A Study on the Level of COVID-19 Pandemic Fatigue Among Pre-University Students at ASASIpintar UKM
(Kajian terhadap Tahap Kelelahan Pandemik COVID-19 di kalangan Pelajar Pra-Universiti ASASIpintar UKM)

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ABSTRACT

This study examined the level of COVID-19 pandemic fatigue among pre-university students from ASASIpintar UKM. A total of 118 students participated in a survey conducted online from February to March, 2022. The survey questionnaire consists of three parts, namely Part A, B and C. Part B served as the main assessment tool to measure the level of pandemic fatigue. It was found that at least 8 out of every 10 students suffered mild to moderate level of pandemic fatigue. Out of a total 118 respondents, 8 students (6.8%) were categorized under severe level. The level of fatigue was shown to be not dependent on gender and respondent's history of covid infection. The outcome of this study implied the need for education providers to alleviate students' unpleasant experience under the lockdown environment by devising context-specific methods during online learning which itself posed many challenges to the students. The results of this study may possibly imply of a generic situation that prevails among students at higher learning institutions during this pandemic era.

Keyword: COVID-19, pandemic fatigue, lockdown, pre-university students, higher education institutions

ABSTRAK

Kajian ini mengukur tahap kelelahan pandemik COVID-19 di kalangan pelajar pra-universiti dari ASASIpintar UKM. Sejumlah 118 pelajar menyertai tinjaun ini yang dijalankan secara atas talian dari Februari hingga Mac, 2022. Soal-selidik tinjaun ini terdiri dari tiga bahagian, iaitu Bahagian A, B and C. Bahagian B berfungsi sebagai alat pengukur utama tahap kelelahan pandemik. Didapati sekurang-kurangnya 8 daripada setiap 10 orang pelajar mengalami kelelahan pandemik tahap ringan ke tahap sederhana. Daripada sejumlah 118 responden, 8 orang pelajar (6.8%) dikategorikan di bawah tahap teruk. Tahap kelelahan didapati tidak dipengaruhi oleh faktor jantina dan sejarah jangkitan covid responden. Hasil dapatan kajian ini menunjukkan perlunya bagi pihak pemberi pendidikan untuk meringankan kesulitan yang dialami pelajar di bawah persekitaran 'lockdown' dengan merangka kaedah spesifik-konteks semasa pembelajaran atas talian yang mana ia sendiri memberikan banyak cabaran kepada pelajar. Hasil kajian ini menunjukkan kemungkinan wujudnya suatu situasi generik di kalangan pelajar di institusi pengajian tinggi dalam era pandemik sekarang.

Keyword: COVID-19, kelelahan pandemik, 'lockdown', pelajar pra-universiti, institusi pendidikan tinggi

INTRODUCTION

Since the beginning of 2020, COVID-19 pandemic has ravaged the normal life of people all over the world. In Malaysia, the sudden crisis has disrupted lifestyle, plan and causing mood-shift among majority of people. To the community in general, it has destructed economic activity, causing a large number of people to lose their income. Under the prolonged era of the pandemic with no end in sight, continuous episodes of frustration and depression led to mood swings and change in people's motivational dimension. Going in and out of repeatedly extended lockdowns had caused them to experience pandemic fatigue. According to the World Health Organization (WHO) (2020), pandemic fatigue refers to the lack of motivation to follow recommendations by the authorities to protect oneself and others from the virus. People are tired of being cooped up due to restrictions on all form of gatherings outside home. They are also tired of wearing masks, observe physical distancing, being away from family and friends, and increasingly fed up with the "new normal" routines. It is a psychological effect that results from lethargic and bored feeling of having to continuously adhere to the rules and restrictions imposed by the government. People started to lose their guard against the risks and threats posed by the covid virus. This led to careless behaviour and sharp rise in COVID-19 cases (AMA, 2021). In a nutshell, in having to deal with COVID-19 pandemic, all of us should realise the hidden danger that is the pandemic fatigue.

According to the United Nation's Educational, Scientific and Cultural Organization (UNESCO) (2020), the pandemic has interrupted the learning of more than one billion students in 129 countries around the world, not excluding Malaysia. The educational sector in Malaysia has undergone a series of changes which have affected students at higher learning institutions. All higher learning institutions adapted emergency remote teaching (ERT) via online platforms, further inducing anxiety among the students (Abdullah et al., 2020). In coping with the pandemic, the distortion of the students' daily routine, isolation, social distancing and others has changed almost all aspects of student life. Due to strict lockdowns, they no longer have the liberty to spend time outdoors doing things of their own choice or for leisure. Non-essential outdoor activities were completely barred. The ban on inter-city travel and prohibition of any form of social gatherings effectively isolated majority of students from their families, relatives and friends. This led to exhaustion of students (Gold et al., 2020) in the form of both psychological and emotional challenges. Not only that, the disruption on education has led to lower tertiary education completion rate. According to Organisation for Economic Co-operation and Development (OECD) (2022), only 39% of bachelor's students graduate within the expected timeframe for their programme. Therefore, the main aim of this study is to assess the level of pandemic fatigue experienced by pre-university level students at ASASIpintar UKM. The outcome of this study may also provide a general reflection on the psychological condition of students at other higher education institutions in the country. The result would help the education providers to be able to relate to the challenges and difficulties faced by the students, thus modifying the operations in their institutions to provide increased support for their students during this stressful time.

