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Psychological Effects of Covid-19 among University Students

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Abstract

Most educational institutions were instructed to close and continue learning online due to the spread of coronavirus. This has caused the learning environment of students to change due to different places of residence. Due to not having a complete infrastructure such as living in college, there are many challenges faced by students to study online that can affect their psychology. The purpose of this study is to study the perception of university students in online learning during COVID-19 and to identify the factors or the stressors of psychological effects among university students in online learning during COVID-19. The study was conducted at Universiti Kebangsaan Malaysia and the study's samples were from various faculties. This study used mixed-method approaches. The data are from questionnaires to 115 students and semi-structured interviews with five students. The findings showed that students were facing difficulties in online learning during this pandemic due to academic and interpersonal stressors. The highest stressors of psychological effects among students are hours in front of the screen with 94.8% and emotional and physical exhaustion with 97.4%. In conclusion, having a good emotional management and lifestyle is particularly important in situations like today's pandemics in an effort to prevent mental illness from happening to ourselves and to our loved ones. Propose future study is to study the psychological effect of COVID-19 in online learning among wider population of higher education students.

Keywords: Online Learning, Psychological Effects, COVID-19, Higher Education, Students Perception.

Introduction

COVID-19 has caused the greatest upheaval in the humans' education history affecting almost 1.6 billion students from different countries around the world (Pokhrel and Chertri, 2002). Almost all regions and countries have enacted seclusion and social distancing measures as a preventative method to the spread of COVID-19 epidemic. This implementation has caused the immediate closing of schools, training institutes, and higher education institutions. A major alternate was affected the method of teaching and learning by replacing the medium through internet networks. Lecturers and students have confronted e-learning and corresponding education, and despite the hardship, there are advanced solutions to this unparalleled global pandemic. A major commute was being implemented and affected the

modus operandi of lecturers providing pedagogy beyond the internet networks, however, the education system has been changed to online education since pandemic.

University students were known as a group of community that always had an active life behavior by referring to their relationship and connections, physical and college activity as well as playing the main role for the evolution of the country in future. College community tends to catch the media and other country's attention especially in the rise of mental health issues being reported lately. Due to the emergence of COVID-19, college students have a more serious and severe mental health dispute (Allemani-Arrebola et al., 2020). According to Son et al (2020), mental health is the main factor that influences academic performance as deterioration of mental health will affect their motivation, main focus, and social relationship. According to Son et al (2020); Ren, et al (2021); Villani, et al (2021), COVID-19 emergence has brought severe impact towards the university students academic performance, interpersonal behavior, and environmental issues. However, previous studies related to the emergence of COVID-19 and its impact on psychology especially towards the college community and higher education students were mainly started from China. On other hand, a few studies have been conducted regarding psychological impacts of COVID-19 but only focusing on the mental health level of workers, patients, children, and the public (Lai, et al., 2020; Xie, et al., 2020).

Nevertheless, in Malaysia, there was scarce information regarding the study that focused on the psychological condition of higher education students except for a few literature reviews and published papers from China related to college student mental health. On the other hand, there are justifications saying that it is irrational to sacrifice student's mental health to forbid the outbreak of COVID-19 while some believe that restriction of COVID-19 will not cause mental health deterioration of college students (Ren, et al., 2021). Thus, this research aims to highlight the effect of COVID-19 emergence on the psychological and well-being of higher education students in Malaysia that hold the key to the country's development in future.

Methodology

This study utilised a mixed method approach. The data were from the questionnaire and semi-structured interviews. The questionnaire consisted of demographic information and personal perspective related to COVID-19 and psychological stressor. Demographic information such as gender, age, major course, current grade, socioeconomic status, and academic status. On the other hand, personal perspective towards COVID-19 including fear of being infected, attitude to COVID-19, history of psychological counselling, the terms of "needed psychological counselling" referred to the university student receiving psychological counselling from the university's party. This study used 115 respondents as sample.

Respondents indicate their level of agreement and disagreement with each question. The Likert Scale was used to evaluate the respondent's personal perspective towards the emergence of COVID-19, their perception towards the implementation of online learning, and clarify the stressors of psychological effects among the university students in Malaysia.

