

PSYCHOLOGICAL IMPACT OF COVID-19 ON UNIVERSITY STUDENTS USING OPEN DISTANCE LEARNING

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ABSTRACT

During the COVID-19 pandemic, the majority of universities adopted remote learning, also known as open and distance learning (ODL). Various challenges and issues that lecturers and students have to deal with in order to ensure the success of this ODL so that students do not drop out of their courses. The psychological effect of university students during the COVID-19 pandemic is examined in this article. An online survey of 191 university students was used to compile the study. We developed a tool that called Psychosomatic Symptoms Questionnaire (PSQ) using the adopted COVID-19's e-Learning Digital Tools questionnaire and Patient Health Questionnaire-4 (PHQ-4), the psychological impact of university and school students was determined. The findings show that all students were classified as having moderate depression and anxiety during the COVID-19 pandemic.

Keywords: *Psychological impact, depression, anxiety, university students, open distance learning, COVID-19 pandemic.*

Introduction

Since 1993, Universiti Teknologi MARA (UiTM) in Malaysia has provided learning and teaching in ODL, though it does not include all programmes. The learning and teaching environment have changed as a result of the COVID-19 pandemic. During the COVID-19 pandemic, all courses at UiTM completely adopt the ODL or remote learning. Various obstacles and challenges faced by lecturers and students to make sure that this ODL is successful and students don't drop out of their courses. In remote learning, numerous studies about the psychological impact of during COVID -19 pandemic had been carried out by researchers (Kecojevic et al., 2020; Li & Leung, 2020; Lischer & et al., 2021; Meda & et al., 2021; Muhammad Irfan & et al., 2020; Son & et al., 2020; Wan Noor Hayatie & et al., 2020). The psychological impact that have arisen as a result of this pandemic have quickly increased the public health burden (Grubic et al., 2020). This article reports on a study that looked at the psychological effects of the COVID-19 pandemic on university students' ODL. The study's aim is to assess these students' mental health, specifically depression and anxiety. The study's

findings will aid policymakers in providing the best possible care for university students during the pandemic (Sheela & et al., 2020).

Methodology

For this study, the online Likert-type questionnaires were created using Google Form and for the data collection process, the link was shared in WhatsApp and Telegram chat groups of instructors and students from various universities. The total of 191 data were collected across Malaysia between 1st October, 2020 and 28th February, 2021.

Furthermore, the hybrid of psychosomatic impact of COVID-19's e-Learning Digital Tools questionnaire as described by Haider and Al-Salman (2020) and 4-item Patient Health Questionnaire-4 (PHQ-4) suggested by Kroenke et al. (2009) was also used in this research, as show in Table 1.

Table 1: The Psychosomatic Impact using Likert-type questionnaires

No	Item	%				
		Little interest or pleasure in doing things	Not being able to stop or control worrying	Undecided	Feeling down, depressed or hopeless	Feeling nervous, anxious or on edge
1	Continuous exposure to electronic screens in online learning is tiring and exhausting.	5.0	2.1	15.7	23.6	58.1
2	Prolonged use of e-learning tools often leads to boredom, nervousness, and tension.	1.6	3.7	19.4	30.4	44.7
3	The psychological element is a key factor in the success of the educational process.	0.0	1.0	17.8	31.9	49.2
4	I don't recommend	5.2	6.8	30.9	26.7	30.4

	continuing with the online learning model because it is socially and psychologically unhealthy.					
5	The use of digital learning tools is responsible for my low academic performance.	2.6	5.2	16.8	28.8	46.6
6	Face-to-face interaction contributes significantly to boosting students' academic achievement.	5.0	1.0	20.9	37.7	39.8
7	Some students cannot afford to buy all necessary digital tools, which is embarrassing and frustrating.	3.7	3.1	19.9	34.0	39.3
8	Measures of lockdown, closures, and quarantine, brought by COVID-19 caused stress, frustration, and depression.	2.6	5.2	16.8	28.8	46.6
9	The volume of assignments via e-learning led to confusion, frustration and poor performance.	1.0	6.3	22.5	31.4	38.7
10	Taking quizzes and exams online from home was not comfortable and made me nervous.	6.3	10.5	31.4	23.0	28.8

Question 1 reveals that the majority of respondents (81.7% or n=155) believe that continuous exposure to electronic screens in online learning is tiring and exhausting make them “Feeling down, depressed or hopeless” and “Feeling nervous, anxious or on edge”. Question

2 reveals that 75.4% (n=143) supported that prolonged use of e-learning tools often leads to boredom, nervousness, and tension. While Question-3, which is on the ability to stop or control their worrying, this indicates that at least 57.1% of the respondents believe that the psychological element plays a key role in the success of the educational process.

Based on Question 4 ,5 and 6, they also do not recommend continuing with ODL because it is believed to be socially and psychologically unhealthy and indirectly, responsible for their low academic performance. They also prefer face-to-face interaction, which contributes significantly in boosting students' academic achievement.

