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PSYCHOLOGICAL IMPACTS OF COVID-19 PANDEMIC TOWARDS MALAYSIA'S SECONDARY SCHOOL STUDENTS

Nurul Neeta Syafika Muhammad Zaki[1], Muhd Fazly Shah Shaharuddin[2], Nur Adani Balqis Cik Ishak[2], Zahida Saffiya Hilmi[1], Nur Aisha Alyssa Kamarul Azmi[2], Jundika Candra Kurnia[3]

[1]Department of Geosciences, Universiti Teknologi PETRONAS, Malaysia
[2]Department of Petroleum Engineering, Universiti Teknologi PETRONAS, Malaysia
[3]Department of Mechanical Engineering, Universiti Teknologi PETRONAS, Malaysia

*Email: nurul_19000021@utp.edu.my

ABSTRACT

The COVID-19 pandemic has been spreading all across the globe since December 2019. The pandemic has brought a threat by not only risking peoples' lives but also impacting society's mental well-being. This research aimed to discuss the impacts of the COVID-19 pandemic on the psychological health of secondary school students in Malaysia who were expected to sit for the Sijil Pelajaran Malaysia (SPM) examination in 2020 but it got postponed due to the current COVID-19 pandemic. The objectives of the proposed research revolve around the idea of investigating the underlying causes affecting these students' mental well-being and identifying any coping mechanisms used to overcome this issue. A total of 137 respondents took part in completing the online survey from the period of February 16th to 21st 2021. Results indicated that 59.6% of the respondents are being psychologically impacted by the current pandemic, followed by 32.7% of the respondents who mentioned they somehow are being psychologically impacted, and 7.7% stating that the COVID-19 has not impacted them psychologically at all. A variety of external stressors led to a finding in the Generalised Anxiety Disorder Questionnaire (GAD-7) that respondents were asked to respond to, indicating that 37.6% of respondents had extreme anxiety, 28.8% had moderate anxiety, 20.0% had mild anxiety, and 5.6% & had normal mental well-being. It is highly suggested that the mental health of secondary school students needs to be monitored by the respective authorities to achieve a quality education among the students.

Keywords: *Coronavirus, pandemic, students' mental well-being, mental health, education, online distance learning*

INTRODUCTION

The COVID-19 pandemic, which originated in China and began in December 2019, has engulfed the entire world. It is a concerning issue because it has rapidly spread around the world, including to Malaysia. The pandemic has affected the education of more than a billion students in 129 countries around the world, according to the United Nations Educational, Scientific, and Cultural Organization (UNESCO). On March 18, 2020, the Malaysian government issued a Movement Control Order (MCO) or Perintah Kawalan Pergerakan (PKP) as a precautionary measure in response to the COVID-19 pandemic in the nation. Many citizens, including students, have been impacted by the government's decision. Since the beginning of MCO, multiple students faced difficulties. Almost all colleges, schools, and tuition centres have adopted online-distance learning (ODL), which has intensified students' anxiety. Studies on the impact of COVID-19 and lockdowns on students in Malaysia reported significant negative effects on students' psychological well-being, as well as high levels of anxiety. Sundarasen et. al. (2020) findings state that 27.8% of students in Malaysia experience anxiety specifically those who are in the age group of 17 to 18 years old. As a result, Malaysian education will be questioned because not all students will be able to adapt and fit into the new learning environment.

The concept of having good mental health does not merely entail the absence of diagnosable mental health issues. However, it is more towards the precautions in preventing the emergence of many such problems as it is essential for all human beings, including students. As part of the Sustainable Development Goals, the world leaders acknowledged the importance of good mental health for all people as it is being emphasised in Goal 3 which covers the aspect of Good Health and Well-Being. The world leaders proposed that by 2030, all countries be able to decrease premature mortality rates from non-communicable diseases by one-third through diagnosis and intervention, as well as promoting mental health and well-being, as part of the health goal's Target 3.4. According to early literature applicable to this report, the pandemic has a plethora number of negative influences on students' psychological well-being. The postponement of exams such as Sijil Pelajaran Malaysia (SPM), a major exam for Malaysian students, can increase stress levels and have an impact on their mental health and education quality.

It is important to comprehend students' mental health because it is a substantial factor in moving towards a world with better health for all mankind thus, improving the quality of education for all. If the student's mental health progresses, the likelihood of receiving better academic achievements will escalate, as does the standard of education. Our research will involve high school students between the ages of 17 and 18, as well as factors that influence stress, anxiety, and pressure. This research is crucial because it will aid the student in adjusting to a new learning environment and restoring educational quality.

Problem Statement

Secondary school life, specifically in the senior year, can be the most challenging phase for students in Malaysia as it determines their path in undergraduate studies. For a bright future, students must concentrate and do well in academics while still engaging in co-curricular activities. Failure to adequately address these issues can lead to mental health problems.

Cao et al. (2020) study shows that one-quarter of students at a medical college in China developed anxiety due to the COVID-19 outbreak. The stressors of the anxiety are found to be economic stressors, effects on daily life, and academic delays. How are we sure that students in Malaysia will not develop the same psychological illness when they are facing the same virus outbreak? The majority of Malaysia's educational institutions are closed during the COVID-19 quarantine. However, the Ministry of Education is giving the priority to students who should have taken SPM in 2020 to progressively return to school. Unfortunately, several schools in COVID-19's red-zone region have yet to open due to safety concerns, and the use of online distance learning (ODL) has been implemented. However, we were unable to guarantee the students' productivity. Students who live in a non-conducive environment at home can find it difficult to concentrate on their studies. Furthermore, students in rural areas can have poor internet service at home, limiting their access to resources and making it difficult to participate in live class sessions. The mental health of teenagers is critical, particularly when it comes to education. The ultimate goal of this circumstance is to ensure that Malaysia's educational system generates students who excel not only in academics but also in mental health (Othman & Rashid, 2018).