Findings

Demographic Information

Table 1
Demographic Information

Questions		Frequency	Percentage (%)
Gender	Male	53	46.1
	Female	62	53.9
Age	18-19	18	15.7
	20-21	20	17.4
	21-22	34	29.6
	23-24	24	20.9
	25 and above	19	16.5
Faculty	Social Science and Humanities	5	4.3
	Science and Technology	6	5.2
	Economics and Management	9	7.8
	Pharmacy	9	7.8
	Islamic Studies	3	2.6
	Health Sciences	5	4.3
	Engineering and Built Environment	5	4.3
	Law	3	2.6
	Dentistry	4	3.5
	Education	56	48.7
	Medicine	5	4.3
	Information Science and Technology	5	4.3
Grade Point Average (GPA)	2.00-2.99	29	25.2
	3.00-3.49	48	41.7
	3.50-4.00	38	30.4

Living area	Urban	35	30.4
	Suburb	31	27
	Rural	49	42.6

The percentage of the first item, respondents' genders, is analysed. Most of the respondents were female by 53.9% while male by 46.1%. For the second item, respondents' age interprets that there were 18 respondents in the age of 18-19 which make up 15.7%, 20 respondents in the age of 20-21 (17.4%), 34 respondents in the age of 21-22 (29.6%), 24 respondents in the age of 23-24 (20.9%) and 19 respondents in the age of 25 and above which make up 16.5% that took part in the questionnaire. Next, respondents' faculty were interpreted and most of the respondents were from the Faculty of Education which were 56 respondents (48.7%). Other than that, respondents' Grade Point Average (GPA) was analysed and it was found that 25.2% of the respondents graded themselves as 2.00-2.99, 41.7% graded themselves as 3.00-3.49 and 33% of the remaining respondents graded themselves as 3.50-4.00. The exact grades that were collected are 29 respondents being in 2.00-2.99, 48 respondents being in 3.00-3.49 and 38 respondents being in 3.50-4.00. Finally, respondents' living area has been identified with 30.4% (35 respondents) living in urban areas, 27% (31 respondents) living in suburban areas and 42.6% (49 respondents) living in rural areas.

Personal Perspective of Respondents Towards the Outbreak of COVID-19

This part of the data collection from the questionnaire studies about participants' level of satisfaction and personal perspective towards the outbreak of COVID-19 using Yes/No/Partly question. Based on the collected data, respondents are asked if they prefer online learning and 43 of the respondents (37.4%) answered 'Yes', 31 of the respondents answered 'No' (27%) and 41 of the respondents answered 'Partly' (35.7%).

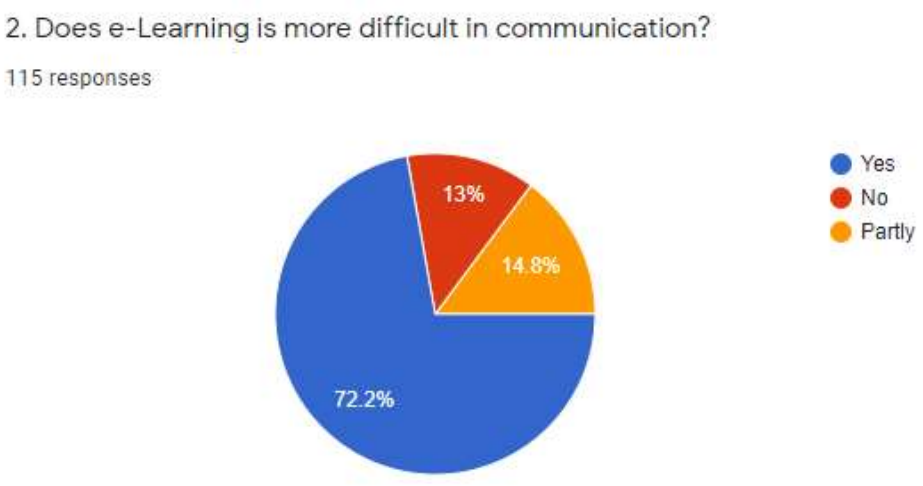

Figure 1: Respondents' Perspective of Difficulty Having Communication during Online Learning

Figure 1 above shows that respondents were asked on their perspective of difficulty having communication during online learning and the highest number of respondents which are 83

respondents (72.2%) stated that they agree. The least amount of perspective which is 13% that totals to 15 respondents believe they are not having difficulty while 14.8% (17 respondents) answered 'Partly'.

