

ACADEMIC PRESURRE FACTORS AMONG HIGH EDUCATION INSTITUTE (HEIs) STUDENTS: A PRELIMINARY SURVEY

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ABSTRACT

The increasing number of mental disorders among students in HEIs has sparked concern among various parties in educational institutions. Mental health problems occur due to various factors including depression, anxiety, and excessive stress, ultimately leading to suicide. Therefore, issues related to mental health and mental health care are very important to be focused on in society. This study was conducted to identify the level of mental health among students in HEIs, namely at Selangor Islamic University (UIS) and University of Melaka (UNIMEL). The findings from the Healthy Mind Screening Test (DASS) survey showed that there are three indicators, namely stress, anxiety, and depression, which are at normal levels. However, there is an average of students who have experienced stress, anxiety, and depression at least once in their lives. This tendency needs to be taken seriously as it can lead to more serious mental health problems. In addition, the findings also showed that the academic stress factor of the respondents' mental health level showed the highest mean value (mean = 3.5828, sd = .87560). This indirectly indicates that academic stress is one of the tendencies of students towards unhealthy mental health problems. The results of this study are expected to provide recommendations to the relevant parties regarding the level of student health in HEIs and ways to solve these problems from a communication aspect, especially among students.

Keywords: *Mental Health, HEIs Students, Academic, Pressure, Stress*

INTRODUCTION

Mental health is an aspect that is very important for every phase of human life, just like physical health. Mental health is viewed from both good and bad aspects. Everyone may experience both of these aspects in their lives, sometimes their mental state is very healthy, but at other times it is the opposite. This study is a comparative study on the level of mental health problems at the HEI level. According to the Ministry of Health Malaysia (2013), mental health refers to a situation where someone is aware and able to act on something when facing stress, can work productively, and can contribute to society.

This also means that mental health can be said to be the foundation of an individual's well-being because it is an expression of emotions and symbolizes a person's ability to adapt to various pressures of life. According to sources from The National Institute of Mental Health (NIMH) 2023, there are several types of mental illnesses that fall under the category of mental health problems, including schizophrenia, manic disorder, bipolar disorder, depression, and anxiety disorder.

Having poor mental health can cause a person to lose focus and not be able to give good commitment to everything in their daily routine. This is because the statement from the World Health Organization (2018) states that mental health is a condition in which the individual is aware of their abilities and can cope with life pressures normally and can work productively and contribute to the community. According to Campbell and Svenson (1992), when stress is seen from a negative aspect or too much pressure, it can have negative effects on a person's health and academic achievement. Stress among HEI students is a worrying phenomenon if not handled comprehensively. It is important for students to identify the factors that cause stress before any intervention program is designed. Students who experience mental health problems may lose interest in learning, have less involvement in conversations, activities, and experience frequent absences from class. Mental disorders among university students can have an impact on their lives and disrupt their learning journey (Mohamad Sahide et al., 2022).

The issue of mental health in Malaysia is seen to be increasingly alarming, where statistics show a trend of increasing individuals seeking support through the Mental Health and Psychosocial Support Services (MHPSS) hotline (2021). The statistics show that in that year, 122,328 calls were received by MHPSS compared to 212,319 calls in the previous year. What is even more concerning is that the statistics on suicide behavior are also at an alarming rate, with a significant increase of 81 percent in 2021 (1,142 cases) compared to 631 cases reported in 2020. Academic pressure, relationship issues, socio-economic issues and social changes, and cultural aspects are among the main pressures experienced by young people (Kok Low, 2019).

Although the level of mental health among HEIs students mostly shows a normal rate, they have experienced mental health problems at least once in their lifetime. This is in line with the statement by Hornor (2016) in Anish Yusrie Mohd Khairul et al (2022), which states that an estimated 7% to 14% of teenagers report having self-harmed at least once in their lifetime. This trend indicates the potential for an individual to harm themselves or experience mental health problems, which is quite alarming.

