

Perceived Stress among University Students During COVID-19 Outbreak

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The COVID-19 pandemic has negatively impacted the mental health of people around the world, including Malaysia. Students' mental health in higher education has been an increasing concern as they face many challenges with the changes in their educational experience. The study examines the perceived stress level among university students during the outbreak. This is the first study to use a convenience sampling technique to analyze data from 305 Malaysian university students. IBM SPSS 23.0 was used to analyze descriptive data and provide an analysis of the results. The majority of those who participated in this study were undergraduate students at age 21 years old. The pandemic affected 181 of their family's earnings, while the remaining 124 were unaffected. Out of 305 respondents, 131 (42.9%) of them have stress in an extremely severe state. It followed by 68 respondents in a state of severe stress. Simultaneously, 47 (15.4%) of them are at the normal state of stress and 32 (10.5%) respondents in mild stress. The result shows that only 27 (8.9%) of the respondents have moderate stress. It is believed that the main factors associated with students' perceived stress level are home-based online learning and financial constraints.

Keywords: perceived stress; covid-19; financial constraints; online learning; university students

The outbreak of COVID-19 pandemic that hit Malaysia and the rest of the world has massive implications for various sectors, including the higher education sector (Abdul Rashid et al., 2020). According to the recent report on 3 June 2021 by the World Health Organization (WHO), globally, 172,910,966 confirmed cases of COVID-19 and 3,717,320 deaths. While in Malaysia, the cumulative number of confirmed cases has reached 595,374 and deaths of 3,096 people (Statistical Report of the Ministry of Health Malaysia, 2021). Malaysia is currently experiencing a surge caused by the new strain of COVID-19 where the highest number of confirmed cases recorded reach 9,020 daily (Statistical Report of the Ministry of Health Malaysia,

2021). This reported statistic is showing that the numbers of positive cases keep arising in every state of Malaysia. Current statistics show that the situation is very serious and requires drastic measures from the government to close all economic and social sectors in the country under a two-week total lockdown from 1 June to 14 June 2021, aiming to control the spread of disease. Prime Minister Tan Sri Muhyiddin Yassin has announced on 28 May 2021 that all sectors are not allowed to operate during this first phase of lockdown except for essential economic and services sectors, including the higher education sector (Babulal, 2021). Globally, more than 1.5 billion students and young people experience anxiety and uncertainty when

they were forced to stay at home due to the closure of schools and universities during the outbreak of COVID-19 (Husain, 2020; UNESCO, 2020).

Thus, this ongoing pandemic COVID-19 with total lockdown has had a tremendous effect on the learning activities of college and university students (Villani et al., 2021). Due to the lockdown, universities implemented a remote learning model, which led to many stressors in university students' everyday life and study habits (Keyserlingk et al., 2021). As the universities are being closed due to this lockdown, university students need to adapt to the new norm of learning, which is online teaching and learning system with various new online platforms rather than the existing conventional system (Abdul Rashid et al., 2020). In order to adapt to the transition, students need to have coping strategies that can help them minimize their academic stress (Abdul Rashid et al., 2020). Other than that, students are impacted when they have to rearrange their returning to universities due to the recent announcement of MCO rules and regulations where they cannot go back to the campus. However, closing the university to contain the outbreak has created massive stress and uncertainty in their daily life by staying at home (Awoke et al., 2020).

Previously, before the outbreak of COVID-19, there were numerous worldwide studies conducted to examine the level of perceived stress among university students (Shah et al., 2010; Borjalilu et al., 2015; Ahmed &

Prashantha, 2018; Gazzaz et al., 2018; Al-Qahtani & Alsubaie, 2020; Karyotaki et al., 2020; Tariq & Jawed, 2020), however only limited studies were done on the same issue during the COVID-19 outbreak. A study from Rodríguez-Hidalgo et al. (2020) shows that students had depression because of fear and stress of COVID-19 mediated by anxiety. Other studies reported a high perceived stress level for university students ranging from 12.6 to 30.2% during the current pandemic (Al Ateeq et al., 2020; Pedrozo-Pupo et al., 2020; Sheroun et al., 2020). In China, research revealed that 25% of university students experiencing anxiety symptoms because of the increasing concerns about academic delays, effects of the pandemic on economic and daily life (Cao et al., 2020). In Malaysia, research on the impact of COVID-19 on the psychological well-being of university students has developed after the country faced the first strikes of COVID-19 infection a year ago (Sundarasan, Chinna, Kamaludin, Nurunnabi, Baloch, Khoshaim, Hossain & Sukayt, 2020).

Thus, this study was done to assess the level of perceived stress among university students in Malaysia. The main objective of this study was to determine the level of perceived stress among university students in Malaysia during COVID-19 and the MCO period and to determine the associated demographic characteristics. In this research, we also want to identify the potential stressors among the students during pandemic COVID-19.

collection. The data collected in early 2021, during students have undergone online classes instead of physical classes due to the COVID-19 pandemic.

Method

Participants

Undergraduate and postgraduate students recruited respondents. The only inclusion criteria for participation were that respondents should have enrolled as undergraduate and postgraduate students in the university at the time of the data

Instruments

The variable of stress has measured using the DASS questionnaire that contains seven items. The respondents had to respond to each statement on a 4-point Likert scale.

The score of the scale was from "0" did not apply to me at all (Never) until "3" applied to me very much, or most of the time (Almost Always).

The characteristics of the stress scale are over-aroused, tense, unable to relax, touchy, irritable, easily startled, nervy, and intolerant. The example of questions is "I tended to overreact to situations", "I felt that I was using a lot of nervous energy", and "I found it difficult to relax".

The questionnaire is divided into sections: Section A is demographic details, and Section B is perceived stress during COVID-19 outbreak among university students. The convenience sampling technique has used in this research, and a total of 305 Malaysian university students have participated by answering the questionnaire via Google Form.

