

ORIGINAL ARTICLE

MENTAL HEALTH STATUS SCREENING AMONG RESIDENTIAL COLLEGE UNIVERSITY STUDENTS

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ABSTRACT

Managing mental health issues in Malaysia has become challenging especially among university students. This study aims to investigate the level of mental health condition among Residential College of Universiti Malaysia Terengganu. There were 400 students from residential college; male (n=153, 38.3%) and female (n=247, 61.8%) had been assessed. The respondents were selected through a simple random sampling technique using self-administered questionnaires derived from the Mental Health Inventory (MHI) measurement tool, followed by the validation of the obtained data through a reliability procedure. Data were collected from December 2019 until February 2020. Descriptive and inferential (t-test) statistics were conducted using the Statistical Package for Social Sciences (SPSS) version 22 to determine relationship between gender with dimensions of Mental Health Inventory. The results showed no significant difference between overall MHI and gender ($p=0.081$, $p>0.05$). However, depression manifested a significant effect on the gender of the students ($p=0.010$, $p<0.05$). The study also revealed that male students experienced poor mental health conditions compared to female students. Suitable intervention programs should be made available to help targeted students.

Keywords: mental; health; university; student; education

INTRODUCTION

Mental health can be defined as “a state of complete physical mental and social well-being and not merely the absence of disease or infirmity”¹. The World Health Organization (WHO) revealed that mental health problems affect one in every four individuals at some point in their lives and that statistically, 450 million people worldwide are suffering from a mental health problem². WHO also predicted that depression is one of the top mental disorders, ranked second after ischemic heart disease². Meanwhile, the National Health and Morbidity Survey in 2015 demonstrated that 29.2% of Malaysians suffered from stress or mental health problems³. In general, an individual may not have good mental health at all times but would still be able to perform the daily routines as usual. To the contrary, various routines will be affected for those with mental health problems because they might be suffering from physical, mental and social health disorders.

Having said that, mental health problems can affect anyone regardless of gender, religion, race and age. University students are no exception to this problem. The change in their social life from a high school student to a university student will to some extent affect the

student. Among the common causes of mental health problems include failure to face challenges⁴, low social support⁵, lack of skills to adapt to the new environment⁶, financial constraints⁷, lack of academic achievement⁸, workload and family factors⁹. These factors could often contribute to more harmful conditions such as stress, panic, trauma and manic.

A previous study on loneliness and psychological well-being among university students in Malaysia were performed using GHQ-12 and -14 item scale in the revised University of California Los Angeles (UCLA) Loneliness Scale¹⁰. Based on the outcome, 65.60% of Malaysian students had good psychological well-being (score 5 and below), whereas the remaining 34.40% of the students were identified with psychological well-being problems. Moreover, the analysis indicated that a majority of the university students (59.60%) suffered from average loneliness levels.

Meanwhile, a prediction on the Universiti Pendidikan Sultan Idris (UPSI) graduate unemployment based on demography, personality, perfectionism and mental health factors were studied using a survey method based on online questionnaires. The questionnaires consisted of the International

Personality Item Pool (IPIP), Hewitt Multidimensional Perfectionism Scale (HMPS) and General Health Questionnaire (GHQ)¹¹. Using logistic regression analysis, increasing age and higher academic achievements levels were predicted to raise university graduates' opportunities to secure a job. The results also revealed that personality and perfectionism were not crucial in Malaysian graduate unemployment issues. The logistic regression on personality, perfectionism and mental health dimensions indicated that the fourth model consisting of conscientiousness, agreeableness, neuroticism and mental health subdimensions was suitable for hypothesis testing.

The present work aims to investigate the level of mental health among the hostel residents in the Residential College of Universiti Malaysia Terengganu (UMT) using the Mental Health Inventory (MHI) survey form. The MHI was designed to measure psychological distress and psychological wellbeing in the general population, which consist of four dimensions (anxiety, depression, behaviour control and positive affect). The results from this study can be used to improve literacy, explore, database, overview to university management about the level of mental health and the management of mental health problems among the residents of the Residential College of UMT and can also be referenced by other institutes of education in future. The study will guide educators and administrators of universities to recognize the level of mental health literacy. Furthermore, it enables policymakers to design the best practices to improve students' mental health quality.

METHODS

Participant

As this study is quantitative, a questionnaire survey was used for data collection. Polit et al¹² also stated that a survey is an efficient method to obtain data, especially when involving a large number of respondents. This study recruited a sample size of 400 respondents involving residents of the Residential College of UMT from various backgrounds. The data collection was conducted within three (3) months started from December 2019 until February 2020 with the permission from the residential college administration. The views of Krejcie and Morgan¹³ were taken into account in determining the sample size of this study. They stated that if the population for a study reached 4500, hence, the required sample size would be 354 at the 5% error and 95% confidence level. Since, the current study population involved 4045 residents, a sample size of 400 was sufficient. Furthermore, the respondents were selected using simple random sampling. We distributed the self-administered questionnaires to the residential college students at the cafeteria, the central

attraction place. The respondents were given 20 minutes to answer and return the questionnaires. A pilot test was conducted among 30 off-campus students who were not involved in this study to ensure the reliability of the questionnaire before the actual test.

