

# Investigating the Mental Health Status of University Students in Malaysia: Cross-Sectional Survey

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## Abstract:

The mental health prevalence issue is critical in Malaysia. The rate is increasing, and Malaysia has the highest rate of mental health in South East Asia. Hence, this paper aimed to investigate the mental health status among universities in Malaysia. Besides is to identify any difference between male and female perception; public and private university students in Malaysia on mental health status. A cross-sectional study used the Depression, Anxiety, and Stress (DASS21) questionnaire. 1087 students from public and private universities in Malaysia joined this study. The data were analyzed by using SPSS 21. Meanwhile, descriptive statistics and chi-square were used to answer the study's objective. The result indicated that the respondents had a severe and extremely severe level of depression. Male found highest on the severe and extreme severe stress level, and public university students experience severe anxiety. The study recommended that intervention and prevention urgently solve the mental health problem among university students in Malaysia.

**Keywords: Mental Health, Depression, Anxiety, Stress, Malaysian University Students**

## Introduction:

The mental health issue is critical locally and internationally; the issue is worsening during the COVID-19 pandemic. Literature indicated that mental health matters such as stress, anxiety, and depression are significant. Therefore, it plays a vital role in achieving global development goals. WHO (2021) reported that the main leading of mental health was depression, followed by suicide. It is the second cause of mortality among 15-29-year-olds. Meanwhile, Saloni Dattani, Hannah Ritchie, and Max Roser (2021) estimate that 792 million people live with a mental health disorder. It is slightly more than one in ten people globally (10.7%).

Several countries reported a high number of mental health; Mental Health America (2022) identified that nearly 50 million or 19.86% of American adults are experiencing a mental illness. Meanwhile, in Hong Kong, studied by Choi, E., Hui, B., & Wan, E. (2020) on 500 people found out that 19% of them had depression and another 14% experience anxiety. In addition, 25.4% claimed that their mental health had deteriorated since the COVID-19 pandemic. In Spain, González-Sanguino, et al.'s (2020) study on 3480 samples reported depression, anxiety, and post-traumatic stress disorder (PTSD). 18.7% of them experienced depression, 21.6% anxiety, and 15.8% PTSD symptoms.

Next, Hyland, P. et al. (2020) revealed that 20% of Irish experienced generalized anxiety disorder (GAD) depression (22.8%) and the most common was GAD or depression (27.7%). It was associated

with younger age, female sex, loss of income due to COVID-19, COVID-19 infection, and higher perceived risk of COVID-19 infection.

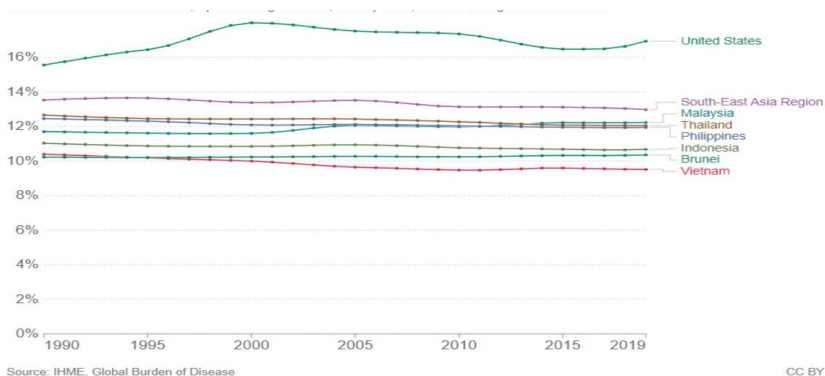
Finally, a study by Özdin, S., & Bayrak Özdin, Ş. (2020) found that 23.6% of their respondents had above the cut-off point of depression and anxiety (45.1). Female living in urban areas and previous psychiatric illness history were risk factors for anxiety. Meanwhile, those living in urban areas were exposed to risk factors for depression.

Malaysia is not exceptional; mental health increased, especially during the COVID-19 pandemic. The number of suicide increased in 2019; the number was 609 and 631 in 2020, and 336 from January 1 to March 31. The helplines by the Ministry of Health (MOH), the Ministry of Women, Family and Community Development (MWFC), and the Department of Islamic Development (JAKIM) found that from January 1 to June 18, 89.4 percent (109,806 out of 122,328 calls) were related to mental health issues that required emotional and psychological support (Yeoh A. 2021 July 1).

Malaysian Healthcare Performance Unit (2017), based on the survey done by NHMS, found out that in 2012, out of 25,507 respondents, 17.7% were with depression, 39.5% with anxiety and 10.1% of them were stressed. Furthermore, in 2017 NHMS claimed that 29.2% of Malaysians above the age of 16 had mental health problems. One in ten Malaysians were stressed, one in five had depression, and two in five suffered from anxiety. Another 10% of adolescents had the idea of committing suicide. Finally, in 2019, half a million people in Malaysia found symptoms of depression.

