

The Depression, Anxiety, and Stress level of Students in Private Higher Learning Institution during COVID-19 Crisis in Malaysia

Kalai Vani Kalimuthu^a, Vikniswari Vija Kumaran^a, Mohd Khairi Ismail^b, Sai Mei Ling^a, Muhammad-Baqir Abdullah^c

^aFaculty of Business and Finance, Universiti Tunku Abdul Rahman, Malaysia, ^bUniversiti Teknologi MARA Cawangan Terengganu, Malaysia, ^cKuliyah Muamalat & Sains Pengurusan, Universiti Islam Antarabangsa Sultan Abdul Halim Mu'adzam Shah, Malaysia

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Abstract

Coronavirus disease (COVID-19) is a recently found infectious illness. In Malaysian, the first COVID-19 case was on the 4th February 2020, and the number of cases grew relatively slowly before an exponential rise in March 2020. Due to the speed rise of COVID-19 infections in Malaysia, the government announced Movement Control Order (MCO) to control the deadly virus from spreading further. The prolonging of the MCO created an unfavourable experience for many sectors, especially the education sector. Studying from home create inequality in the education system because the facilities in the house are different among the students. The study aims to analyse the psychological state of private higher learning institution students in Malaysia during the pandemic of COVID-19. The study used a quantitative approach, and the survey was conducted online from 15th July 2021 to 15th August 2021. The results indicate that most students face mental health problems, depression, stress, and anxiety during this pandemic. Besides, the findings also showed a significant difference in the level of gender where the female students' mental health problem percentage is higher than male students. The study's implications can contribute to the colleges, universities, and parents so that they are aware of students' mental health conditions and prepare to save the young generations not to be involved in extreme decisions such as suicide due to the unstable psychology state this pandemic.

Keywords: Stress, Anxiety, Depression, Covid-19, Private Higher Learning Institution

Introduction

On 11th February 2020, World Health Organization (WHO) was officially announced Coronavirus disease 2019 as a "COVID-19". It was previously known as "2019 novel coronavirus", a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was also genetically similar to the coronavirus that caused the 2003 SARS epidemic. This disease affects different people in different ways. The most common symptoms are fever, fatigue and dry

cough. Other symptoms are chills, coryza, sore throat, nausea, vomiting, diarrhoea, shortness of breath or difficulty breathing, muscle aches, runny nose, headache, chest pain, conjunctivitis, rash and loss of taste or smell (Chen et al., 2020). Usually, a person exposed to this virus will have the signs and symptoms of Covid-19 in two to 14 days. World Health Organization (WHO) declared a global pandemic on 11th March 2020, after the Covid-19 virus rapidly spread across the world in a short period.

The global pandemic cause ravaged many countries worldwide and has overwhelmed many healthcare systems. It also resulted in the loss of livelihoods due to prolonged shutdowns, which have had a rippling effect on the global economy. The COVID-19 pandemic has led to the massive contraction of international economic activities as it breaks down human society's health and well-being (Van Lancker & Parolin, 2020). The pandemic never skips any of the sectors in this world unaffected; the socioeconomic impact in all education sectors from preschool to tertiary education (Nicola et al., 2020). The current COVID-19 pandemic generates a psycho-emotional chaotic situation. Countries have been writing a sharp rise of mental health problems, including anxiety, depression, stress, sleep disorder, and fear, among their citizens (Gritsenko et al., 2020). The fear of COVID-19 is one of the leading mental blocks for human society. The fast and unexpected spread of COVID-19 generated many changes in government laws to be stricter and control the movement of citizens (Adhikari et al., 2020).

There are many studies about stress, anxiety, and depression in the scientific literature. The theoretical model stated that socio-environment stress with internal biological processes that direct the pathogenesis of depression (Slavich & Irwin, 2014). Stress impacts physical, mental, or emotional factor that causes bodily or mental tension (Shiel, 2018). A person will respond to a stimulus or the physiological consequences of that response (Kemeny, 2003). Anxiety is a feeling of tension, apprehension, nervousness, and worry (Horwitz et al., 1986). While depression is an emotion, a symptom, or a disease (Kleinman, 2004), someone feels sad or loses interest in activities once enjoyed, which leads to various emotional and physical problems. In addition, it can decrease a person's ability to function normally (Association, 2017).