Instruments

A questionnaire-based survey was applied to obtain information from respondents. The instruments for this study were adopted from Veit and Ware¹⁴. The questionnaire distributed to the respondents consisted of two (2) sections A and B. Section A contained questions regarding the respondents' personal information such as gender, age, race, religion, marital status, level of study, year of study, and household income. Meanwhile, section B contained the MHI measurement tool. The MHI contains 18 standard items to assess overall mental health status. The items were answered using the Six-Point Likert Scale and were divided into four (4) dimensions of mental health namely anxiety, depression, behaviour control and positive affect. Some of the items for measuring anxiety in MHI included 'during the past 4 weeks, how much of the time have you been a very nervous person', for measuring depression; 'during the past 4 weeks, how much of the time did you feel depressed', for measuring behaviour control; 'during the past 4 weeks, how much of the time have you felt emotionally stable' and for measuring positive affect; 'during the past 4 weeks, how much of the time has your daily life been full of things that were interesting to you?'. The mean and standard deviation is also presented to understand the distribution. The lower mean score indicates better mental health status. The Likert scale ranged from 1 = all of the time, 2 = most of the time, 3 = a good bit of the time, 4 = some of the time, 5 = a little of the time, 6 = none of the time. Table 1 indicates the number of items per dimension in the questionnaire.

Data Analysis

Descriptive (skewness & kurtosis) and inferential (t-test) statistics were conducted using the Statistical Package for Social Sciences (SPSS) version 22 to determine relationship between gender with dimensions of Mental Health Inventory. P-value less than 0.05 is considered statistically significant. Some first-order analysis (frequencies, percentages, means, etc.) were executed. Next, the traditional methods were applied to test the reliability of the measurement scale namely as Cronbach's Alpha ($\alpha > 0.60$).

RESULTS

Table 2 illustrates the information on the demographic profile of respondents in terms of frequency and percentage. Respondents in this study consisted of male (n=153, 38.3%) and females (n=247, 61.8%). Majority of the

respondents (n=328, 82.0%) were in the age range of 18 - 22 years. A majority of the respondents (n=332, 83.0%) were pursuing bachelor's degree, while diploma (n=35, 8.8%), foundation (n=14, 3.5%), doctoral candidates (n=11, 2.8%) and Master's students (n=8, 2.0%). Also, a majority (n=291, 72.8%) of respondents were in their first year of study, while a minority (n=9, 2.3%) were in their fourth year of study.

Table 3 summarises the results of the normality tests in this study. Normality test determines whether the data used is normal. Descriptive analyses (Skewness & Kurtosis) were used to determine the normality of the data. George and Mallery¹⁵ stated that the distribution of data is considered normal if Skewness and Kurtosis values were in the range of -2 and +2. The data

Table 1: Subdivision of the Items.

Dimensions	Item number on MHI	Item Number
Anxiety	4, 6, 11, 18 & 10	5
Depression	2, 9, 12, 14 & 3	5
Behaviour Control	16,17, 5 & 8	4
Positive Affect	1, 7, 13 & 15	4

Table 4 depicts the reliability values (Cronbach's Alpha) for the overall MHI and each dimension used in this study. Cronbach's Alpha for the overall MHI was $\alpha=0.677$, while the dimension of anxiety was $\alpha=0.666$, depression $\alpha=0.731$, behaviour control $\alpha=0.836$ and positive affect was $\alpha=0.874$. According to Pallant¹⁶, Cronbach's alpha values above 0.600 are considered acceptable and of high reliability. Hence, all dimensions obtained in this study were acceptable.

Table 5 represents the t-test values for mental health inventory and gender. The overall MHI was insignificant for the gender of students ($p=0.081$, $p>0.05$). However, based on the MHI conducted with four dimensions, depression manifested a significant effect on the gender of the students ($p=0.010$, $p<0.05$).

DISCUSSION

Using MHI, four major dimensions on deciding a person's mental health level were assessed: anxiety, depression, behaviour control, and positive affect. Based on the mental health screening test conducted using MHI, there was no significant difference ($p=0.081$, $p>0.05$) between overall MHI and the gender of the students. The overall mean score for males (3.646) is higher than for females (3.552). The mean score indicates the mental health level among male students was in poor condition than female students. Among all the dimensions, the analysis indicates a significant difference in depression scores between males and females. This may be

in this study were normally distributed as they fell in the range of -2 and +2. Table 3 also indicated the overall mental health among the residents with a mean value of 3.908 and standard deviation of 0.490. Furthermore, the mean value for the dimension of anxiety was 3.873 with a standard deviation of 0.86205. The dimension of depression had a mean value of 3.846 with a standard deviation of 1.009. The dimension of behaviour control has a mean value of 4.975 with a standard deviation of 0.658 and the dimension of positive effect has a mean value of 2.962 with a standard deviation of 1.062.