RESEARCH METHODOLOGY

Research Design

A questionnaire survey design combining mixed method, i.e. quantitative and qualitative methods was utilized in this study. Quantitative method yielded numerical data, while qualitative method was used to obtain qualitative feedback on the possible ways to resolve pandemic fatigue faced by students.

Online survey using Google Form was conducted via WhatsApp and Telegram channel to collect students' responses. Statistical analysis on the collected data was conducted using Microsoft Excel and IBM SPSS softwares.

Sampling and Population

The study population was ASASIpintar students of 2021-22 academic intake. Krejcie and Morgan Table was used to determine sample size for a given population (Krejcie & Morgan, 1970). Researchers decided to use Krejcie & Morgan Table to determine the sample size because the population size for this study is within the range of population size provided in the table. Besides, the Krejcie & Morgan Table provides a degree of confidence of 95%, which is considered high. For a population of 170, the sample size is 118. The sampling method used is simple random sampling. Simple random sampling was conducted by assigning every individual of the population, which is all ASASIpintar students of 2021-22 academic intake, a number, followed by the use of a random number generator to randomly pick the sample.

Research Instrument

The questionnaire consists of three parts, namely Part A, B and C. Part A served to obtain the demographic information of respondents in term of gender, matriculation number and history of COVID-19 infection.

Part B served as an assessment tool to determine the level of pandemic fatigue. The scores obtained were based on a rating from a 5-point Likert scale items (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = always), which amounts to a total score ranging from 0 to 75. Following the respondent's answer for each question, the scores were totalled to rate the level of pandemic fatigue. The total scores were categorised as follows: no pandemic fatigue (15), slight level (16-30), mild level (31-45), moderate level (46-60) and severe level (61-75). The higher the score, the greater the level of pandemic fatigue.

Part C consisted of three open-ended questions where respondents could freely express their opinion regarding this issue.

Data Collection

The research questionnaire was distributed via WhatsApp and Telegram to the sample population which comprised ASASIpintar students of 2021-22 intake batch. A total of 118 responses were obtained. The complete survey questionnaire utilised in this study is shown below.

Pilot Test

A pilot test was conducted to evaluate the validity and reliability of the originally-drafted questionnaire where 30 students were selected to participate. The statistical analysis performed on the results of the test using IBM SPSS Statistics software showed that the questionnaire instrument was not valid and reliable enough. Researchers edited the questions which had alpha values lower than 0.2 and conducted a second pilot test using the edited questionnaire. The statistical analysis performed on the data from the second pilot test showed that the instrument was valid and reliable to be used. Thus, the researchers were satisfied with the edited questionnaire as it was able to provide consistent interpretation which ensure its validity.

RESULTS AND DISCUSSION

Part A

The gender ratio of 118 respondents was shown in Table 1. The ratio can be considered as balanced between male (n = 53, 44.9%) and female (n = 65, 55.1%) respondents. Considering the fact that the gender ratio of ASASIpintar 2021-22 students was approximately 50:50, this ratio illustrated the random sampling approach that was utilised in our sample representation.

Table 2 shows the status of history of covid infection of respondents. Almost one-third (n = 36, 30.5%) of the respondents have been infected by

TABLE 1. Gender distribution of survey participants

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	53	44.9	44.9	44.9
Female	65	55.1	55.1	100.0
Total	118	100.0	100.0	

TABLE 2. Distribution of participants based on COVID-19 history status

Infected by COVID-19	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	36	30.5	30.5	30.5
No	82	69.5	69.5	100.0
Total	118	100.0	100.0	

COVID-19, while the rest of the respondents ($n = 82$, 69.5%) have yet to succumb to this virus at the time of research. Currently, Malaysia has reached 97.6% of two-dose vaccination completion among adults of 18 years old and above. Thus, the non-infected percentage which is considerably high could possibly be due to the herd immunity effect has been promoted in our society. This lowers the risk of virus infection within the community. Moreover, even if the person was infected, the two-dose vaccination would provide enough protection from the danger of the virus (Mayo Clinic, 2022).