Malaysia is also one of the countries worse affected by the infection of COVID-19, especially when the cases started to reach 20000 in mid of August 2021. The higher the cases, the citizens in Malaysia have to decree long periods of self-isolation and/or lockdown in which citizens have to stay home. It has seriously affected the living conditions of Malaysians, spread uncertainty by creating new variations, and increased new infection cases. The absence of a vaccine to counter the disease has led to increased fear. The fear of COVID-19 is the main contributor to stress, anxiety, and depression.

The prolonging of MCO causes educational institutions to closure to maintain social distancing and decrease infections (Sheikh et al., 2020); Van Lancker and Parolin, 2020; Viner et al., 2020). The higher education students are affected due to the drastically altered learning landscape and the sudden switch from face-to-face to distance online learning during the COVID-19 lockdown. The COVID-19 pandemic has placed bare the inequalities in education systems. It drives students back into homes where they have a problem accessing internet connection and other facilities and resources like clean water, safe homes, and adequate health care. This pandemic also increases the fear of not being able to mitigate with online

chats, webinars, or learning platforms, which in the end cause the student not mastering content. The overall aims of higher education are still missing. Higher education aims to develop a consciousness of their role as agents in social justice, leadership awareness and competencies, critical thinking and acting, and an appreciation for inclusion, diversity, and pluralism (Schreiber & Ludeman, 2021). The fear increases the implication for a mental health problem among students because physical activity appeared to be a factor that could prevent mental disorders such as anxiety or depression. According to Islam et al (2020), higher education students are on the list of people facing anxiety, depression, and stress.

Additionally, uncertainty and the potential of not performing well in the academic progression could hurt students' mental health. For example, Strickland (2021) found that the more prominent public universities had a lower Mental Well-being Index (MWI) than smaller private institutions. This study also reveals that institutions with a higher tuitions fee have a higher MWI than others (Strickland, 2021). Moreover, most private higher learning institutions pay more fees than public universities, and fear is one of the main factors that will affect the students' psychological state. This observation chose private higher learning as a sample because the psychological state among private higher learning institution students is high compared to public higher learning institution students.

Thus, the main objective of this study is to evaluate the psychological state of students in a private higher learning institution at a critical moment in the current crisis as an addition to the body of knowledge of the existing literature. Finally, this study will analyse depression, anxiety, and stress levels among students who study in private higher learning institutions.

Literature Review

Malaysia is one of the leading countries for higher education in the Asia-Pacific region (Knight & Morshidi, 2011; Lee, 2014), but university students' poor mental health is one of the rising problems in Malaysia. According to The New Straits Times (2016), the mental health problems among Malaysian students are worsening. The report exposed that the mental health problems among Malaysian students increased from one in ten individuals in 2011 to one in five in 2016. This study also reveals that anxiety and depression are the leading causes of mental health problems among Malaysian students based on the expert's view. A survey by Kotera, Ting & Neary (2020) on the mental health of Malaysian university students by comparing with United Kingdom students disclosed that Malaysian students had higher levels of depression (15.36), anxiety (17.41) and stress (18.68). According to Jia & Loo (2018), the stress level is high among Malaysian undergraduate students and female and first-year undergraduate students. This study also revealed that the first-year students were 2.383 times more likely to be stressed than the fourth-year students.

A recent study by Yunus et al (2021); Misran et al (2021) revealed that happiness was a protective factor while work-life balance is a risk factor that can predict students' negative emotional symptoms among Malaysian university students during the coronavirus disease (COVID-19) pandemic. Yunus *et al* (2021) disclose that university students scored moderate to extremely severe levels of stress (22%), anxiety (34.3%), and depression (37.3%) symptoms, respectively. At the same time, Yunus *et al* (2021) found that the participants' mean levels of anxiety, depression, and stress were moderate, and a large proportion of students had severe psychological discomfort. Female students have a slight increase in stress compared to males.

Additionally, there was a strong negative but non-stressful association between religion, anxiety, and depression.