The literature indicated that Malaysia is among the highest in mental health in Southeast Asia (Saloni Dattani, Hannah Ritchie, and Max Roser 2021). For example, figure 1 shows 1, in 2017, 14% of Malaysia experiences mental health compared to Thailand 13%; Philippine 12%; meanwhile, Indonesia 11% and the lowest was Vietnam (10%).

**Figure1: Mental Health in the United States and South East Asia**



The study by Wong LP, Alias H, Md Fuzi AA, Omar IS, Mohamad Nor A, Tan MP, et al. (2021) of the Malaysian population aged 18 years and above found high percentages symptoms of depressive (59.2%), anxiety (55.1%), however less stress (30.6%). Additionally, females and people with poor financial conditions—were more likely to experience mental health symptoms. Another study by Yee, A., Hodori, N.‘M., Tung, YZ. et al.(2021) shows that 149 out of 528 respondents had mild-to-severe depression. They were mainly younger without a partner, lived in the red zone during COVID19, and had lower household income or in the category of B40.

Meanwhile, Paul G, Rahman MM, Naznin S, Chowdhury M, Uddin MJ (2022) claimed that urban students had higher levels of depression and anxiety. In the meantime, female students exhibited more

anxiety symptoms than males. Furthermore, the depression symptoms significantly differed by family types and students' place of residence.

Based on the above discussion, this study focused on university students. The aim is to investigate the mental health status (depression, anxiety, and stress) among Malaysia's public and private university students. Besides, identify any difference between genders, type universities, and mental health status.

**METHODOLOGY**

This study used the quantitative research approach to gather quantifiable data. First, a survey has distributed the questionnaire to the respondent online. Then, a few statistical methods are described in detail to analyze data. Finally, the statistical techniques were used to analyze the data by interpreting the mean score and Chi-Square test for independence. This study involved 1087 final-year University students from public and private universities in Malaysia. The survey method is Google form, and the link was posted on social media such as WhatsApp and Facebook. Next, the data is used for analysis purposes. The Mental Health problems status assess by using the Depression, Anxiety, and Stress (DASS21) questionnaire. The four-point Likert scale of Not at all (1); Some of the time (2); A good part of the time (3); and Most of the time (4). Finally, SPSS software version 20.0 is used to analyze the data.

**FINDINGS**

**Background of Respondents**

70.2% of respondents are female, and 64.7% are less than 23. In terms of race majority, or 67.9, is Malay and from a public university (70.9%). Nearly half of respondents (40.75) take business and management study and finally, respondents almost from all over Malaysia with the most from Selangor (24.6%).

**The Mental Health Status**

The mental health assessment in this study is the Depression Anxiety Stress Scale (DASS) developed by Lovibond and Lovibond in 1995. The DASS will identify the predominantly aimed at assessing the perceived severity of depression, anxiety, and stress symptoms. This study used a shorter 21-item version. Each of the three DASS-21 scales contains seven items, and the total scores for depression, anxiety, and stress are calculated. The total score has been multiplied by 2 to get the total score for the Mental Health status classification (Table 1).

	<b>Depression</b>	<b>Anxiety</b>	<b>Stress</b>
<b>Normal</b>	0-9	0-7	0-14
<b>Mild</b>	10-13	8-9	15-18
<b>Severe</b>	21-27	15-19	26-33
<b>Extremely Severe</b>	28+	20+	34+

\*\* Lovibond & Lovibond (1995). Manual for the Depression Anxiety & Stress Scales. (2nd Ed.) Sydney: Psychology Foundation.

Table 1. Depression, Anxiety & Stress Classification According to DASS-21 Scoring System

The distribution of mental health status among 1087 students participating in this study was tabulated in Table 2. Most of the Malaysian students showed a normal level of depression (35.6%) and a moderate level of anxiety (34.8%), and stress (42.4%). On the other hand, about 18.4% of students show severe to extremely severe depression, 33.7% showed severe to extremely severe anxiety levels, and 26.5% showed severe to extremely severe stress. In the depression condition group, the highest was normal level (35.6%), followed by moderate level (32.0%), mild (14.05) and severe (10.1%), and extremely severe level (8.3%). While in the anxiety condition group, the highest was from moderate level

(34.8%), followed by normal (22.6%), extremely severe (20.5%), severe (13.2%), and mild (8.9%). In addition, for the stress condition group, the highest was from moderate level (42.4%), normal (25.9%), severe (16.8%), extremely severe (7.7%), and mild (7.2%).

