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MIND MATTERS: AN APPROACH TO INCREASE UNDERSTANDING OF MENTAL ILLNESS AMONG THE ENGINEERING STUDENTS

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ABSTRACT

Students with mental health issues often encounter a variety of difficult challenges at institutions of higher education students with good mental health are more successful in school. Students with good mental health can cope with the normal stress of life, can work productively and able to make a contribution to their community. However, rapidly changing society has been impacted on students' mental health. Mental health may be deteriorated and negatively influence on their studied if it is not controlled. This article reports on a study of the mental health level comparison among the engineering and non-engineering students. Based on the DASS model, the most dominant element in student mental health problems were highlighted in three elements, namely depression, anxiety and stress. Also, students preferred method for dealing with mental health problems were identified through this study. A total number of 180 students from five faculties in UTHM were random selected to be the samples. The results showed that the levels of mental health among the students are normal. Besides, the results also showed that there is no significant difference in mental health level between engineering and non-engineering students. The method of choice to handle mental health problems for the students are closer to the Gods, but taking medicines is the least preferred method. In conclusion, the role of the university counselling unit should be reinforced, creating a module of Mental Health Education at the tertiary education level, and to diversify infrastructure for student's recreational facilities.

Keywords: mental health level, engineering and non-engineering student and DASS.

INTRODUCTION

Mental health refers to the ways of thinking, feeling and behavior of an individual in his/her daily lives. A person with a healthy mental health can recognize his/her own ability, willing to accept failure, able to control his/her emotions and appreciate himself/herself [1]. Mental health is also related to stress, depression and anxiety. Stress has become the core health problems that are common to all groups. It can affect the person with behavior and emotion change when they fail to overcome with the stress. In the long run, the person would be exposed to a number of diseases such as heart disease, high blood pressure and cancer. This will interfere with concentration and performance of a work.

Mental health can be considered as a very significant aspect of every phase of human life as the importance of physical health. Mental health issues often occur among students and create negative impact on students. About three million people in this country who suffer from mental health problems are potentially to have mental illness if they do not receive any treatment [2]. The depression is predicting to become a cause of mental illness will rise to the second top of disease after the ischemic heart disease in the world by 2020 [3]. Also, the cases of mental and behavioral disorders are expected to increase from 11% to 15% globally [3].

In Malaysia, the findings of the National Health and Morbidity Survey that conducted by the Ministry of Health in 2011 showed that the prevalence of depression is 1.8%, and the prevalence of anxiety was 1.7% among adults. The study also found that mental health problems among children and adolescents have increased from 19.4% in 2006 to 20.0% in 2011 [4]. In addition, the study examined the behavior of suicide among Malaysians adult. The results showed that 1.7% of respondents had ideas of suicide, 0.9% had planned to commit suicide, and 0.5% had attempted suicide. Furthermore, there is a 5% prevalence of Common Mental Disorders in the Malaysian population [5]. The current education system required the students to work harder and spend more time to achieve the high demand in that system itself [6]. As a result, the students began to feel pressured by the burden of the education system. Besides, changing urban society also has impacted on students' mental health. Malaysian Government needs to look into mental health issues seriously, following the release of suicide case figures by the Health Ministry recently [7]. Mental Health Promotion Advisory Council member, Tan Sri Lee Lam Thye mentioned that from 2007 to 2010, the ministry recorded 1,516 suicide cases; in 2008, 290 suicide cases were recorded in the country, with another 328 cases in 2009 [7].

This proves that mental health problems among Malaysians increasingly worried. This issue also involves university students who are the future leaders of the country. Thus, there is a need to conduct a research on a better understanding of the causes of mental health among the students because more information is needed for developing effective prevention strategies. Therefore, this study aims to examine the mental health level of students in engineering and non-engineering. Moreover, this study also determined the best practice to minimize mental health problems among these students.

DEPRESSION ANXIETY STRESS SCALES

Depression Anxiety Stress Scales (DASS) is a set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress

[8]. Depression scale in DASS assesses self-disparaging, dispirited, convinced that life has no meaning or value, pessimistic about the future, unable to experience enjoyment or satisfaction, unable to become interested or involved and slow, lacking in initiative. On the other hand, anxiety scale in DASS assesses panicky, shaky, aware of dryness of the mouth, breathing difficulties, pounding of the heart, sweatiness of the palms and worried about performance. Meanwhile, stress scale in DASS assesses over-aroused, unable to relax, easily upset, irritable, easily startled, nervy and intolerant of interruption or delay. The DASS has been widely used to measure psychological parameters in many studies, either among clinical or non-clinical populations. It also has been broadly used as a research tool in measuring psychological aspects [9].

METHODS

A case study using a survey was employed in this study. A total of 180 final year students from engineering and non-engineering faculty were cluster selected randomly as samples. The instrument used for data gathering comprise of two parts: the restructured DASS in the first part; and the methods for reducing mental health problems in the second part. There are a total of 56 items in this instrument. The reliability index for the three elements of DASS were .94, .90 and .87 respectively. The data analyses obtained from respondents were presented in table forms. Descriptive statistics were used to determine and describe students' mental health level and the method used for reducing mental health problems. Mann Whitney U test was used to analyse the difference in mental health between engineering and non-engineering students.