Spring and Silman (2013) found that one-third of isolated and quarantined children are traumatised and show symptoms of PTSD. When comparing the National Health and Morbidity Survey (NHMS) 2017 to the NHMS 2012, we could see that the prevalence of depression (from 17.7% to 18.3%) and anxiety (from 39.6% to 39.7%) among adolescents aged 13 to 17 years old has increased. These studies depict adolescent mental health before the COVID-19 outbreak. What would happen to students if there were no educational opportunities, no social interactions, and a hostile home environment to contend with during the COVID-19 pandemic? What if the number of students with mental illnesses continues to rise?

Research Objectives

The research hopes to achieve the following objectives:

1. To emphasise the importance of comprehending the underlying psychological effects experienced by Malaysian secondary school students amid the COVID-19 pandemic.
2. To investigate secondary school students' perception of remote learning amid a COVID-19 pandemic.

3. To identify the differences in secondary school students' well-being during remote learning and traditional learning.

Research Questions

The following research questions are created in providing credible yet reliable answers to achieve the objectives of this study, which are:

1. How does the COVID-19 pandemic affect the psychological state of secondary school students in Malaysia?
2. Why is it critical to draw attention to the problems affecting students' mental wellbeing during the COVID-19 pandemic?

Hypothesis

The research aims to reject the null hypothesis by providing the alternative hypothesis as mentioned below:

1. **Null Hypothesis, H_0**: Malaysia's secondary school students are not psychologically impacted due to the current COVID-19 pandemic.
2. **Alternative Hypothesis, H_1**: Malaysia's secondary school students are psychologically impacted due to the current COVID-19 pandemic.

Significance of Study

There is a growing consensus for new uncertainties that have been introduced into major aspects of the world ever since the new coronavirus, namely COVID-19, existed. The purpose of this study is to gain a better understanding of the effects and consequences of the COVID-19 pandemic on the mental health of Malaysian secondary school students.

A person's psychological state can be concerning due to stressors, which means to experience challenging situations that are perceived as threats to one's well-being. Malaysia's infamous national examination, Sijil Pelajaran Malaysia (SPM) is undeniably the most important agenda in Malaysia's secondary school students' lives. To combat the spread of the coronavirus, Malaysia's Movement Control Order (MCO) was implemented on March 18, 2020, prohibiting all public meetings, including schools. Hence, students were not allowed to attend physical classes and instead, attend classes virtually. In this study, we ought to focus on the underlying circumstances and situations that Malaysia's high school students underwent amidst the COVID-19 pandemic. Furthermore, the following will benefit from this research:

1. Respondents – The main target group of this study consists of secondary school students in Malaysia, and the result of this study aims to inform respective authorities to assist students in adapting to the "new normal". This initiative will help secondary school students in Malaysia to battle the psychological impacts of the "new normal".
2. Respective authorities – The findings of this study will be emphasising on the psychological effect of the COVID-19 pandemic on secondary school students and provide an assessment of strategies to assist students in better adapting to the "new normal." The assessment of strategies will also aid respective authorities to initiate and find a solution to combat ineffective learning processes.
3. Future researchers – The results of this study will be used as reference material and guidance for future researchers who wish to conduct a similar experimental study that focuses on the psychological impacts of the COVID-19 Pandemic on secondary school students in Malaysia.

LITERATURE REVIEW

The principal hindrance to academic success is mental health problems. Students' motivation, concentration, and social interactions can all be affected by mental illness, which is an all-important factor for students to succeed at any level of education (Irfan et al., 2020; Son et al., 2020).

The COVID-19 pandemic, which was first identified in Malaysia in January 2020, has focused attention on the mental health of affected Malaysian students, particularly those taking their national public examination, Sijil Pelajaran Malaysia (SPM), this year. The SPM is one of the education pathways of Malaysian government schools to tertiary education, which is taken after 11 years of schooling. The students who sit for the examination for SPM are mostly 17 years old, or widely known as Form 5. Notwithstanding, some circumstances allow younger students to take it, like those who have very excellent performance in their

early education, allowing them to skip their years of study either in secondary school or primary school. Furthermore, students who wish to pursue higher education after secondary school must have the necessary academic qualifications and good grades, as it is highly advantageous to secure a spot in universities or colleges, as well as to be eligible for a scholarship to fund their education (Study Malaysia, 2015; Samya, 2019). Looking at these beneficial aspects, there is no doubt that SPM is very prominent in ensuring a bright future for the youth of Malaysia. Without excellent results, the students' dreams of furthering their studies at a higher level will inevitably be affected, in addition to stifling their ambitions.

Unfortunately, it is this enormous importance that has driven many secondary school students to be psychologically disturbed or depressed during their adolescence, as they worry too much about their academic performance which may affect their future in adulthood. In fact, with the global situation now plagued by the COVID-19, learning and teaching sessions are physically limited, affecting these students in their preparation for the significant examination (Kalok et al., 2020). Concerns should also be given to the Form 5 students who were supposedly going to take their SPM examination for the 2020 session, yet have been postponed, causing them to sit for it in the mid of 2021. This has not only hampered the process of teaching and learning, as well as their preparation for the SPM, but many students are likewise psychologically affected. The particular reasons for this occurrence are they must face these new norms with strict Standard Operating Procedures (SOPs) of COVID-19 pandemic, to eradicate the transmission of this dangerous virus, apart from taking too long in their secondary school level.