Figure 2: Respondents' Satisfaction with Online Learning

Respondents were asked about their satisfaction level in using online learning, and as shown above in Figure 2, the highest percentage 42.6% which are 49 respondents feel very satisfied with the method. 31.3% of the respondents which are 36 respondents answered 'No' and 26.1% of the respondents which are 30 respondents felt neutral.

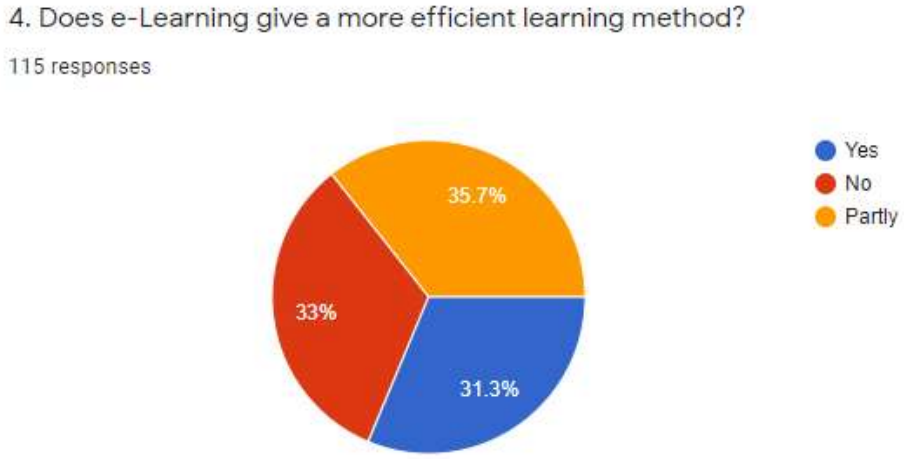

Figure 3: Respondents' Perspective on The Helpfulness of Online Learning

Respondents were questioned on how helpful was online learning and the highest percentage of respondents which were 35.7% (41 respondents) stated the experience as 'Partly'. 31.3% (36 respondents) stated the experience as 'Yes' and 33% (38 respondents) stated as 'No'.

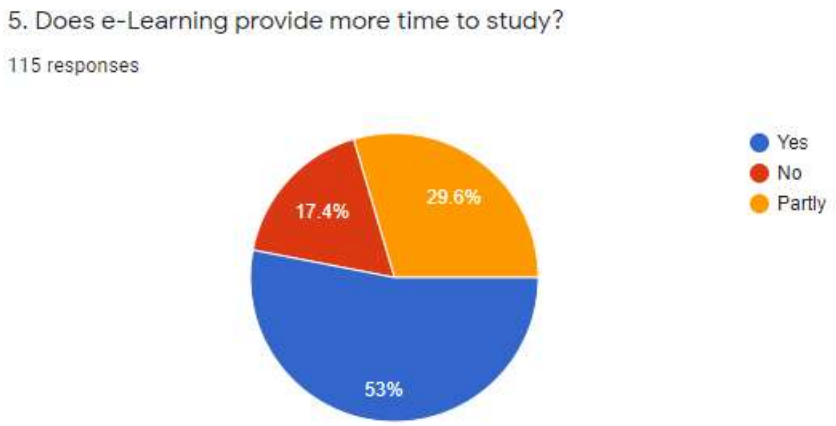

Figure 4: Respondents' Perspective with The Time Provided to Study with Online Learning

Figure 4 above shows respondents' perspective with the time provided to study with online learning and it is analysed that 53% of the respondents (61 respondents) were satisfied with the time provided. Most of them were highly satisfied and the other percentages of 17.4% and 29.6% which are respectively 20 and 34 respondents felt dissatisfied and partly with the time provided.