Additionally, religion acts as a protective factor against depression. Meanwhile, some aspects of religion (e.g., abstinence from sinful acts and frequent performance of good acts) are a substantial protective factor against anxiety and depression, respectively. Thus, in hindsight, mental health and religion seem to have something in common when coping with psychological suffering. As such, this is a critical phase in developing growing mental health services, when the introduction of religious components into therapeutic practice may positively assist in the healing process for psychological health difficulties. Similarly, integrating religion into one's life, or being religiously inclined as manifested in everyday life, is associated with improved mental health results. According to Ting et al (2021), there was a significant negative association between stress levels and internal and outward forms of religious expression. The areas of sickness perception, including personal control, understanding, and emotions, accounted for a considerable portion of the diversity in stress levels. Additionally, the religious expression had a substantial moderating effect on the association between sickness perception and stress dimensions.

Depression, anxiety, loneliness, avoidance of work, and procrastination are symptoms that may be neglected and hence go untreated due to technology addiction, especially during pandemic Covid-19. It has developed into a severe condition that has attracted the attention of researchers, mental health counsellors, and physicians. Unfortunately, those who suffer from the disorder are unaware that they are undergoing a phase of the pleasurable, addictive experience of appealing to themselves through long hours of social networking, gaming, and internet browsing. This experience is negatively impacting their psychological well-being. However, Johan et al (2021) found that technology use affected technology addiction but had no effect on psychological well-being. Additionally, this uncomfortable situation might deteriorate further during the current Covid-19 pandemic phase, which has resulted in a prolonged mobility restriction order (MCO) for students, regardless of whether they live at home or on campus.

According to Kadir & Mohd (2021) indicate that there are strong associations between the model of positive youth development (PYD), particularly confidence and connection, and well-being, while purpose in life and hope to be associated with the 2Cs (confidence and connection) of PYD and well-being indirectly. Therefore, mental health practitioners dealing with Malaysian emerging adult university students reassess and reframe their treatment designs to include confidence, connection, purpose in life, and hope. Lerner and colleagues' 5Cs model of good youth development reduces stress, anxiety, and depression. Nevertheless, universities need to use the 5Cs (i.e. competence, confidence, character, connection, and caring) to develop a friendly environment for high education learning in Malaysia.

As a contribution to the body of information in the existing literature, this study examines the psychological status of students in a private higher learning institution during a crucial period of the present crisis. Finally, this research will examine the degrees of depression, anxiety, and stress experienced by students enrolled in private higher education institutions.

Research Methodology

This study adopted a descriptive research design by conducting a quantitative survey methodology. The researchers have administered the online survey and issued it to all students pursuing their studies in private higher learning institutions. The questionnaire is distributed online between 15th July 2021, to 15th August 2021, for the students currently studying in a private higher learning institution. Before distributing the questionnaire, a population setting is necessary to determine the study's sample size. For this study, the study population was students between year one to year three studying in a private higher learning institution. It uses random sampling techniques and aims to consider all students across states in Malaysia who are currently pursuing their studies in private higher learning institutions. For data collection, the study uses a google form link to observe with almost 500 targeted respondents; however, only 384 valid response rates were received, approximately 76.8%. Hence, the response rate is sufficient and valid for a cross-sectional study, as Sekaran (2003) supported.

The analysis of the study uses descriptive analysis and depression anxiety stress scale (DASS). DASS is a written screening test to identify a level of depression, anxiety and one's stress. With this screening test, you can know your mental health status, whether you are stressed, worried, or depressed. DASS is an instrument to assess the level of an individual for an analysis of depression and anxiety. DASS has no implications for patients or individuals in classification systems such as discrete diagnostic manuals, statistic mental disorders (DSM), and disease classification. DASS only assesses depression, anxiety and stress (Psychology Foundation of Australia, 2011). The DASS approach used 21 items after modification earlier stage (42 items). Most psychological studies use DASS to recognise the reliability and validity of its items in various areas of study. Therefore, DASS is a recognised instrument for measuring pressure symptoms, anxiety, stress (Antony et al., 1998).

Results & Discussion*Demographic Analysis*

Table 1 shows the profile of the respondents is representing mostly Chinese students from private higher learning institutions in Malaysia. Most students are from Perak state and are pursuing their first year of full-time undergraduate studies in Malaysia's private higher learning institution. Besides, most students stay with their families with four to five members. In addition, from the aspects of a healthy life, most students sleep between seven to eight hours per day.

