Indian and 1% others. Almost all respondents of this study are Muslim (97%) and the remaining are Hindu (1%), Buddhist (1%), and also others (1%).

Table 1. Respondent's Demography Profile

Demography	Frequency (n)	Percentage (%)
<b>Gender</b>		
Male	27	27
Female	73	73
<b>Age (year)</b>		
19	1	1
20	6	6
21	24	24
22	39	39
23	28	28
26	1	1
34	1	1
<b>Year of Study</b>		
Year 1	33	33
Year 2	35	35
Year 3	32	32
<b>Ethnic</b>		
Malay	96	96
Chinese	2	2
Indian	1	1
Others	1	1
<b>Religion</b>		
Islam	97	97
Hindu	1	1
Buddhist	1	1
Others	1	1

***n* = 100**

### *Stress, Anxiety and Depression Level Scores*

Based on the descriptive analysis of the DASS-21 Test, it was found that the anxiety level score was higher than the stress level and depression level among university students (Table 2). In general there were 28% of respondents in this study showed high levels of anxiety, followed by 26% high levels of stress and there were 17% of respondents had high depression scores.

TABLE 2. Respondents' DASS-21 Score Result

Sub-scale	Level of Test		
	Low	Moderate	High
Stress scale	43	31	26
Anxiety scale	43	29	28
Depression scale	58	25	17

n = 100

*NSSI Thinking Behaviour*

Based on Table 3 shows the descriptive data for NSSI thinking among the respondents. It was found that 88% of the respondents never thought of NSSI but the remaining 12% did have a thought of NSSI.

TABLE 3. Respondents' NSSI Thinking Frequency

Thinking of NSSI	Frequency (n)	Percentage (%)
No	88	88
Yes	12	12

n = 100

*Inferential Result*

In this study, t-test analysis was conducted to see the difference between gender with the level of stress, anxiety and depression as well as NSSI thinking as Table 4. However, t-test analysis found that the level of anxiety and depression have significant differences between gender of respondents at  $p < 0.05$ . While there is no difference between the level of stress and thinking of NSSI with gender of the respondents.

TABLE 4. Differences between Gender and the Level of Stress, Anxiety, Depression and Thinking of NSSI

No.	Variables	Gender	N	min	standard deviation	t value	df	Significant
1	Level of Stress	Male	27	1.72	0.84	1.307	98	0.066
		Female	73	2.00	0.82			
2	Level of Anxiety	Male	27	1.81	0.83	1.463	98	0.025*
		Female	73	1.86	0.87			
3	Level of Depression	Male	27	2.30	0.874	1.050	98	0.029*
		Female	73	2.10	0.834			
4	Thinking of NSSI	Male	27	1.78	0.84	1.044	98	0.075
		Female	73	1.92	0.83			

n=100

**Discussion and Implications of The Study**

Based on the results of this study found that 12% of university students have NSSI thinking. When compared with the prevalence of NSSI thinking of secondary school students which is 15.1% in Malaysia (Mohamad et al., 2021), the percentage of this study finding is slightly lower. Yet this does not mean that self-harming thoughts do not occur among university students. Based on the DASS-21 Test score, it was found that there were 12% of university students had depression and 28% had a high score for anxiety and 26% had a high stress score. The results of this study are seen in line with previous studies that found anxiety scores were higher than stress and depression scores among students (Hazuad & Rahiah, 2014; Nurhaila et al., 2011; Suhaimi & Rozita, 2018).

If viewed from the aspect of the level of anxiety, it was found that female students have a higher mean score than male students. As for the aspect of depression, male students have a higher mean score than female students. The results of the DASS-21 Test screening data show an indicator that there are problems with anxiety and depression among students and it provides a significant difference between the sexes of students. These results are in line with previous studies (Baetens et al., 2014; Muehlenkamp & Gutierrez, 2007; Ross & Heath, 2002). Various factors can actually be the cause of anxiety, depression and NSSI thinking among university students. Hazuad & Rahiah (2014) identified that interpersonal relationship problems, academic workload, time management stress, environment, financial aspects, safety, family relationships and involvement in outdoor activities contribute to anxiety and depression of university students. From the aspect of NSSI thinking, this study found no significant differences between the sexes. The results of this study contradict the results of the study of Whitlock et al (2011) who stated females students were more likely than males to self-injure because they were upset or in hopes that someone would notice them. If we look at the age of the respondents of this study, the average age is in their early 20s and according to the level of psychosocial development of Eric Erikson (Dunkel & Harbke, 2016), at an early age a person is expected to face a sense of relationship complexity and value of tenderness and also love issue (Dunkel & Harbke, 2016). Therefore, it is not surprising if university students have a tendency to NSSI behavior because they want to release stress due to developmental issues that they are facing.

Therefore, the results of this study should be taken seriously because if the data screening of mental health problems such as anxiety level, depression level and NSSI thinking is not given appropriate intervention treatment this will lead to a more serious mental health problems that can cause suicidal behaviour to happen. Psychological counselling services and social work assistance should be provided to university students who are at high risk of mental disorders. Additionally, in a pandemic threat situation of Covid-19 makes mental health problems even more worst. Students' Mental Health Policy needs to be developed and enforced so that mental health problems among university students can be controlled and given early prevention measures. This policy should take into account all aspects of the mental health of university students and provide mental health services at the residential college and faculty level to ensure that students affected by life on campus can get out of the shackles of mental problems and avoid the occurrence of NSSI thinking.

### **Conclusion**

Based on the results of this study, NSSI thinking do occur among university students even though it is not serious. But early preventive measures should also be taken based on mental health screening tests, DASS-21 found that there are a handful of students who have problems with stress, anxiety and depression. If this condition is not controlled properly it can lead to more serious mental health problems and at the same time expose the dangers of NSSI behavior to university students. All parties on campus need to be more aware of NSSI's mental problems and behavioural tendencies in order to develop an ecosystem to help university students in need. The top management of the university needs to implement an inclusive mental health policy and conduct periodic monitoring involving collaboration with off-campus agencies to provide comprehensive mental health services. If these services can be provided with quality, the issue of students' mental problems such as stress, anxiety, depression and NSSI thoughts can be overcome through early prevention. This situation is

important in producing a sustainable and healthy human capital of the country in ensuring work productivity in the future.

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