On March 18, 2020, the government issued a nationwide Movement Control Order (MCO), also known as a lockdown, to contain the deadly outbreak by instituting quarantine and social isolation. Unprecedented laws have had a significant impact on people's lives and social relationships (Irfan et al., 2020; Son et al., 2020; Sundarasen et al., 2020). Although measures such as lockdowns, strict isolation, social distancing, emergency remote learning, and confusion or delays in school, college, and university start-ups are primarily taken to reduce the spread of COVID-19 in Malaysia, they do have a major impact on students' sociopsychological well-being and anxiety levels.

In China, Cao et al. (2020) has conducted a study to examine the psychological impact of the COVID-19 on college students. Data that has been collected from 7,143 students from Changzhi Medical College China, has shown that 21.3% of the respondents were experiencing mild anxiety, 2.7% moderate anxiety, and 0.9% severe anxiety, using the Generalized Anxiety Disorder Assessment (GAD-7) as an indicator. In addition, the study also explored that living in urban areas, living with parents, as well as having a steady family income were protective factors against anxiety. Other stressors identified as key factors affecting students' anxiety and psychological well-being include their parents' psychological state, decreased social interactions, an increase in the number of new cases and affected provinces, and educational disruptions (Sundarasen et al., 2020). Our study uses similar approaches as a benchmark for measuring the anxiety factors associated with the psychological impacts of the COVID-19 pandemic towards Malaysia's Form 5 students.

Meanwhile, in Malaysia, a cross-sectional study was conducted by Kalok et al. (2020), using self-reported questionnaires that were distributed online using the Depression, Anxiety and Stress Scale-21 (DASS 21), Short Warwick Edinburgh Mental Well-Being Scale (SWEMWBS), and the newly designed MCO effect questionnaire, to examine the psychological impact of MCO during the COVID-19 outbreak on clinical undergraduates all around the nation. From a total of 772 students who were involved in the study, the results have revealed that the prevalence of psychological distress was 52.8%, with around 60% of respondents reporting disruption to their daily lives. They also discovered that undergraduates who received family assistance or support had lower depression scores ($p = 0.037$) and higher mental health ($p = 0.020$) than those who did not.

It is almost impossible to find a study in Malaysia that discussed the mental health of high school students since most of them only focused on the psychological impacts of COVID-19 on university or college students. However, the studies mentioned before are highly beneficial in assisting our research

in various aspects, notably on the methodology and future recommendations, as they provide concrete evidence that a lot of students in Malaysia from various levels of education have been psychologically affected by this global pandemic.

Furthermore, as mentioned before, this COVID-19 pandemic has hampered the teaching and learning process physically and caused almost all levels of study to be conducted online, which most are not accustomed to. Attention should always be given to the effectiveness of the online learning itself, to ensure that each student does not lag in lessons and can achieve the objectives of each learning. Landrum (2020) discussed how students' confidence in their ability to utilise online learning platforms, using self-regulation strategies, as well as engaging in online classes indicates their satisfaction with and perceived utility of online classes.

Students with more online class experience are more pleased with online learning than those with less experience, according to this study. For Malaysia's Form 5 students, it is apparent that most of them are not familiar with the online learning system some have never encountered or joined a class online, due to the education system in Malaysia, which was indeed conducted physically before the world was hit by the COVID-19 epidemic. Tan (2021) who studied the impacts of the COVID-19 pandemic on student learning performance, reported that a vast majority of students in Malaysia lost their motivation and could not perform well using online learning methods during the MCO period, which should be viewed as one of the factors affecting the students' mental well-being.

There is also research in Malaysia that aimed to examine how university students in Malaysia coped with the psychological impact of the COVID-19 pandemic and MCO. About 30% of the students from the study conducted by Kamilah et al. (2020) were discovered to experience some level of anxiety due to the COVID-19 pandemic, in which the proportion is similar to the results from some studies in other countries, such as in China and Spain (Cao et al., 2020; Odriozola-Gonzáleza et al., 2020). Hence, the researchers found that to cope the stress, the students used maladaptive coping strategies, which is the avoidance, self-blaming, and substance use, more than adaptive coping strategies, that include actions and behaviours of active coping, problem-solving, and seeking social support, including emotional support to reduce stress (Kamilah et al., 2020).

Arguably, this actively demonstrates that most of the secondary school students are possibly not satisfied with the non-conducive online learning environment as they lack experience with online classes, resulting in the inadequacy of online learning itself. However, according to Baber (2021), social interaction has a substantial positive impact on the effectiveness of online learning. Even so, in the presence of social distance standards, this effect is diminished, as people place a higher value on continuous learning and lifesaving than on socialising in the online environment, demonstrating and promoting that online learning affects the quality of study as well as the psychological well-being of Malaysian secondary school students. According to Irfan et al. (2020), abnormal stress and depression among students affect not only their performance but also their self-injury and suicide attempts. By using appropriate advanced methods to estimate the average anxiety level amongst the students, this study aims to identify and understand the effect of major stressors associated with the COVID-19 pandemic on the psychological well-being of Malaysian high school students all over the nation.