Mental Health Trends at International and Malaysian Levels

Mental health issues are not unfamiliar in the field of education, especially among university students worldwide. This is due to the pressure and problems faced by students throughout their studies at universities. According to the findings of Saloni Dattani et al (2021), approximately 970 million people worldwide experience mental health problems and substance abuse disorders.

Meanwhile, Eskin et al (2016) in R. McMaster et al (2021), in a large survey involving 12 countries including Japan, the survey results showed that the socio-cultural context of individuals, psychological problems such as suicide and suicidal ideation are not uncommon among university students.

In the context of Malaysia, mental health problems among IPT students are not unfamiliar, but issues such as psychological pressure leading to suicide are not common. Outside of Malaysia, in countries like Australia, mental health statistics are increasingly alarming due to a sudden increase. All reported mental patients begin before the age of 14, and 75% of young people are in their mid-20s (WHO (2017) in Margaret Anne Carter et al (2017).

In March 2020, when the whole country was hit by the COVID-19 pandemic, it also had a profound impact on the mental health of students worldwide, including in Malaysia. This happened

because, after the COVID-19 pandemic, many parents lost their jobs, causing financial constraints to support their families. Internationally, as many as 25% of a sample of over 7,000 undergraduate students at a medical college in China experienced anxiety due to the COVID-19 pandemic. This is due to the pressure obtained from academics, economics, and the impact of COVID-19 on their daily lives (Wenjun Cao et al (2020) in Rachel H. Dodd et al (2021). In addition, a study conducted in Greece showed an increase in anxiety problems by 73.0%, depression by 60.9%, suicidal ideation by 20.2%, and their sleep quantity increased by 66.3% while their sleep quality decreased and worsened by 43.0% (Chrysi K. Kaparounaki et al (2020).

In Brunei, A. Alam (2022) stated that university students feel lonely, low self-esteem, loss of appetite, anxiety, and almost no motivation to attend classes after the pandemic period that required them to quarantine at home. In addition, there are students who admit that they are having difficulty learning from e-lectures. Malaysian IPT students are also not exempt and they experience the same thing because the situation and problems faced by every university student during the pandemic are the same, which is related to their learning process.

Jung Min Lee et al (2021) and Varisara Luvira et al (2023) argue that the most pressing issues or problems towards the mental health of university students at Kentucky and Khon Kaen University Thailand are learning, family, friendship, and there are also students who experience more than one problem at a time. This can cause students to experience strong pressure in dealing with every problem while continuing their studies.

The Reality of Students in Higher Education Institutions (HEIs)

Recently, the issue of mental health among higher education students has become increasingly worrying. This is because it is estimated that about 1 in 4 higher education students in Malaysia have been reported to be affected by mental health problems such as anxiety, depression, and stress (Muhammad Hafizi, 2023). In addition, the deaths of two higher education students during online learning periods are one of the reasons why the learning environment of higher education students needs to be reviewed. Therefore, the higher education learning system needs to be examined to avoid pressure that can affect the mental health of students.

The academic pressure faced by higher education students during their studies has led many of them to experience mental health problems such as depression, anxiety, and excessive stress. For example, Kumaran et al. (2022) found that private university students face mental health problems such as depression, anxiety, and high stress due to drastic changes in the education system, especially in the delivery of teaching during the pandemic.

The higher education world requires a high commitment from university students to adapt and compete with other students in their universities (Ahmad Janaidi Abd Ghani et al, 2022). This can affect their mental health. Sohana Abd Hamid (2019) also stated that the mental health problems commonly experienced by higher education students are depression, anxiety, and excessive stress. In addition, many studies have found that academic achievement in colleges and universities can disturb the mental well-being of students (Andrews & Wilding; Stark & Brookman 1994 in Sohana Abd Hamid 2019).