Table 1
Respondent Profile

| Gender | Percentage (%) | Members in Family | Percentage (%) |
|-------------------|----------------|-----------------------------------|----------------|
| Male | 32.8 | 2- 3 Members | 6.9 |
| Female | 67.2 | 4 – 5 Members | 59.2 |
| Age | | > 5 Members | 33.9 |
| 19 – 20 Years old | 54.6 | Sleeping Hours | |
| 21- 22 Years old | 42.5 | < 7 hours | 24.7 |
| 23 – 24 Years old | 2.9 | 7 – 8 hours | 61.8 |
| Ethnic | | > 8 hours | 13.5 |
| Malay | 2.0 | Education Status | |
| Chinese | 89.1 | Undergraduate | 97.7 |
| Indian | 7.5 | Postgraduate | 2.3 |
| Others | 1.4 | Studying Mode | |
| State | | Full time | 96.0 |
| Kedah | 6.9 | Full time with Part-time with job | 4.0 |
| Penang | 11.2 | Year of Studying | |
| Perak | 43.4 | 1 st Year | 74.1 |
| Selangor | 9.8 | 2 nd Year | 13.5 |
| Kuala Lumpur | 1.1 | 3 rd Year | 12.4 |
| Melaka | 3.4 | Currently Staying with | |
| Negeri Sembilan | 2.3 | Family | 94.3 |
| Johor | 15.2 | Friends | 2.3 |
| Pahang | 1.1 | Alone | 3.4 |
| Kelantan | 1.1 | | |
| Terengganu | 1.4 | | |
| Sabah | 1.4 | | |
| Sarawak | 1.4 | | |

Number of Respondent, $n = 384$

(Source: Author's calculation, 2021)

Table 2 shows the DASS score for 384 respondents. Analysis of DASS divides individuals into five categories: standard, mild, moderate, severe and extremely severe. The implementation of the Movement Control order (MCO) that creates a new norm in the life of the students affects their education. DASS's analysis shows that 22.1 per cent of respondents experience depression at mild levels, 29.9 per cent at a moderate level, and 10 per cent at a severe level. In addition, analysis shows that there are students with mild stress problems at 39.9 per cent, 17.2 per cent students at a moderate level and 4.3 per cent at a severe level. While for anxiety, there are students with mild problems at 5.5 per cent, 39.9 per cent students at a moderate level and 20.1 per cent at a severe level. Overall, students with mental health issues will be addressed effectively with high depression, stress, and anxiety levels. It is because mental health problems will affect their education and the overall quality of their life.

Table 2

DASS-21 Score with Components of Mental Health

| DASS-21 Score | Percentage (%) |
|----------------------|-----------------------|
| Depression | |
| Normal | 37.9 |
| Mild | 22.1 |
| Moderate | 29.9 |
| Severe | 4.0 |
| Extremely severe | 6.0 |
| Stress | |
| Normal | 38.5 |
| Mild | 39.9 |
| Moderate | 17.2 |
| Severe | 2.3 |
| Extremely severe | 2.0 |
| Anxiety | |
| Normal | 34.5 |
| Mild | 5.5 |
| Moderate | 39.9 |
| Severe | 8.6 |
| Extremely severe | 11.5 |

Number of Respondent, n = 384

(Source: Author's own calculation, 2021)

Cross Tabulation Analysis

Table 3

Cross Tabulation Analysis between Gender and Mental Health

| | | Normal (%) | Not Normal (%) | | | | Total |
|------------|--------|--------------|----------------|--------------|------------|------------------|---------------|
| | | | Mild | Moderate | Severe | Extremely severe | |
| Depression | Male | 54 15.5% | 25 7.2% | 23 6.6% | 3 0.9% | 9 2.6% | 114 32.8% |
| | Female | 78 22.4% | 52 14.9% | 81 23.3% | 11 3.2% | 12 3.4% | 234 67.2% |
| | Total | 132 37.9% | 77 22.1% | 104 29.9% | 14 4.0% | 21 6.0% | 348 100.0% |
| Stress | Male | 55 15.8% | 29 8.3% | 22 6.3% | 8 2.3% | 0 0.0% | 114 32.8% |
| | Female | 79 22.7% | 110 31.6% | 38 10.9% | 0 0.0% | 7 2.0% | 234 67.2% |
| | Total | 134 38.5% | 139 39.9% | 60 17.2% | 8 2.3% | 7 2.0% | 348 100.0% |
| Anxiety | Male | 58 16.7% | 3 0.9% | 30 8.6% | 14 4.0% | 9 2.6% | 114 32.8% |
| | Female | 62 17.8% | 16 4.6% | 109 31.3% | 16 4.6% | 31 8.9% | 234 67.2% |
| | Total | 120 34.5% | 19 5.5% | 139 39.9% | 30 8.6% | 40 11.5% | 348 100.0% |