due to the less effort made by the male to solve their depressive problems. They rarely opt for appointments with psychiatrists or psychologists for antidepressants or anxiolytics prescriptions compared to females¹⁷. Moreover, males are unwilling to acknowledge their sad thoughts internally and do not readily express their emotions¹⁸. Nevertheless, gender comparisons in self-reported mental health measures may not be entirely representative in identifying mental health illnesses. It is mainly because males tend to be masculine in that they refrain from reporting any experiences or even benign mental health symptoms. They were more likely to reckon those depressive symptoms to the "normal ups and downs of life" and are less likely to accept depression as a biological problem compared to women¹⁷. However, this is contradicted with the study conducted by Aripin et al¹⁹ at Universiti Teknologi Mara (UiTM). They found that most female students (68.80%) have weak and very weak mental health levels compared to male students (15.70%).

Nevertheless, the overall mental health among UMT residential college students is still in good condition. This is because most of the students are not married (single). Therefore, the students can handle the mental health issues due to the lower commitments and problems regarding family institution or marriage. Our findings also agree with the study conducted by Samsudin and Hong²⁰ and Shukor et al²¹, which discovered the student's mental health at Universiti Utara Malaysia (UUM) and Community College of Masjid Tanah (KKMT) were in a normal state.

Table 2: Demographic Profile of Respondents.

Demographic Characteristics	Category	Frequency (n = 400)	Percentage (%)
Gender	Male	153	38.3
	Female	247	61.8
Age	18 - 22 years	328	82.0
	23 - 27 years	64	16.0
	28 - 32 years	6	1.5
	33 - 37 years	2	0.5
Race	Malay	283	70.8
	Chinese	40	10.0
	Indian	57	14.2
	Others	20	5.0
Religion	Islam	295	73.8
	Buddha	36	9.0
	Hindu	53	13.3
	Christian	16	4.0
Marital Status	Single	397	99.3
	Married	3	0.8
Level of Study	Foundation	14	3.5
	Diploma	35	8.8
	Bachelor's Degree	332	83.0
	Master's Degree	8	2.0
	Doctor of Philosophy	11	2.8
Year of Study	First	291	72.8
	Second	74	18.5
	Third	26	6.5
	Fourth	9	2.3
Household Income	Less than RM1000 (USD233.73)	113	28.2
	RM1001 - RM2000 (USD233.96 - USD467.45)	111	27.8
	RM2001 - RM3000 (USD467.69 - USD701.18)	66	16.5
	RM3001 - RM4000 (USD701.41 - USD934.91)	28	7.0
	RM4001 - RM5000 (USD935.14 - USD1168.63)	24	6.0
	More than RM5001 (USD1168.87)	58	14.5

CONCLUSIONS

The present study collected information addressing the mental health inventory level among students in the Residential College of UMT. The risk of students being susceptible to severe conditions is inevitable. However, the study proved no significant relationship between the overall mental health conditions towards gender except for depression. Moreover, male respondents were more prone to experiencing mental health conditions compared to females. However, this study is limited to residential college and only focus on the comparison of gender. Therefore, it is recommended to expand the investigation into a larger population and to

assess the other factors affecting the student's mental health condition. The respective authorities should also consider organising awareness programs and interventions to facilitate and help students prone to mental health-related problems.

Conflict of interest

The authors declare no potential conflict of interest.

Table 3: Descriptive Statistics (Skewness & Kurtosis).

Variables	Mean	Std. Dev.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Overall MHI	3.9079	.49010	-0.273	0.122	0.596	0.243
Anxiety	3.8730	.86205	-0.463	0.122	-0.031	0.243
Depression	3.8460	1.00917	-0.515	0.122	-0.338	0.243
Behaviour Control	4.9750	0.65776	0.063	0.122	-1.085	0.243
Positive Affect	2.9619	1.06211	0.127	0.122	-0.462	0.243

Table 4: Reliability Analysis.

Dimensions	Number of Items	Cronbach's Alpha
Overall MHI	18	0.677
Anxiety	5	0.666
Depression	5	0.731
Behaviour Control	4	0.836
Positive Affect	4	0.874

Table 5: Independent Samples t-test.

Dimensions	Male		Female		F	Sig.
	Mean	Std. Deviation	Mean	Std. Deviation		
Overall MHI	3.646	0.618	3.552	0.579	3.059	0.081
Anxiety	3.962	0.883	3.818	0.846	2.657	0.104
Depression	4.012	0.935	3.743	1.041	6.782	0.010*
Behaviour Control	3.561	0.759	3.520	0.861	0.043	0.836
Positive Affect	2.879	1.114	3.013	1.028	1.507	0.220

* Significant at $p < 0.05$

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