Previous studies have found that changes in learning patterns and different situations due to the COVID-19 pandemic have somewhat disturbed the mental health of university students. This was seen when the findings of a study by Sheela Sundarasan et al (2020) stated that among the pressures that arose due to the COVID-19 pandemic among higher education students were financial problems, changes in physical classroom environments to online classes, and anxiety about uncertainty about their future as they feared their ability to finance their education. In addition, Norsimah Dasan stated that stress among higher education students has always been a concern, as a student needs to manage their

time, be independent, and learn to adapt to survive until they complete their studies. The presence of the COVID-19 pandemic has further complicated the situation and increased mental health problems among students (Harian Metro, 2022).

Nur Zafifa Kamarunzaman et al (2020) said that higher education students found situations such as being away from their families to be a social support for students, and various other problems such as financial problems and examinations have become major problems and challenges throughout their studies at higher education institutions.

METHODOLOGY

This study is a quantitative study to identify and systematically examine the level of mental health among students in two universities, namely the Islamic University of Selangor (UIS) and the University of Malacca (UNIMEL). This study uses a survey research design and a questionnaire is given to respondents in the form of a Google form (online survey). The population of this study is randomly selected from students from both institutions, with a total of 330 students from various educational levels.

Research findings

Descriptive analysis was conducted to examine the background of the respondents for this study. The data from the survey questionnaire shows that 42.1% of the respondents were male, while 57.9% were female. This information indicates that the majority of the respondents for this study were female students.

Furthermore, based on the demographic profile data, it also shows that the highest number of respondents were Bachelor's degree students, accounting for 62.1%, followed by Diploma students at 32.7%. The least number of respondents were PhD students, accounting for only 0.3%. The percentage of students from UIS who answered the survey questionnaire was 78.7%, while the percentage of students from UNIMEL was 21.2%.

As for the age data of the respondents, the demographic profile analysis shows that respondents aged between 20 to 22 years old were the highest in number, followed by respondents aged between 22 to 24 years old at 27.6%. Therefore, the least number of respondents were aged 25 years old and above, accounting for 13.6%.

Table 1 : Frequency and Percentage of Respondents' Demographics for the Study

Demographic	Frequency	Percentage
Gender		
Male	139	42.1
Female	191	57.9
Education level		
Foundation	9	2.7
Diploma	108	32.7
Bachelor's Degree	205	62.1
Master's Degree	6	1.8
Ph.D	1	3.0
Institution		
UIS	260	78.8
UNIMEL	70	21.2
Age		
under 20 years	67	20.3
20 - 22 years	127	38.48
22 - 24 years	91	27.6
25 years and above	45	13.6

Overall, the respondents' level of mental health was found to be high with a mean value of 2.8179 and standard deviation of .84857. Among the seven items that measured the respondents' level of mental health, the first item, "Academic Pressure," showed the highest mean value (mean= 3.5828, sd = .87560). On the other hand, the lowest mean value was found in the third item, "Social Change," with a value of mean = 2.2830, sd = .85496.

Table 2: Mean and Standard Deviation for Mental Health Level

Item	Mean	Standard Deviation
Academic Pressure	3.5828	.87560
Life Changes	2.6985	.79560
Social Change	2.2830	.85496
Family Support	2.3856	.89895
Use of Technology	3.2933	.76680
Work-Life Balance	2.6152	.79078
Emotional Balance	2.8673	.95731
Total mean value	2.8179	.84857

Based on the findings above, (Munir, 2015 & Dixit, 2020) stated that academic pressure is a condition where individuals experience too much pressure, demands, anxiety with exams or completing academic assignments, resulting in the inability to manage academic tasks properly due to a tight schedule. This is in line with the research by Ibrahim et. al. (2013) which explains that students often experience depression problems due to the demands and academic pressure that cannot be controlled.

In line with the findings of Abouserie (1994), academic activities such as exams, too many assignments, the desire to achieve the best results, and carrying out class projects are the main causes of stress among students.

Furthermore, a study conducted by Vikniswari Vija Kumaran et al. (2022) among private university students in Malaysia also showed that most university students face different levels of pressure, depression, and anxiety. This indicates that mental health issues among university students are widespread, regardless of the higher education institution.