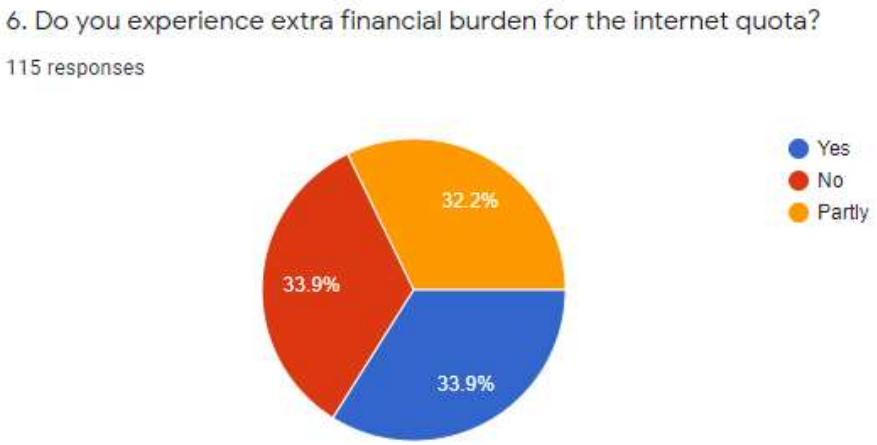

Figure 5: Respondents' Experience in Extra Financial Burden for the Internet Quota

Figure 5 depicts most of the respondents (33.9%, 39 respondents) both rated 'Yes' and 'No' while the remaining 37 respondents (32.2%) rated it as partly.

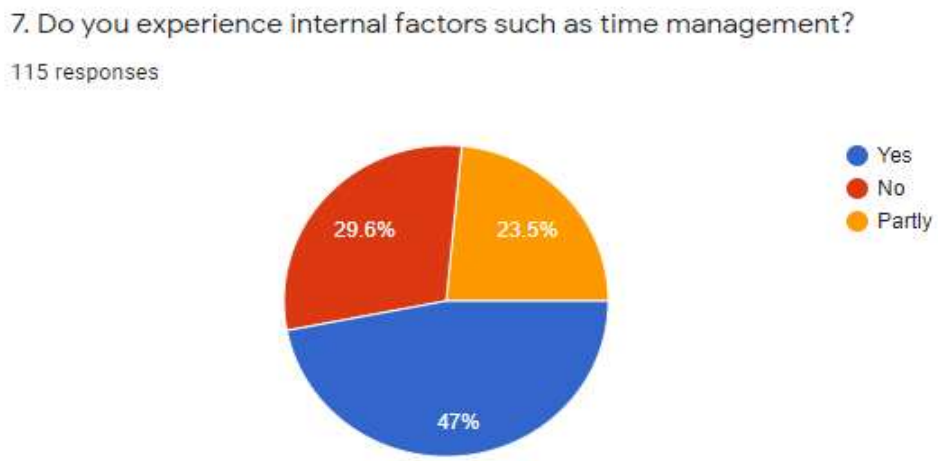

Figure 6: Respondents' Experience in Having Internal Factors such as Time Management

Figure 6 above shows that respondents were asked on their experience in having internal factors such as time management and the highest number of respondents which are 54 respondents (47%) stated that they agree. The least amount of perspective which is 23.5% that totals to 27 respondents believe they are partly having difficulty while 29.6.% (34 respondents) answered 'No'.