*Number of Respondent, n = 384**(Source: Author's calculation, 2021)*

Generally, most students have mental health problems, whether depression, anxiety, and stress. But the findings show a significant difference in the level of gender. Table 3 below shows the cross-tabulation distribution of depression, anxiety and pressure among the students in private higher learning institutions during the COVID-19 pandemic. The composition of depression for the female is 44.8% experiencing a mild depression level to severe, and this percentage is higher than the male with 17.3% (Jia & Loo, 2018).

In addition, the percentage of cross-tabulation against stress levels shows that some females experience at least mild stress to extremely severe at 44.5% compared to the male student with 16.9%. From the aspect of the anxiety level, around 49.4% of the female students experienced anxiety levels starting from mild to extremely severe during their study period compared to male students with 16.1%. Thus, overall, we can conclude that female students have higher mental health issues than males in private institutions (Jia & Loo, 2018).

Table 4

Cross Tabulation Analysis between Sleeping Hours and Mental Health

| | | Normal (%) | Not Normal (%) | | | | Total |
|------------|--------------|--------------|----------------|--------------|------------|------------------|---------------|
| | | | Mild | Moderate | Severe | Extremely severe | |
| Depression | < 7 hours | 50 19.1% | 29 11.1% | 34 13.0% | 0 0.0% | 0 0.0% | 113 43.1% |
| | 7 – 8 hours | 44 16.8% | 29 11.1% | 25 9.5% | 4 1.5% | 0 0.0% | 102 38.9% |
| | > 8 hours | 20 7.6% | 5 1.9% | 10 3.8% | 0 0.0% | 12 4.6% | 47 17.9% |
| | Total | 132 37.9% | 77 22.1% | 104 29.9% | 14 4.0% | 21 6.0% | 348 100.0% |
| Stress | < 7 hours | 41 15.6% | 55 21.0% | 17 6.5% | 0 0.0% | 0 0.0% | 113 43.1% |
| | 7 – 8 hours | 56 21.4% | 37 14.1% | 9 3.4% | 0 0.0% | 0 0.0% | 102 38.9% |
| | > 8 hours | 20 7.6% | 12 4.6% | 3 1.1% | 5 1.9% | 7 2.7% | 47 28.0% |
| | Total | 132 44.7% | 77 39.7% | 104 11.1% | 14 1.9% | 21 2.7% | 348 100.0% |
| Anxiety | < 7 hours | 57 21.8% | 5 1.9% | 39 14.9% | 8 3.1% | 4 1.5% | 113 43.1% |
| | 7 – 8 hours | 42 16.0% | 0 0.0% | 40 15.3% | 8 3.1% | 12 4.6% | 102 38.9% |
| | > 8 hours | 13 5.0% | 7 2.6% | 15 5.7% | 0 0.00% | 12 4.6% | 47 18.0% |
| | Total | 132 42.7% | 77 4.6% | 104 35.9% | 14 6.1% | 21 10.7% | 348 100.0% |

Number of Respondent, $n = 384$

(Source: Author's calculation, 2021)

Moving to sleep hours which has been known as the most significant factor that cause mental health issues, we can conclude that most of the students in private higher learning institutions sleep less than 7 hours, which cause the depression level with almost 62% experiencing a mild depression level to extremely severe as shown in Table 4. However, only 37.9% of students are normal and without depression symptoms. For stress level, 55.4% of students are experiencing a mild stress level to extremely severe level, and only 44.7% are normal without any stressful feelings. From the aspect of the anxiety level, although only 42.7% of students are normal, this is lower than students from mild anxiety level to extremely severe level with 57.3%. Overall, we can conclude that fewer sleeping hours have caused the students in private higher learning institutions to experience mental health issues (Hasan et al., 2020).