Table 3: Scores of Depression, Stress and Anxiety Levels

	Depression	Anxiety	Stress
Normal	0 - 5	0 - 4	0 - 7
Mild	6 - 7	5 - 6	8 - 9
Moderate	8 - 10	7 - 8	10 - 13
Severe	11 - 14	9 - 10	14 - 17
Extremely Severe	15+	11+	18+

Table 4: Scores for depression, stress, and anxiety levels in HEIs

Item	Mean
Stress	2.39
Anxiety	2.28
Depression	2.35

Before that, the researcher conducted the DASS test on the respondents. In the DASS-21 questionnaire, there are a total of 21 items. The instrument consists of 3 subscales, each of which contains 7 items or questions that need to be answered by the participants. The depression subscale assesses dysphoria, hopelessness, devaluation of life and self-worth, lack of interest and involvement, anhedonia, and negative affectivity. The anxiety subscale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress subscale assesses non-specific chronic arousal such as difficulty relaxing, nervous arousal, being easily upset and agitated, and being overly reactive or impatient.

Based on table 3, the scores for depression, anxiety, and stress levels were found to be within the normal range. However, the tendency of students towards depression, anxiety, and stress still exists, and at least they have experienced it once in their lifetime.

This is in line with the statement by Hornor (2016) in Anish Yusrie Mohd Khairul et al (2022) which stated that an estimated 7% to 14% of teenagers reported that they have self-harmed at least once in their lifetime.

Lokman Khairi (2023) also stated that HEI students often do not attend classes, receive medical leave due to stress-related problems, and some even defer their studies due to mental health issues such as depression. According to a statement from Berita Harian (2023), excessive stress can also lead to depression. Sometimes, depression can occur even if the individual's life is healthy and normal. Therefore, although depression, anxiety, and stress levels are within the normal range, there are still students in universities who have experienced them at least once in their lifetime.

If a comparison is made between the two institutions, besides academic activities, the learning environment is also related to student problems. It can be seen that HEIs located in suburban areas experience less depression, stress, and anxiety. This is because lifestyle factors affect an individual's life compared to HEI students in rural areas whose university is located in rural areas.

In line with the findings of Bojuwoye (2002) in his study on students at eight universities in South Africa, students experience stress due to the physical environment of the university. As for the mean score for mental health among students in HEIs in English, it would be "The mean score for mental health among higher education institution (HEI) students."

Mental Health from the Perspective of Religion

From the perspective of Islam, mental health is an extremely important matter. This is because humans are created by Allah SWT from two main elements, namely physical (bodily) and spiritual (soul). Both of these elements need to be constantly fulfilled and cannot be left empty, in fact, both elements are closely related to each other (Dr Rosni Wazir, 2020). Therefore, religious practices greatly influence individual mental health as it is like "food" for our spiritual or soul.

In addition, in Islam, recognizing Allah is one way to understand the purpose of creation as a community. For example, worship such as prayer is mandatory, but if someone fails to fulfill the obligation of prayer, it leads to failure in matters involving the belief and responsibility of a servant. A spiritual approach will bring a person to accept the reality of life and also need to understand the concept and purpose of human creation (Sakinah Salleh et al., 2022).

Mental health is also found in the field of psychology, where many Eastern traditions are used to improve general well-being. For example, the practice of Buddha awareness meditation is one example of modern psychological intervention taken directly from the East. This awareness meditation has led to the absorption of consciousness in various treatment protocols for physical and mental illnesses (Dr Zohair, 2020). In addition, from the perspective of Christians, mental health is understood as an ability to fulfill the call of God (Christopher C. H., 2020).

According to Saviano in John W. et al (2023), Christian communities usually see mental illness as a spiritual problem and assume that the difficulties faced are a response to the mistakes that someone has made in life. Furthermore, this mental illness can also be a real biological disease that has caused chemicals in the brain to become imbalanced.