METHODOLOGY

The main goal of this study is to discover more about the negative psychological effects of the COVID-19 pandemic on secondary school students in Malaysia. The research consists of a combination of quantitative and qualitative approaches towards the targeted respondents. The research subjects have been discovered through an online questionnaire which is made using Google Form. As COVID-19 affected the entire country, the best method for gathering data is through an online questionnaire, which does not require any physical contact between researchers and research subjects. In maintaining the reliability of the instruments, the data has been screened to observe any repetition made by submission by respondents. The responses are also processed automatically, and the results are available at any moment, making data analysis easy for researchers. The online questionnaire has been shared on social media, indicating that this

is a convenient sampling method. Furthermore, the researchers approached some targeted respondents to request them to share the questionnaire with their network, implying that this survey is also subject to snowball sampling. The online questionnaire contains various non-theoretical questions about concepts revolving around the main scope, which is COVID-19's psychological effects on Malaysian Secondary School Students. The main target of the sample size for each cycle of the online questionnaire has been set to about 50 respondents regardless of their genders and educational backgrounds. With two different cycles of gathering data through the online questionnaire, the targeted sample size has been achieved as 76 respondents have taken part in cycle one while 61 respondents under cycle 2. Two different cycles have been conducted to increase the reliability of the data gathered with each having a gap of several days. With two different cycles, the researchers can gather the average results of the data obtained. The main criteria for this study are that the respondents must be SPM candidates for the 2020/2021 session, with the respondents being 17-year-old students.

An online survey or questionnaire has been conducted as a preventive measure in breaking down the COVID-19 chain to gather the data from the targeted subjects via Google Form. A list of questions has been constructed to collect the subjects' demographic data as part of the online survey for future research purposes. The research subjects have also been categorised into two different categories with each having different targeted questions whether they are being psychologically affected by the COVID-19 pandemic or otherwise. The determination on which set of questions that the subjects encountered was based on the main question in the demographic data section where it has been identified whether the subjects are currently experiencing, have experienced, or have not experienced the proposed phenomenon.

The online questionnaire also consists of several questions from a self-reported research questionnaire which is the Generalized Anxiety Disorder Assessment 7 (GAD-7). It is a self-reported research questionnaire for evaluation and severity assessment that measures the aspects covered in this questionnaire. GAD-7 is composed of seven parts that evaluate the severity of multiple GAD symptoms using reported response categories with each having its designated points. The items include nervousness, inability to stop worrying, excessive worry, restlessness, difficulty in relaxing, easy irritation, along with fear of something awful happening (Spitzer et al., 2006). The GAD-7 index or score was determined by assigning points of 0, 1, 2, and 3 to the response categories of "Not at all", "Several days", "More than half days", and "Nearly every day", respectively. The scores of the seven items were then added, with the total scores that range from 0 to 21.

The first step in gathering the data was mainly involving numerical measurements in an online survey as mentioned above. The proposed further discovery which involves online interview sessions with the selected respondents has been cancelled due to unavoidable circumstances. This includes that the psychological and mental well-being of the respondents may have been enhanced due to the current SPM examination that is currently ongoing. This may lead to unreliable results as the collection of data has been collected before the examination.

FINDINGS AND DISCUSSION

We have conducted a nationwide survey with two different cycles to get more accurate and reliable data. Each cycle took about 3 days in gathering the necessary data from the online questionnaire where the first cycle was from 16th to 18th February 2021 while the second cycle was from 19th to 21st February 2021.

Demographic Data

Demographic data is the socio-economic data collected based on the characteristics of the population. This data is essential for generalisation purposes, where the individuals in a particular study are a representative sample of the target population. In this research, the demographic data collected consists of the gender, type of school the students attend, and the preference on whether the students are psychologically impacted by online learning.

There was a total of 137 respondents from the survey which includes Cycle 1 and Cycle 2. For the gender, the student chose from the two options provided which are male and female. The majority of the respondents are female with a total percentage of 80.29% and the

Table 1 Respondents' Demographic Data

	Cycle 1	Cycle 2
Gender		
Male	16	11
Female	60	50
Type of school		
Government/ Public	30	16
Boarding	44	43
Home school	0	0
Private	2	2
Total	**76**	**61**

remaining 19.71% of the respondents are male. Next, the respondents selected their type of school based on the four options provided which are a private school, homeschool, boarding school, and government or public school. Both cycles contained results with a similar pattern. The majority of the respondents are from boarding schools with a total percentage of 63.5%, followed by the government or public school with 33.58%. Unfortunately, there were only 2.92% of respondents from private schools and none of the respondents are homeschooling.

The first Movement Control Order (MCO) was implemented by the Malaysian government on 18th March 2020 to reduce the spread of the COVID-19. Some restrictions have been made which include the closure of all educational institutions in Malaysia. The students were having mixed feelings regarding the news. As a result, students must adjust to the new norm, which allows them to learn independently and effectively manage their time at home. These pressures may slowly lead to them being psychologically impacted by the current situation. The students have chosen whether online learning has psychologically impacted them as a student. Most of the respondents chose "Yes" (59.12%) followed by "Maybe" (32.85%) and the least selected option is "No" (8.03%).

Psychological Effects that Respondents have Experienced during the Online-Distance Learning (ODL) Period

In this section, respondents answered "Yes" or "Maybe" for the question "Has online learning impacted you psychologically?". Inadequate efforts in identifying the mental health problems experienced by secondary school students in Malaysia, especially during a worrying state of the pandemic, could lead to long-term health and educational consequences.