Question 7 reveals that, more than 70% of respondents felt down, depressed or hopeless as a result of the facts that 73.3% (n=139) of the respondents claimed that it was unaffordable for them to buy all necessary digital tools, which made them felt embarrass and frustrating. Meanwhile, in Question 8, 75.4% cited COVID-19 as one of the key factors for their stress, frustration, and depression. While in Question 9, 70.1% also claimed that the volume of assignments given to them via e-learning led to confusion, frustration and thus, poor performance. Finally, Question 10 reveals that 51.6% (n=98) of the respondents considered taking quizzes and exams online from home as not comfortable and made them felt nervous.

Based on the results of table 1, we had developed the Psychosomatic Symptoms Questionnaire (PSQ) to measure the average score of depression and anxiety among the respondents. Scores are rated as normal (1.00 - 1.25), mild (1.26 - 3.00), moderate (3.01 - 4.25) and severe (4.26 - 5.00) anxiety and depression.

Results and Discussions

Table 2 indicates the four items in the Personal and Demographic sections of the questionnaire. According to Table 2, ODL during the Covid-19 pandemic caused moderate anxiety and depression on the all of respondents. It also shows that the PSQ score was affected by gender, age, level of study and geographic location.

According to Table 2, female respondents had a higher PSQ score than male respondents. When compared to other age groups, respondents aged 41 to 50 had the highest PSQ score. In contrast to undergraduate and postgraduate students, pre-diploma students had the highest PSQ

score. These findings could indicate that, as compared to older graduates, younger graduates are unable to handle stress.

Surprisingly, the respondent who lives in a rural area with minimal facilities has the lowest PSQ score. This may be because their rural lifestyle has trained them to embrace challenges and handle their emotions and stress.

Table 2: Respondents' Personal and Demographic with PSQ Score

No	Item	Total Sample		PSQ Score	
		N	%	M	SD
1.	Gender:				
	Male	87	45.5	3.9	0.7
	Female	104	54.5	4.0	0.7
2.	Age:				
	Below 22 years	130	68.1	4.0	0.7
	23 – 30 years	51	26.7	4.0	0.7
	31 – 40 years	5	2.6	3.9	0.3
	41 – 50 years	5	2.6	4.1	1.1
3.	Levels of Study:				
	Pre-diploma	7	3.7	4.1	0.5
	Undergraduate	144	75.4	4.0	0.7
	Postgraduate	40	20.9	4.0	0.8
4.	Residential Area:				
	Urban	89	46.6	4.0	0.7

Suburban	58	30.4	4.0	0.7
Rural	44	23.0	3.9	0.8

Table 3 displays four items related to the Internet and the ODL, which include data plan limits, internet speed, preferred learning style, and ODL-satisfaction. Data plan limits, preferred learning style, and ODL-satisfaction, have an effect on the outcome of their anxiety and depression. The internet speed had no impact on the PSQ score. ODL during the Covid-19 pandemic clearly shows that respondents with unlimited data and limited data are most likely to experience only 4.0 PSQ score. On the contrary, respondents with little or no data experienced the highest PSQ score with 4.5 score.

When it comes to Learning Style Preference, since they need to learn using ODL learning, students who prefer face-to-face have a higher risk of anxiety and depression (score 4.5) than those who prefer ODL or mixed learning. Excellent ODL satisfaction was associated with lowest PSQ score (3.7), while poor ODL satisfaction was associated with highest score (4.4). While, Table 3 depicts the psychological condition and ODL of university students.

Table 3: Information on Internet and ODL with PSQ Score

No	Item	Total Sample		PSQ Score	
		N	%	M	SD
1.	Data Plan Limits:				
	Unlimited data	104	54.4	4.0	0.7
	Limited data	84	44.0	4.0	0.7
	No data	3	1.6	4.5	0.3
2.	Internet Speed:				
	Fast	40	20.9	4.0	0.7
	Medium	127	66.5	4.0	0.7

	Slow	23	12.0	4.0	0.7
	No Internet available	1	0.6	4.0	
3.	Learning Style Preferable:				
	Face-to-face classes	61	31.9	4.2	0.6
	Open-distance learning	28	14.7	4.0	0.7
	Blended-learning	102	53.4	4.0	0.7
4.	Satisfaction of ODL:				
	Very Poor	5	2.6	4.2	0.7
	Poor	13	6.8	4.4	0.7
	Fair	62	32.5	4.0	0.7
	Good	78	40.8	4.0	0.7
	Excellent	33	17.3	3.7	0.7

Conclusions

Even though, the study is not designed to be representative due to the small number of samples which were only 191 out of approximately 5000 (just in UiTM itself), it is still important for the ministry of education to look into this mental health issues such as depression and anxiety among students in university and schools, more seriously. Emphasis should be done more onto the university students, due to the fact that most university students are self-sufficient during their studies, and some are reluctant to share their problems with their parents or lecturers about their mental issues until it is too late affected their academic results. It is important to conduct a progressive review of their mental health or psychological state in order to prevent the issue from worsening. Parents and lecturers should work together to ensure that their children and students are capable of maintaining a healthy life style while studying. Policymakers, as well, must develop appropriate guidelines to ensure the safeness of university students, not only physically but also mentally.

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