Data Analysis

The data gathered has analyzed using IBM SPSS 23.0 by descriptive analysis. The score of each respondent has computed summed up and divided into five levels of stress: normal (0-7), mild (8-9), moderate (10-12), severe (13-16), and extremely severe (17 and above).

Results

The demographic profiling of the respondents shown that the average of them is at the age of 21 years. 68 (22.3%) male students and 237 (77.7%) female students participated in this study. As shown in Table 1, most of the respondents in this study were undergraduate students (n=296) and only nine postgraduate students. A total of 181 (59.3%) of their family income was affected by the pandemic, while the balance of 124 (40.7%) was not affected.

Meanwhile, a total of 140 (45.9%) respondents has family members between 5-6, followed by 82 (26.9%) respondents staying with 2-4 members in one house. The rest showed that 77 (25.2%) have more than six members in the family. The least of the family members of 6 (2.0%) participants have less than two members in their house. Lastly, the result shown that 213 (69.8%) of the respondents come from the B40 family income group, 66 (21.6%) respondents are from M40, and the least of 26 (8.5%) respondents are from the group T20.

Table 1

Demographic profiling of the respondents

Demographic Profiling	Frequency (N=305)	Percentage (%)
Male	68	22.3
Female	237	77.7
Undergraduate	296	97.0
Postgraduate	9	3.0
<i>Family Income Affected</i>		
Yes	181	59.3
No	124	40.7
<i>Family Member</i>		
Less than 2 members	6	2.0
2-4 members	82	26.9
5-6 members	140	45.9
7 members and above	77	25.2
<i>Family Income</i>		

B40	213	69.8
M40	66	21.6
T20	26	8.5

Furthermore, Table 2 shows that out of 305 respondents, 131 (42.9%) of them have stress in extremely severe state. It followed by 68 (22.3%) respondents in a state of severe stress. Simultaneously, 47 (15.4%)

of them are at the normal state of stress and 32 (10.5%) respondents in mild stress. The result shows that only 27 (8.9%) of the respondents have moderate stress.

Table 2

Level of stress among respondents

Level of Stress	Frequency (N=305)	Percentage (%)
Normal	47	15.4
Mild	32	10.5
Moderate	27	8.9
Severe	68	22.3
Extremely Severe	131	42.9
TOTAL	305	100

Discussion

During the COVID-19 pandemic, the current lives of all students, educators and families living in Malaysia have observed a complete disruption caused by nationwide lockdown and social distancing. Restrictions on movement have made everyone stay away from social places where they spent a maximum of their time (e.g., schools, colleges, workplaces). Students miss their schools, college campuses, friends, visiting the library, working in laboratories, working in group assignments projects, etc. Though these social interactions may have been taken for granted in earlier times, today (with the current situation), it reminds students of their good old times.

In the present study, 43% of the students experienced severe stress levels due to the COVID-19 pandemic. This proportion is similar to the results from studies in other countries. The research was done on students of Nursing collage in Puna aged 21–25 years old recorded a mean perceived stress score of 21.88 (\pm 4.30) (Sheroun et al., 2020). Another internet survey during

the COVID-19 collected data from 2449 residents in 20 provinces of China, and the results reported that students had the highest perceived stress of 23.87 (\pm 6.18) compared with other occupations. The survey also concluded that stress represented a health risk in 48.66% of the participants (Li et al., 2020). Additionally, Son et al. (2020) research reported the mean PSS score of 18.8 (\pm 4.9) among students, with an average age of approximately 20.7, indicating moderate perceived stress during the outbreak of the coronavirus disease.

An interesting factor is the family income of the family plays a role in the pandemic and restrictions on movement; 59.3% of students' families had a financial crisis during this pandemic, whereas 40.7% balanced the financial status to an extent. Students staying with at least family members make up around 2%, and 46% of sample students stay with 5-6 family members. Based on Table 1, 69.8% of the students from the B40 family income group are believed to be one of the reasons 59.3% of them were affected financially during the pandemic COVID-19. Department of Statistics Malaysia (DOSM) in 2014 has

grouped the monthly income into three classes, bottom 40% (B40), middle 40% (M40) and top 20% (T20). According to Thangiah et al. (2020), the B40 income group refers to the society with monthly household income below RM3860, the M40 income group for those who have a monthly household income between RM3,860 and RM8,319 and the T20 income group with monthly household income greater than RM8,319.

Students classified into B40 group income families might face issues that their parents do not have enough money to purchase a proper device and provide internet access for their children's online learning classes (Zainol et al., 2021). UNICEF Malaysia in 2020 reported that due to the outbreak of COVID-19, many urban low-income families being unemployed, have cut working hours and experience more significant constraints in accessing healthcare and home-based learning. This difficulty forces them to urgently spend money on their daily needs (e.g., foods, drinks, groceries) rather than preparing the proper device and internet access for their children's online learning.

Regarding gender, 78 % of participants in this study were female, whereas only 22% comprised male participants. According to Ruiz-Robledillo (2020), examining gender differences on the effects of the COVID-19 pandemic on the stress levels, the result showed that females exhibited higher stress levels than male lives. Thus, this present study showed that the number of female participants more significant influences students who experienced severe stress levels.

Conclusion

Students' findings suggest an increase in stress among university students following the outbreak of the Covid19 pandemic, owing primarily to campus closures, the shift to virtual classes, and financial

constraints. The findings emphasize the importance of investigating students' experiences to socioeconomic status and family background and developing a strategy for online stress management programmes to help alleviate stress during this pandemic period. Furthermore, more research and studies are needed to determine the effects of the COVID-19 pandemic on students' anxiety and depression levels in the later stages of the crisis.

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