Respondents may answer this question with more than one choice in which they think suits this scenario the best. Figure 1 shows the respondents' choices about the psychological effects experienced during Online-Distance Learning (ODL). The majority of the respondents with a total percentage of 91.24% from both cycles stated that they experienced many psychological effects. Holland argued that anxiety and stress are associated with each other. The combination of both is dangerous and may lead to restlessness, distress, and fear. The results showed that the respondents agreed that they had poor concentration during ODL as it was the highest-cumulated choice among the others. Poor

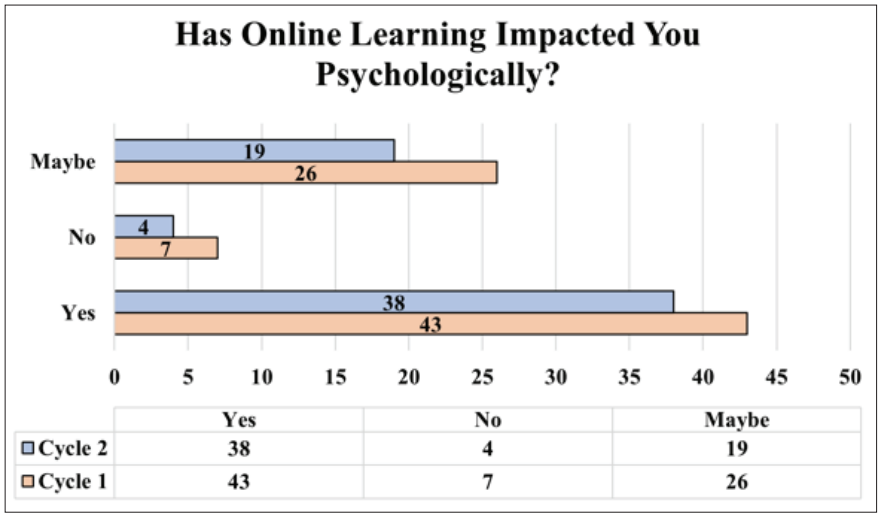
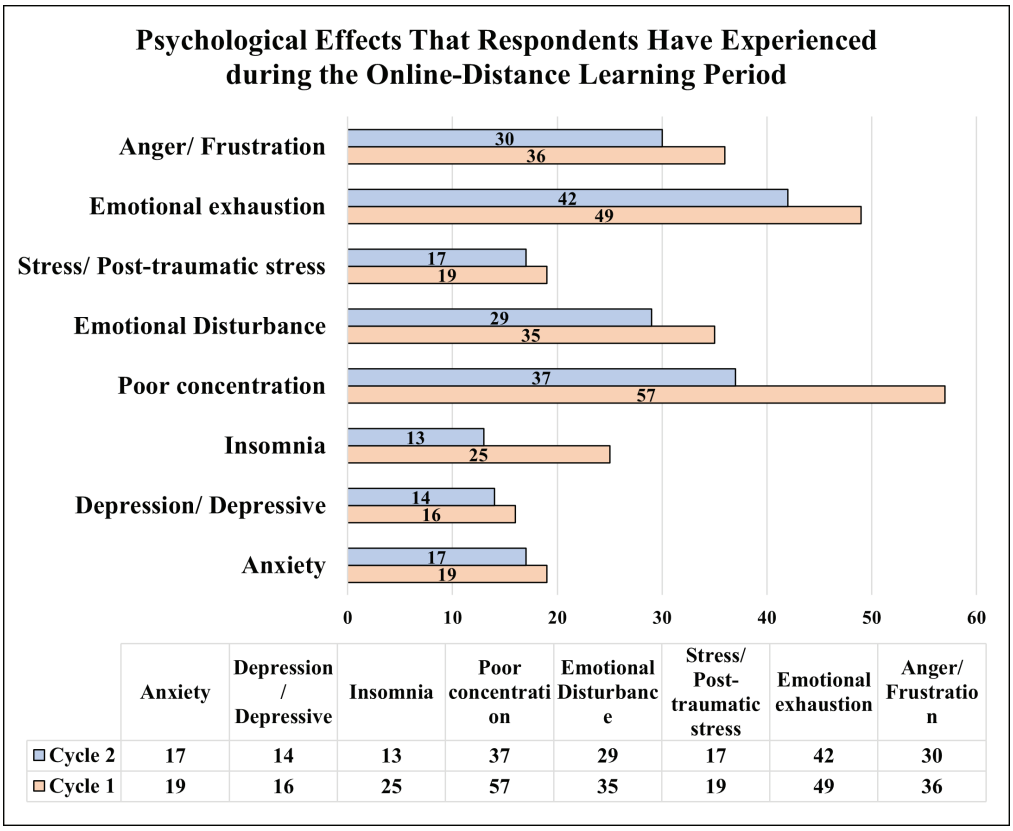


Figure 1 Has Online-Distance Learning Been Impacting the Respondents Psychologically



	Anxiety	Depression / Depressive	Insomnia	Poor concentration	Emotional Disturbance	Stress/ Post-traumatic stress	Emotional exhaustion	Anger/ Frustration
Cycle 2	17	14	13	37	29	17	42	30
Cycle 1	19	16	25	57	35	19	49	36

Figure 2 Psychological Effects That Respondents Have Experienced during the Online-Distance Learning (ODL) Period

concentration is one of the consequences of sleep deprivation among students which makes it difficult for students to think clearly and keep their focus on a specified task (Nall, 2019). Sleep deprivation could also affect students' emotions and students may feel overwhelmed yet irritated as it disrupts their student life. It is then followed by "Emotional Exhaustion" with a cumulative record of 91 respondents. Next, respondents opted that the current pandemic has led them to feel emotionally disturbed and being trapped in anger or frustration with each recorded the value of 64 and 66 respondents, respectively. It is natural for human beings to experience anger as it is an automatic response to physical or emotional harm. If nothing is done to stop this, it may lead to a more problematic issue involving aggression, outburst, or even physical altercations (Holland, 2019). Anxiety, depression, insomnia, and stress or post-traumatic stress are the least psychological effects faced by the respondents. The level of anxiety and stress for most students rises during this pandemic as the sudden shift towards ODL interrupts their learning processes. A non-conducive learning environment that students must adapt to effects these two stressors. Holland argued that anxiety and stress are associated with each other. The combination of both is dangerous and may lead to restlessness, distress, and fear. As a result, students may find it difficult to fall asleep, stay asleep, or both which is a sleeping disorder called insomnia (Lamoreux, 2020).