RESULTS AND DISCUSSIONS

To determine the students' mental health level, data collected were analyzed into three elements that are depression, anxiety and stress. Findings indicated that 82 students (61.7%) are inclined towards the normal level for the depression element, followed by mild level with the numbers of student was 26 (19.5%), and then followed by moderate level with 24 students (18%). Only one of the students (0.8%) possesses the severe level of depression, and none of them tended to have extremely severe level of depression. For the anxiety element, a majority of respondents were at the moderate level with the numbers of student was 47 (35.3%), followed by normal level with the numbers of student was 46 (34.6%). However, the finding also indicated that there were 16 students (12%) tended to have severe level, and eight students (6%) posse to have an extremely severe level of anxiety. In the meantime, the results implied that majority of the students were inclined towards the normal level in stress element (76.7%) and followed by the mild level (18.8%). Only four students (3%) tend to have moderate level and two students (1.5%) at a severe level in stress. Fortunately, none of them tended to have an extremely severe level of stress. The results showed engineering students are able to confront depression and stress but not for anxiety.

Table-2 illustrated the non-engineering students' levels of mental health in three aspects, namely depression, anxiety and stress. Findings indicated that a majority of respondents (53.2%) were tended to normal level of depression. However, an approximately the same numbers of students were the severe level (6.4%) and extremely severe level (6.4%) of depression. Surprisingly, majority of the non-engineering students were posed to have severe level (25.5%) and extremely severe level (10.6%) in anxiety. About 34% of these students were at the moderate level in anxiety. The rest of them (29.7%) were normal level and moderate level in anxiety. In the stress element, the result showed that about 68% of the students was normal level. Fortunately, none of them tended to have extremely severe level of stress. The results showed non-engineering students are able to confront stress but not for anxiety and depression.

Table-1. Engineering students' mental health level.

Level	Elements of mental health					
	Depression		Anxiety		Stress	
	f	%	*f*	%	*f*	%
Normal	82	61.7	46	34.6	102	76.7
Mild	26	19.5	16	12.0	25	18.8
Moderate	24	18.0	47	35.3	4	3.0
Severe	1	0.8	16	12.0	2	1.5
Extremely Severe	0	0.0	8	6.0	0	0.0
Total	133	100.0	133	100.0	133	100.0

Table-2. Non-Engineering students' mental health level.

Scoring scale	Elements of mental health					
	Depression		Anxiety		Stress	
	f	%	*f*	%	*f*	%
Normal	25	53.2	9	19.1	32	68.1
Mild	7	14.9	5	10.6	5	10.6
Moderate	9	19.1	16	34.0	6	12.8
Severe	3	6.4	12	25.5	4	8.5
Extremely Severe	3	6.4	5	10.6	0	0.0
Total	47	100.0	47	100.0	47	100.0

A Mann-Whitney U test was conducted to evaluate the difference in mental health level between engineering and non-engineering students as showed in Table-3 and Table-4. The results of the test showed that there was no statistically significant difference in mental health level between engineering and non-engineering students, $z = -1.838$, $p > .05$; non-engineering students had a mean rank of 101.93 while the engineering students had a mean rank of 85.75.

Table-3. Ranks of mental health score.

Academic discipline	N	Mean rank	Sum of ranks
Engineering	133	85.75	11319.50
Non- Engineering	47	101.93	4790.50
Total	180		

Table-4. Test statistics[a].

	Mental health
Mann-Whitney U	2541.50
Wilcoxon W	11319.500
Z	-1.838
Asymp. Sig. (2-tailed)	.066
a. Grouping Variable: Academic Discipline	

The analysis findings have shown that majority of the students involved in this study are more inclined towards religion when they having mental health with a total number of 132, followed by sleeping with the numbers of students was 16, and then followed by always think positively with the numbers of students was 15, as summarized in Table 5. By involving an individual in religion activities can heal the mental illness. The second most method used to confront with mental health problem is sleeping. Most people become depressed because of lack of sleep. Sleep is very important as it can relax the body and mind. The enough sleeping can refresh and enhance the motivation and morale of an individual [10].

Surprisingly, only three of them were choosing counseling when they have mental health problem. This result should discuss in detail as the role of counseling is to help students deal with issues such as academic, personal, social and psychological problems that require clinical counseling interventions. However, the finding showed that most of the students were not using this service well. Therefore, the counseling unit should take proactive actions to encourage students to use the services provided to support their development of academic, psychological and career. This unit should also actively organize the promotion of mental health care through a variety of methods such as exhibitions, lectures, seminars and so on. Mental Health Day needs to be organized in enhancing the awareness among the students.

Table-5. Method for reducing mental health problems.

Methods	Frequency	Declining order
• Through religion	132	
• Sleeping	16	
• Always think positively	15	
• Sports/Games	7	
• Food intake	4	
• Counseling	3	
• Shopping • Taking medication • Sharing problems with lecturer	2 2 2	
• Sharing problems with friend • Sharing problems with family members • Vent the emotion	1 1 1	

CONCLUSIONS

Although the level of mental health of students remained at normal levels, however, the effort to use the best approach should be taken to avoid any possibility of mental health problems more serious. All parties must work together to ensure the success of the plan to improve the quality and level of mental health among students. Each student is a national asset that will become leaders in the future. Review and further discussion by the experts it is important to establish a system of mental health care better and more effective. It is hoped that this study will raise awareness and provide new ideas to enhance the mental health of the people of Malaysia.

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