DASS21	Depression		Anxiety		Stress	
	N	%	N	%	N	%
Normal	387	35.6	246	22.6	281	25.9
Mild	152	14.0	97	8.9	78	7.2
Moderate	348	32.0	378	34.8	461	42.4
Severe	110	10.1	143	13.2	183	16.8
Extremely severe	90	8.3	223	20.5	84	7.7
Total	1087	100	1087	100	1087	100

Table 2. The Mental Health Status of the respondent

### Gender towards Mental Health Status

The stress condition was affected by gender, especially in severe and extremely severe levels where males are more common than females (26.0% vs. 21.3%). However, almost half of each gender showed moderate stress with  $p=0.047$ . The result shows no significant impact of gender on the mental health status of university students in Malaysia, with  $p>0.05$  for depression and anxiety. The detail is in the table 3, 4, and 5.

		Stress					Total
		Normal	Mild	Moderate	Severe	Extremely Severe	
Gender	Female	88 27.2%	20 6.2%	147 45.4%	39 12.0%	30 9.3%	324 100.0%
	Male	193 25.3%	58 7.6%	314 41.2%	144 18.9%	54 7.1%	763 100.0%
Total		281 25.9%	78 7.2%	461 42.4%	183 16.8%	84 7.7%	1087 100.0%

P-value = 0.047 – significant

Table 3. Impact of Gender on Mental Health Status (Stress)

		Anxiety					Total
		Normal	Mild	Moderate	Severe	Extremely Severe	
Gender	Female	83 25.6%	33 10.2%	115 35.5%	36 11.1%	57 17.6%	324 100.0%
	Male	163 21.4%	64 8.4%	263 34.5%	107 14.0%	166 21.8%	763 100.0%
Total		246 22.6%	97 8.9%	378 34.8%	143 13.2%	223 20.5%	1087 100.0%

P-value = 0.192 – significant

Table 4. Impact of Gender on Mental Health Status (Anxiety)

		Depression					Total
		Normal	Mild	Moderate	Severe	Extremely Severe	
Gender	Female	122 37.7%	34 10.5%	106 32.7%	41 12.7%	21 6.5%	324 100.0%
	Male	265 34.7%	118 15.5%	242 31.7%	69 9.0%	69 9.0%	763 100.0%
Total		387 35.6%	152 14.0%	348 32.0%	110 10.1%	90 8.3%	1087 100.0%

P-value = 0.052 – significant

Table 1. Impact of Gender on Mental Health Status (Depression)

**Type of University towards Mental Health Status**

Our data in table 6 demonstrated that the type of university, whether public or private, the university the students studied affects the mental health conditions for anxiety ( $p=0.012$ ). Most students in public and private universities demonstrated a moderate level of anxiety (33.4% and 38.3%, respectively). However, more students in public universities showed severe anxiety (15.1%), and more students in private universities showed extremely severe anxiety (24.1%). This factor does not affect students' depression and stress conditions from different universities ( $p>0.05$ ).

		ANXIETY					Total
		Normal	Mild	Moderate	Severe	Extremely Severe	
UNIVERSITY	Public University	179 23.1%	73 9.4%	259 33.4%	117 15.1%	148 19.1%	776 100.0%
	Private University	67 21.5%	24 7.7%	119 38.3%	26 8.4%	75 24.1%	311 100.0%
Total		246 22.6%	97 8.9%	378 34.8%	143 13.2%	223 20.5%	1087 100.0%

$p$ -value = 0.012 –significant

Table 6. Impact of Type of University Mental Health Status (Anxiety)

**CONCLUSION**

The mental health result shows that many respondents said they experienced mental health such as depression, anxiety, and stress. Nearly one-third of respondents reported they have a severe and extremely severe level of depression. In addition, close to two-thirds of respondents said they experienced moderate, severe, and highly severe anxiety. Finally, nearly a quarter are experiencing a severe and extremely severe stress level. The study also found that male respondents had severe and extreme severe stress levels. Furthermore, more students in public universities exhibit severe anxiety.

However, the study also has some limitations, where the result is only based on respondent perception using a questionnaire. In addition, the clinical test is unavailable due to Covid 19 pandemic. Another limitation is the self-reporting of the levels of psychological impact, anxiety, depression, and stress, which may differ from the mental health professional's opinion. Nevertheless, psychological impact, anxiety, depression, and stress are based on personal feelings, and self-reporting was paramount during the COVID-19 pandemic.

Therefore, the researchers were unable to face to face with respondents. However, his study can guide the government and the agency to create activities for future generations. Finally, the study recommended that future studies use the clinical study to reconfirm the current result of the study. Besides, include the factors that influence their mental health statuses such as financial, uncertainty, or family.

Finally, the study suggested that the government should make mental health a national agenda. Immediate interventions, including community counseling programs, TV, and social media campaigns, are urgently needed to reduce the mental health among the university students in Malaysia. Furthermore, various Governments should focus on effective methods of disseminating unbiased knowledge about the disease, teaching correct methods for containment, ensuring availability of essential services and commodities, and providing sufficient financial support for the present and future to win the current war against the prevalence mental health problems.

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