Furthermore, it is a well-known fact that to achieve excellent results, students must complete a considerable amount of schoolwork as well as continuous study. This is difficult to carry out if students are struggling with the psychological problems pointed out earlier thus, letting them at risk of school failure (Logsdon, 2020). Eventually, students may feel emotionally exhausted if this happens in a long run. Emotional exhaustion, according to Cafasso (2019), is a state of feeling emotional and drain because of accumulated stress. People who are experiencing this often feel "trapped" or "stuck."

External Factors that are Affecting the Psychological Effects Experienced by Respondents

After a thorough analysis in this study, the external factors faced by students that are affecting their

psychological well-being were mainly coming from a non-conducive environment for learning at home as shown in Figure 1 with over 61.29% from both cycles. As widely known, the COVID-19 pandemic has restricted the movement of society, and students are obliged to implement Online-Distance Learning (ODL) as schools are being locked down in combatting this virus from spreading even more. The living conditions of students in their respective households are crucial in determining the students' quality of education. Since everyone is required to stay home due to the government's order, the noise level coming from devices, family members' talks and external sources are enhanced and disrupts the students' concentration during online classes as well as studying sessions (Allam et al., 2020; Fatonia et al., 2020). Some students may also be struggling with family issues, which may contribute to their stress levels. This leads to them becoming emotionally burned and stressed out as a result of their inability to keep up with the syllabus thus, affecting their academic achievements. 18.55% of the respondents specified that they have experienced a bad internet connection that had hampered their online distance learning, while

13.71% mentioned that the stress that negatively affects their mental well-being came from family-related issues in their respective households as shown in Figure 2.

On top of that, a fair proportion of the respondents with a total percentage of 6.45% mentioned that the stress that negatively affects their mental well-being came from family-related issues in their respective households (Figure 3). Students' stress levels may also vary depending on their financial situation (Fatonia et al., 2020). As the pandemic disrupts the economic status of nations around the globe, the COVID-19 crisis presents a significant financial threat to certain families as well. Students from these families face significant challenges because this problem is intertwined with whether they have the essential devices and resources to adjust to the current educational technology norms during the COVID-19 pandemic.

Generalized Anxiety Disorder Assessment 7 (GAD-7)

The data analysed in Figure 4 has shown the largest number of respondents from both Cycle 1 and Cycle 2, with the percentage of 37.6% of these respondents were identified as suffering from severe anxiety, which their scores were ranging from 15 to 21. This result was then followed by the respondents who were identified as experiencing moderate anxiety during ODL, with a total of 22 and 14 respondents from Cycle 1 and Cycle 2, respectively, which leads to a percentage of 28.8%. With a very small difference of 0.8%, a total of 35 respondents were analysed to encounter mild anxiety with an average score of 7 for Cycle 1 and 6.9 for Cycle 2. Unfortunately, only 5.6% of these 125 respondents were in normal mental health or were not too psychologically affected during the time of the Malaysian government's Movement Control Order (MCO), which was imposed to effectively stop the COVID-19 from spreading further. These respondents have obtained scores from 0 to 5, as the result of data evaluation carried out using this GAD-7 method.

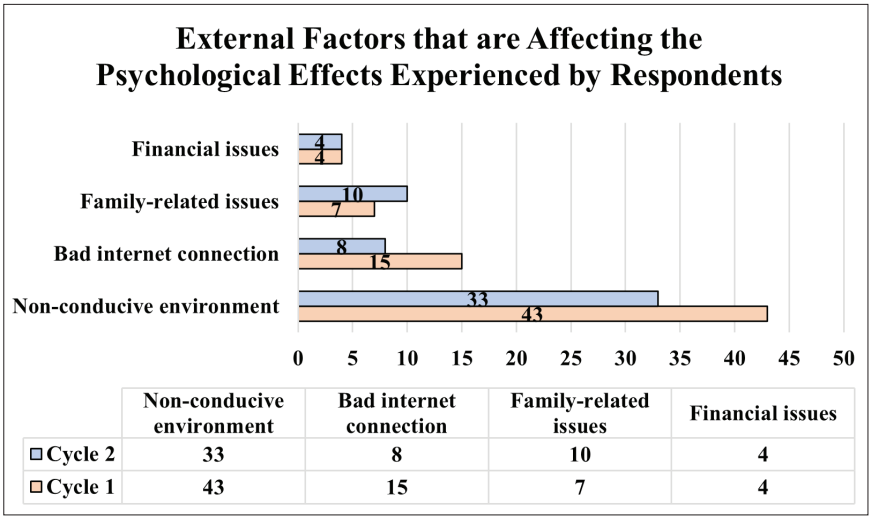
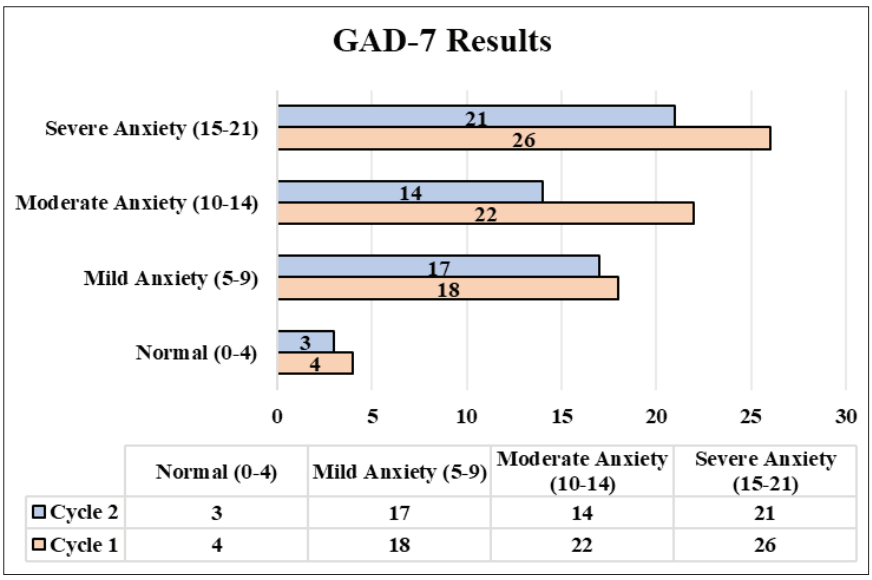