CONCLUSION

This study measures the level of depression, anxiety, and stress faced by IPT students in two institutions. The findings of the study show that, despite being burdened with various tasks and daily student life, the level of mental health is not worrying. However, there is still a possibility that students may face mental health problems. This is because through the analysis conducted, it was found that students have at least once experienced mental health problems in their lifetime. This indirectly increases the likelihood of mental health problems occurring in the future if not addressed. Religious beliefs and support from family play an important role in helping students manage mental health-related issues.

CONFLICTS OF INTEREST

The manuscript has not been published elsewhere and is not under consideration by other journals.

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REFERENCES

- Ab Ghani, A. J., Bhari, A., Ishak, N. A., & Daud, W. N. W. (2022). Pengendalian Kes Kesehatan Mental dalam Kalangan Kaunselor Berdaftar di IPTA. *Proceedings Science, Ethics & Civilization, 1*, 01-05.
- Abouserie, R. (1994). Sources and levels of stress in relation to locus of control and self-esteem in university students. *Educational Psychology, 14*(3): 323-331.
- Alam, M. (2022). Mental health impact of online learning: A look into university students in Brunei Darussalam. *Asian Journal of Psychiatry, 67*, 102933.
- Andrews & Wilding; Stark & Brookman 1994 dalam Hamid, S. A. (2019). Tahap kesihatan mental dalam kalangan pelajar institut pengajian tinggi: Kajian literasi mental health level among student institute of higher education: literacy study. *E-Prosiding Persidangan Antarabangsa Sains Sosial dan Kemanusiaan, Kolej Universiti Islam Antarabangsan Selangor, 24-25*.
- Bojuwoye, O. (2002). Stressful experience of first year student of selected universities in South Africa. *Counseling Psychology Quarterly, 15*(3): 277-290.
- Campbell, R. L. & Svenson, L. W. (1992). Perceived Level of Stress among University Undergraduate Students in Edmonton, Canada. *Perceptual and Motor Skills, Vol. 75*(2), 552-554.
- Christopher C. H. Cook. (2020). Mental health in the kingdom of God. *Theology, 123*(3), 163-171.
- Dr Zohair Abdul Rahman (2020). Spiritualiti Islam dan Kesihatan Mental. <https://yaqeeninstitute.org.my/read/paper/spiritualiti-islam-dan-kesihatan-mental>
- Eskin et al (2016) dalam R. McMaster, K. Adachi, H. Yada, R. Odachi, M. Omura & M. Cleary (2021): Exploration of Mental Health Issues of Students among University Health Science Academics in Japan, *Issues in Mental Health Nursing*, DOI: 10.1080/01612840.2021.1894617