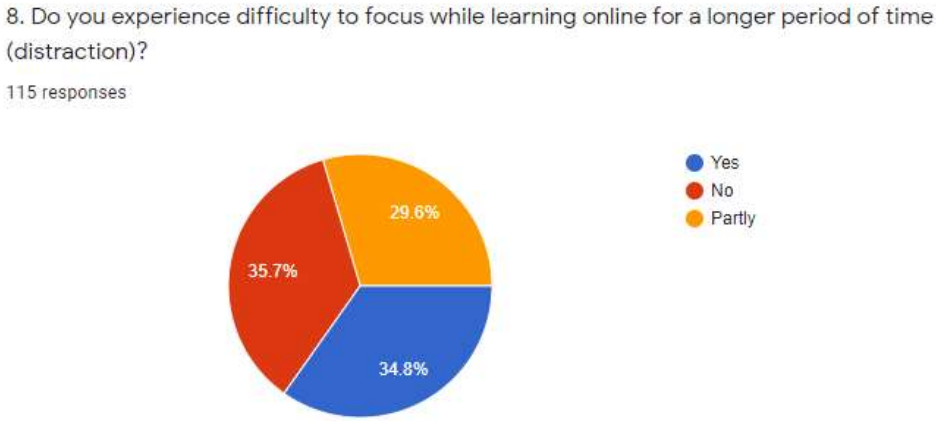

Figure 7: Respondents' Experience in Having Difficulty to Focus While Learning Online for a Longer Period of Time (Distraction)

Respondents were asked about their experience in having difficulty to focus while learning online for a longer period of time (distraction), and as shown above in Figure 7, the highest percentage 34.8% which are 40 respondents are having distraction with e-Learning. 35.7% of the respondents which are 41 respondents answered 'No' and 29.6% of the respondents which are 34 respondents felt neutral.

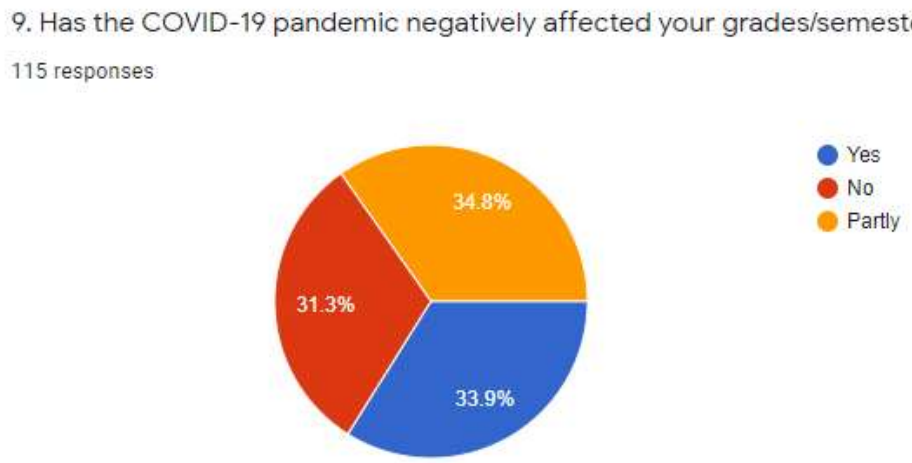

Figure 8: Respondents' Perspective On COVID-19 Negatively Affected Their Grades/Semester

Respondents were questioned on their perspective on COVID-19 negatively affected their grade/semester and the highest percentage of respondents which are 34.8% (40 respondents) stated the experience as 'Partly'. 33.9% (39 respondents) stated the experience as 'Yes' and 31.3% (36 respondents) stated as 'No'.

Stressors of Psychological Effects Among University Students
(1 – Never, 2 – Rarely, 3 – Sometimes, 4 – Often, 5- Always)

Table 1
Stressors of Psychological Effects Among University Students

Stressors of Psychological Effects Among University Students	Item	1	2	3	4	5
Academic obligations	(N) %	(0) 0	(1) 0.9	(2) 1.7	(4) 3.5	(108) 93.9
Parental education		(5) 4.3	(5) 4.3	(17) 14.8	(25) 21.7	(63) 54.8
Household size		(4) 3.5	(4) 3.5	(9) 7.8	(19) 16.5	(79) 68.7
Mood alterations and irritability		(0) 0	(0) 0	(6) 5.2	(11) 9.6	(98) 85.2
Hours in front of screen		(0) 0	(0) 0	(1) 0.9	(5) 4.3	(109) 94.8
Internet connectivity		(0) 0	(2) 1.7	(2) 1.7	(4) 3.5	(107) 93
Device's accessibility		(3) 2.6	(3) 2.6	(5) 4.3	(10) 8.7	(94) 81.7
Feeling anxious and stress		(4) 3.5	(7) 6.1	(18) 15.7	(28) 24.3	(58) 50.4