Figure 3 External Factors that are Affecting the Psychological Effects Experienced by Respondents



	Normal (0-4)	Mild Anxiety (5-9)	Moderate Anxiety (10-14)	Severe Anxiety (15-21)
Cycle 2	3	17	14	21
Cycle 1	4	18	22	26

Figure 4 GAD-7 Results for Respondents Who Answered "Yes" or "Maybe" in Figure 1

Likert Scale

As mentioned earlier in this report, 18th March 2020 was declared as the first Movement Control Order (MCO) and a new directive from the Malaysian government urged all institutions to introduce online learning to minimise the spread of this virus. With the implementation of the new Standard Operating Procedure (SOP), it is undeniably hard for students who are accustomed to traditional learning to adapt to the new norm, Online-Distance Learning (ODL). Based on Figure 5, the option "Disagree" accumulated the highest percentage of 34% in both Cycle 1 and Cycle 2, for the first statement "Online-learning has been more effective than face-to-face learning". On the contrary, the lowest percentage of respondents from both Cycle 1 and Cycle 2 is 4% with the option "Strongly Agree". As for the second statement "Online-learning has positively affected the way I manage my time in preparing for the upcoming examination", the majority chose "Disagree" with 29% of the respondents in both cycles. The least opted choice "Agree" only accumulated 10% of the respondents in both cycles. Meanwhile, the third statement "I prefer online-learning than face-to-face learning" amassed more than half of the respondents with 51% in Cycle 1 and Cycle 2, combined, strongly disagreeing that