- Hamid, S. A. (2019). Tahap kesihatan mental dalam kalangan pelajar institut pengajian tinggi: Kajian literasi mental health level among student institute of higher education: literacy study. *E-Prosiding Persidangan Antarabangsa Sains Sosial dan Kemanusiaan, Kolej Universiti Islam Antarabangsan Selangor*, 24-25.
- Hornor (2016) dalam Khairul, A. Y. M., Kamaluddin, M. R., Tsuey, C. S., Tsuey, M. S. M., Subhi, N., Ali, M. M., ... & Rahman, F. N. A. (2022). Prevalens dan Tekanan Psikologikal dalam Kalangan Pelajar Sekolah Menengah yang Mencederakan Diri Tanpa Niat Membunuh Diri di Negeri Selangor. *Akademika*, 92(2), 35-46.
- Jung Min Lee et al (2021) dalam Luvira, V., Nonjui, P., Butsathon, N., Deenok, P., & Aunruean, W. (2023, January). Family Background Issues as Predictors of Mental Health Problems for University Students. In *Healthcare* (Vol. 11, No. 3, p. 316). MDPI.
- Kamarunzaman, N. Z., Shanthi, A., Md Nen, Z., Zulkifli, N., & Shamsuri, N. I. (2020). Mental Health Issues Among University Students and Educators' Readiness to Detect and Help. *International Journal of Academic Research in Business and Social Sciences*, 10(9), 711-725.
- Kaparounaki, C. K., Patsali, M. E., Mousa, D. P. V., Papadopoulou, E. V., Papadopoulou, K. K., & Fountoulakis, K. N. (2020). University students' mental health amidst the COVID-19 quarantine in Greece. *Psychiatry research*, 290, 113111.
- Kok, J. K., & Low, S. K. (2019). Risk factors contributing to vulnerability of mental health disorders and the protective factors among Malaysian youth. *International Journal of School & Educational Psychology*, 7(2), 102–112. <https://doi.org/10.1080/21683603.2018.1499573>
- Kumaran, V. V., Ismail, M. K., Thinagar, S., & Roslan, S. N. M. (2022). Mental Health Disorder among Malaysian Universities Students during COVID-19 Pandemic. *Asian Journal of University Education*, 18(3), 735–744. <https://doi.org/10.24191/ajue.v18i3.18965>
- Mohamad Sahide, N. B., Mohd Pauzi, H., & Awang Noh, N. (2022). Isu dan Literasi Kesihatan Mental dalam kalangan Remaja. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(8), e001688. <https://doi.org/10.47405/mjssh.v7i8.1688>
- Muhammad Hafizi (2023). Tahap Kesihatan Mental Mahasiswa Membimbangkan. Bernama Tinta Media. <https://www.bernama.com/bm/tintaminda/news.php?id=2184548>
- Norsimah Dasan (2022). Mahasiswa Stress. Harian Metro. <https://www.hmetro.com.my/akademia/2022/04/828232/mahasiswa-stres>
- Salleh, S., Wazir, R., Abd Rahman, K. A., Sudi, S., Awang, A. H., & Kamarulzaman, A. I. (2022). Mengatasi Masalah Kesihatan Mental Melalui Pendekatan Psiko Spiritual. *International Journal of Education, Psychology and Counseling*.
- Saloni Dattani, Hannah Ritchie and Max Roser (2021) - "Mental Health". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/mental-health' [Online Resource]
- Saviano dalam John W. Kennedy And Renée Griffith Grantham. (2023). Bible Engagement Project. <https://bibleengagementproject.com/en/Blog/What-Does-the-Bible-Say/The-Bible-and-Mental-Health#:~:text=Saviano%20days%20Christians%20typically%20view,off%20balance%2CE2%80%9D%20Saviano%20says>.
- Sundarasan, S., Chinna, K., Kamaludin, K., Nurunnabi, M., Baloch, G. M., Khoshaim, H. B., ... & Sukayt, A. (2020). Psychological impact of COVID-19 and lockdown among university students in Malaysia: implications and policy recommendations. *International journal of environmental research and public health*, 17(17), 6206.
- Talian Bantuan Perkhidmatan Sokongan Psikososial (MHPSS). (2021). Inisiatif Perkhidmatan Kesihatan Mental Dan Sokongan Psikososial (Mhpss) Kkm. <https://covid-19.moh.gov.my/semasa-kkm/2021/06/inisiatif-perkhidmatan-kesihatan-mental-dan-sokongan-psikososial-mhpss-kkm>
- Wazir, R. (2020). Tuntutan Kesihatan Mental Menurut Maqasid Al-Sunnah. In *Dlm E-Prosiding Persidangan Antarabangsa Isu-Isu Semasa Al-Quran Dan Hadis (THIQAH 2020). Dalam Phayilah Yama et al.(Ed.). E-Proceeding of The 2nd International Conference On Contemporary Issues In Al-Quran And Hadith* (pp. 218-233).
- Wenjun Cao et al (2020) dalam Dodd, R. H., Dadaczynski, K., Okan, O., McCaffery, K. J., & Pickles, K. (2021). Psychological wellbeing and academic experience of university students in Australia

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during COVID-19. *International Journal of Environmental Research and Public Health*, 18(3), 866.

WHO (2017) dalam Carter, M. A., Pagliano, P., Francis, A., & Thorne, M. (2017). Australian university students and mental health: Viewpoints from the literature.