No motivation and distraction		(2) 1.7	(4) 3.5	(8) 7	(20) 17.4	(81) 70.4
Loneliness		(6) 5.2	(6) 5.2	(12) 10.4	(22) 19.1	(69) 60
Emotional and physical exhaustion		(0) 0	(0) 0	(1) 0.9	(2) 1.7	(112) 97.4

Findings from Table 1 revealed the above responses from the respondents for each of the aspects in the table above. The data gathered via this questionnaire was used to triangulate with findings obtained. This questionnaire was administered to a total of 115 students who were participants in this study.

Upon analysing the data from 115 participants, it was revealed that the highest stressors of psychological effects among students are hours in front of screen with 94.8% (109 respondents) and emotional and physical exhaustion 97.4% (112 respondents).

Perception of University Student Towards Implementation of e-Learning

Table 2 below interprets the data collection that were collected through open-ended questions targeted at the respondents. This part of the questionnaire aims to distinguish the perception of university students towards implementation of e-Learning.

Table 2

Perception of University Student Towards Implementation of e-Learning

Code	Coding Description	Answers Excerpt
Positive	Respondents perceive e-Learning in positive ways: new experiences, flexibility	"Healthy and normal." "Fun, I get to experience lots of things." "Good and able to maintain sleeping hours." "Fun, I get to experience lots of things." "Very comfortable and convenient to study at home." "Not really. I can spend more time with my family and I worry less."
Negative	Respondents perceive e-Learning in negative ways: challenges, motivation affected, difficulties	"Time management and distraction." "Stress because I have to adjust with the new method of learning." "The unstable Internet connection and other external factors, especially the electricity disruption."

		"I spent too much time in front of my laptop, my back aches and I often had episodes of headache and dizziness." "Have to be online all the time to check messages and news. Discussion for assignments is not convenient." "There are a few. Having to meet with friends virtually has the tendency to cause commitment issues and distrust. Another challenge I faced was motivational issues and short attention span due to absence of peers physically." "I've become lazier and more anxious to volunteer to speak." "I can't interact with people well. It feels awkward meeting people after 2 years online." "Commitment issues and distrust may arise due to absence of physical discussions and studies with peers. Motivational issues are the largest factor that I have been having difficulty to tackle."

Based on the results, there are advantages and disadvantages of e-learning during the pandemic. Many students agree that we can now access all types of learning materials online without leaving the comfort of their homes. They are given opportunities to learn and interact with other students from different locations. However, e-learning is not for everybody.

Discussion

Existing evidence clearly showed that students are having and facing difficulties in e-learning during this pandemic. As clearly stated in the theory of Community of Inquiry (Garrison et al., 1999), students need social presence to an extent to which students are able to construct and confirm meaning through sustained reflection and discourse in a critical Community of Inquiry. Facing online distance learning can be one of the stressors that lead to mental health declining as students have motivational issues and short attention span due to absence of peers physically and feel lonely without social presence. Living far away from each other can make a discussion difficult as well.

Cognitive presence is also important to get a meaningful and successful student learning. The quality and quantity of problem-solving skills and critical thinking are reflected by the quality of cognitive presence. COVID-19 has evaded students to have a discussion and mostly assignments are given individually in the online environment, making an engaging of mind impossible. As stated by Garrison et al (1999), students need to have the ability to identify with the community, communicate purposefully in a trusting environment, and develop interpersonal relationships by way of projecting their individual personalities.

It can be concluded that, study group and discussion is absolutely necessary in enhancing learning. It has been proven that both social and cognitive presence are needed in learning as they can encourage students to think critically and creatively, and also build communication skills which also help in refining understanding of the material. The factors such as having no motivation and problems in maintaining responsibilities can be solved with the theory.

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