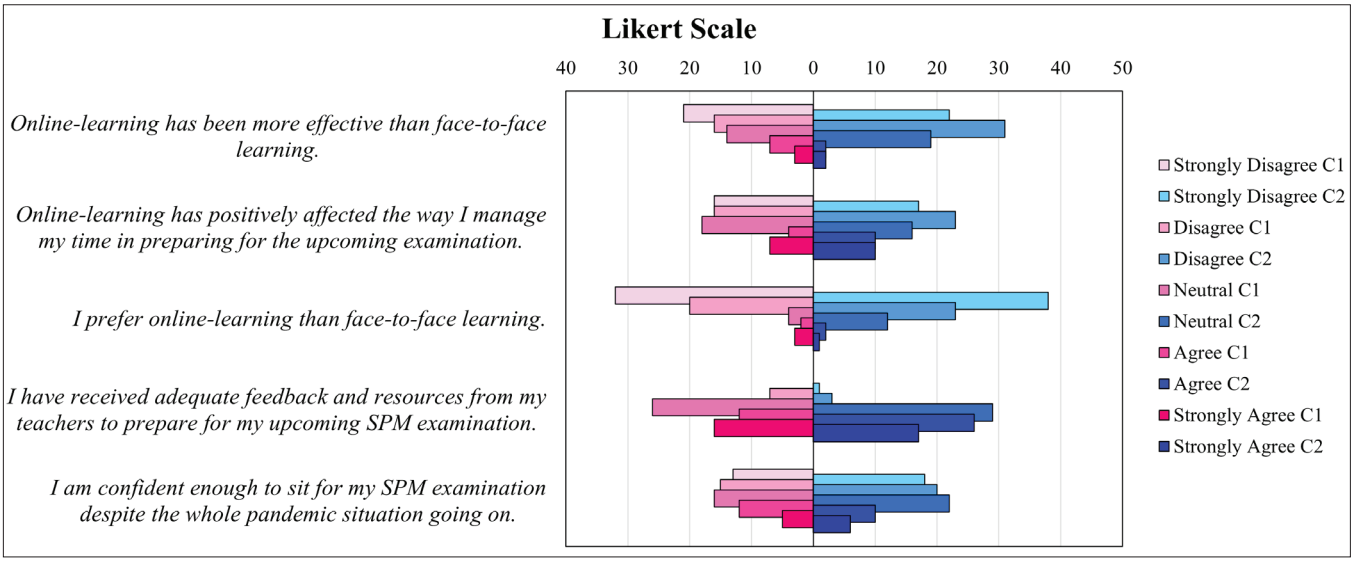


Figure 5 Likert Scale questions for Cycle 1 & Cycle 2

online learning is better than face-to-face learning. In the period of Online-Distance Learning (ODL), the students are expected to use their mobile devices mandatorily for communication and education (Malay Mail, 2021). Alas, a minority of 3 % and 3% of both Cycle 1 and Cycle 2 respondents agree and strongly agree online learning is preferable to face-to-face learning, correspondingly. Consequently, physical activities such as tuitions, revision classes, and motivation seminars were ended abruptly which leads to the fourth statement, "I have received adequate feedback and resources from my teachers to prepare for my upcoming SPM examination", 40% of the respondents in Cycle 1 and Cycle 2 opted for "Neutral", meaning the respondents neither agree nor disagree to the statement. In addition, 1% of the respondents in both Cycle 1 and Cycle 2 chose "Strongly Disagree". Although it is evident that modern technology and internet connectivity have created a faster, efficient method to find study materials and feedbacks from teachers. Not only does that influence the way students learn but technology is also becoming a distraction for students (Frohlich, 2017). Hence, this results in increasing disagreement that says online learning is preferable to face-to-face learning among the respondents. For the last statement "I am confident enough to sit for my SPM examination despite the whole pandemic situation going on", the highest percentage of 25% of the respondents in both cycles combined opted for the option of "Disagree". Unfortunately, only a percentage of 8% of the respondents in both cycles expressed the least opted choice, "Strongly Agree". By encapsulating every single response that has been expressed by each individual, it can be concluded that more than half of the SPM candidates are not confident enough to sit for the Sijil Pelajaran Malaysia (SPM) despite the adequate feedbacks the students receive from their teachers in preparing for the national examination.

Generally, it can be concluded that most of the respondents are psychologically impacted by the current ongoing COVID-19 pandemic. The non-conducive environment experienced by the respondents was recorded as the main reason why the respondents experienced several psychological effects throughout the pandemic. Most respondents reported having trouble concentrating throughout the pandemic which could be the after-effect of several other psychological effects. This has been affecting their overall mental well-being to a whole new level as they are already stressed out with the fact that the Sijil Pelajaran Malaysia (SPM) is one of the biggest national examinations, which acts as the stepping stone in their pathway in the technical and tertiary education. The struggle and constant pressure of performing well to meet society's expectations have made the respondents feel uneasy, stressed, and emotionally exhausted which leads to a relatively higher score in the GAD-7 Questionnaire. Conversely, with the countless and adequate feedbacks as well as resources from their respective teachers, the respondents managed to slowly cope and adapt to the transition to Online-Distance Learning (ODL). As a whole, the respondents are ensuring that they have the sufficient materials and advice needed in preparation to excel in the forthcoming Sijil Pelajaran Malaysia (SPM) examination.

CONCLUSION

According to our cross-sectional analysis, the current COVID-19 pandemic has caused 91.24% of secondary school students to experience psychological consequences such as anxiety, low concentration in daily tasks, and emotional exhaustion. Stressors proposed in this research were predominantly non-conducive learning environment, bad internet connection for the learning processes, family-related issues as well as financial problems. Several external stressors led to a discovery in the Generalised Anxiety Disorder Questionnaire (GAD-7) that the respondents are required to respond to were 37.6% respondents were experiencing severe anxiety, 28.8% moderate anxiety, 20.0% mild anxiety, and only 5.6% respondents have normal mental well-being. As the new normal of education has now transformed with having online-distance learning as its core, it is reasonable to infer that the majority of Malaysian secondary school students are dissatisfied with the transition. Generally, these students preferred the traditional learning method over online-distance learning where physical interactions between teachers and students are being utilised at their best. Despite the restriction in achieving the aforementioned phenomenon, teachers are doing their utmost to assist students by offering numerous and sufficient feedbacks as well as resources for the students to prepare for the Sijil Pelajaran Malaysia (SPM) examination.

All parties must be concerned and vigilant on this issue to reduce stressors related to mental health problems in secondary school students during the MCO era due to the COVID-19 pandemic. This includes the government, non-governmental organisations (NGOs), school authorities, families, community, as well as the students themselves. The most effective actions that the government and NGOs can take to reduce the digital barrier in this crisis are the distribution of electronic devices such as laptops and smartphones to students in need, as well as increasing access to online classes by providing adequate internet connections, as both are the main mediums required for online learning. Some students were having trouble getting a strong internet connection for online learning, as mentioned in the previous section. Students who have trouble accessing the internet are frequently left behind and unable to catch up with the syllabus being taught by the instructor, resulting in psychological distress (Sundarasen et al., 2020). As the students are prepped with necessary devices to commit during their online-distance learning, this can lessen the psychological impacts experienced by the students as students can catch up with the syllabus taught by the instructors.

The school management should also provide resources in managing the financial structures, academic curricula, as well as psychosocial support for their students. This action not only aims to address the mental health problems of students but also strives to achieve quality education for the students. On top of that, students must sustain a healthier lifestyle by adhering to a regular sleep routine as well as eating a nutritious and well-balanced diet during this tough time. This pandemic situation has forced individuals to sit at home and limit their social activities outside in the public. Therefore, every individual including students is recommended to practice a healthy lifestyle to adapt to the current change. With that being said, the repercussions are severe enough for it to necessitate urgent mental health services aimed at prevention and treatment for the targeted group.

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