Table 5

Cross Tabulation Analysis between Year of Study and Mental Health

| | | Normal (%) | Not Normal (%) | | | | Total |
|------------|----------------------|--------------|----------------|--------------|------------|------------------|---------------|
| | | | Mild | Moderate | Severe | Extremely severe | |
| Depression | 1 st Year | 114 32.8% | 56 16.1% | 64 18.4% | 3 0.9% | 21 6.0% | 258 74.1% |
| | 2 nd Year | 8 2.3% | 12 3.4% | 16 4.6% | 11 3.2% | 0 0.0% | 47 13.5% |
| | 3 rd Year | 10 2.9% | 9 2.6% | 24 6.9% | 0 0.0% | 0 0.0% | 43 12.4% |
| | Total | 132 37.9% | 77 22.1% | 104 29.9% | 14 4.0% | 21 6.0% | 348 100.0% |
| Stress | 1 st Year | 114 32.8% | 82 23.6% | 47 13.5% | 8 2.3% | 7 2.0% | 258 74.1% |
| | 2 nd Year | 5 1.4% | 39 11.2% | 3 0.9% | 0 0.0% | 0 0.0% | 47 13.5% |
| | 3 rd Year | 15 4.3% | 18 5.2% | 10 2.9% | 0 0.0% | 0 0.0% | 43 12.4% |
| | Total | 134 38.5% | 139 39.9% | 60 17.2% | 8 2.3% | 7 2.0% | 348 100.0% |
| Anxiety | 1 st Year | 111 31.9% | 12 3.4% | 91 26.1% | 15 4.3% | 29 8.3% | 258 74.1% |
| | 2 nd Year | 5 1.4% | 7 2.0% | 16 4.6% | 8 2.3% | 11 3.2% | 47 13.5% |
| | 3 rd Year | 4 1.1% | 0 0.0% | 32 9.2% | 7 2.0% | 0 0.0% | 43 12.4% |
| | Total | 120 34.5% | 19 5.5% | 139 39.9% | 30 8.6% | 40 11.5% | 348 100.0% |

*Number of Respondent, n = 384**(Source: Author's calculation, 2021)*

Table 5 shows the mental health problems faced by students from the aspects of depression, stress and anxiety. Findings show that there is a significant difference in the level study. From Table 5, we can conclude that the composition of depression for the 41.4% of first-year students is experiencing a mild depression level to extremely severe level. This percentage is higher than second-year students with 11.2% and third-year students with only 8.1%. Besides, the composition shows that 41.4% of first-year students experience a mild stress level to extremely severe level. This percentage is higher than second-year students with 12.1% and third-year students with only 8.1%. However, adaptation to online learning makes first-year students experience depression compared to others.

In addition, the percentage of cross-tabulation distributions against anxiety levels show that first-year students have the least mild anxiety to extremely severe at 42.1%. In contrast, second-and third-year students only have mild to extremely severe anxiety levels with 23.3%. Thus, overall, we can conclude that the first year has mental health issues due to

adaptation to online learning that makes the first-year students experience depression compared to others (Jia & Loo, 2018).

Conclusion & Implications

The present study analyses the psychological state of private higher learning institution students in Malaysia. The study's results showed that most students from higher education face stress, depression, and anxiety at different levels. The findings also conclude that first-year students face higher depression, stress, and anxiety than students from the second and third years during the COVID-19 pandemic due to adaptation to online learning issues (Jia & Loo, 2018). Besides, the present study also discovered that female students affected by depression, stress and anxiety are higher than male students. The present study's findings can bring awareness to the universities, colleges, and parents about students' psychological state and their growing mental health issues. To ensure the students are continuously involved in educational processes, the universities should implement education programs to reach out to students living in remote areas with or without devices associated with internet-service providers by providing scholarships or student loans.

Furthermore, parents should be encouraged to create a welcoming and supportive family atmosphere for university students without pressure on their future academic and professional careers by offering recovery help from the government, as mentioned in (Kadir & Mohd, 2021). We need to apply 5Cs (competence, confidence, character, connection, and caring) to build a positive circle to reduce students' mental illness problems and conduct more religiosity programs in the university to protect depression (Ting et al., 2021). In addition, universities need to think of appropriate programs to expose students to the new norms. Students need to familiarise themselves with the acceptance of new technology aimed at reducing the risk of infection cases and being able to continue learning online. As in the study Johan et al (2021), the effects of technology did not affect students' stress while attending in the classroom.

Corresponding Author

Muhammad-Baqir Abdullah

Universiti Islam Antarabangsa Sultan Abdul Halim Mu'adzam Shah, Malaysia

Email: muhammad.baqir@unishams.edu.my

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