Part B

Table 3 tabulates the statistics of the 15 items assessed in Part B in terms of mean scores and standard deviation. All the items displayed an almost uniform mean, in the range of 2.65-3.69. From the table, it can be seen that item 3: *Do you feel tired/ frustrated upon witnessing the increasing number of death cases due to COVID-19?* recorded the highest mean of 3.69 of all the 15 items.

The survey questionnaire of the edited questions which was used in the second pilot test.

Part A

1. What is your gender?
2. AP number
3. Have you ever been infected by Covid-19 before/ now?

Part B

1. Did you feel frustrated when hearing the term "Covid-19"?
2. Do you feel tired/frustrated upon seeing the increasing number of Covid-19 cases?
3. Do you feel tired/frustrated upon witnessing the increasing number of death cases due to Covid-19?
4. Do you feel tired and not concerned anymore of any Covid-19 updates?
5. Do you feel annoyed when someone keeps updating you with news related to Covid-19?
6. Do you feel annoyed by new rules set by the government in order to deal with Covid-19 pandemic situation?
7. Do you feel stressed/feared of yourself getting infected by Covid-19?
8. Do you feel tired or lazy to follow the SOPs during the Covid-19 pandemic?
9. I am not concerned about the ongoing Covid-19 cases as time passed by.
10. I am not catching up with the latest info of Covid-19 as frequently as I did at the start of the pandemic.
11. I still go outside when it's unnecessary to do so. (eg. window shopping, go to a theme park)
12. I am tired of restricting my own freedom in order to protect me and the close ones from getting infected by Covid-19.
13. I am exhausted due to the changes of lifestyle as a result of Covid-19 pandemic.
14. I don't really care about the daily number of Covid-19 cases in Malaysia.
15. I am losing my heart when dealing with Covid-19.

Part C

1. Do you agree that we ourselves are the most responsible ones in dealing with pandemic fatigue?
2. Suggest another party that should also pick up their responsibilities in order to deal with pandemic fatigue faced. Why?
3. In your opinion, what can be done by us to reduce the effect of pandemic fatigue?

TABLE 3. Tabulation of statistics showing the means and standard deviation of each item in Part B

Part B	Valid (N)	Missing (N)	Mean	Std. Deviation
1. Did you feel frustrated when hearing the term "Covid-19"?	118	0	3.01	1.066
2. Do you feel tired/frustrated upon seeing the increasing number of Covid-19 cases?	118	0	3.43	1.090
3. Do you feel tired/frustrated upon witnessing the increasing number of death cases due to Covid-19?	118	0	3.69	1.130
4. Do you feel tired and not concerned anymore of any Covid-19 updates?	118	0	3.37	1.108
5. Do you feel annoyed when someone keeps updating you with news related to Covid-19?	118	0	2.29	1.055
6. Do you feel annoyed by new rules set by the government in order to deal with Covid-19 pandemic situation?	118	0	2.74	1.158
7. Do you feel stressed/feared of yourself getting infected by Covid-19?	118	0	3.15	1.196
8. Do you feel tired or lazy to follow the SOPs during the Covid-19 pandemic?	118	0	2.98	1.094
9. I am not concerned about the ongoing Covid-19 cases as time passed by.	118	0	3.06	1.127
10. I am not catching up with the latest info of Covid-19 as frequently as I did at the start of the pandemic.	118	0	3.57	1.209
11. I still go outside when it's unnecessary to do so. (eg. window shopping, go to a theme park)	118	0	3.27	1.181
12. I am tired of restricting my own freedom in order to protect me and the close ones from getting infected by Covid-19.	118	0	2.76	1.167
13. I am exhausted due to the changes of lifestyle as a result of Covid-19 pandemic.	118	0	3.02	1.177
14. I don't really care about the daily number of Covid-19 cases in Malaysia.	118	0	2.85	1.144
15. I am losing my heart when dealing with Covid-19.	118	0	2.65	1.105

Another part of the result is standard deviation. The table showed that all the items recorded almost similar standard deviation value, in the range of 1.055-1.209, which implied of consistent uniformity of the responses given to all the questions.

Table 4 presents the percentage distribution of pandemic fatigue level among the respondents.

Interpretation of the level of pandemic fatigue is based on the range of scores specified earlier. 45.8% of the respondents fall under moderate level, 40.7% under mild level, while only 6.8% under both slight and severe level, respectively. Thus, almost all the respondents (86.5%) were categorized as having mild to moderate fatigue level.

Statistics

	N			
	Valid	Missing	Mean	Std. Deviation
1. Do you feel frustrated when hearing the term " Covid-19"?	118	0	3.01	1.066
2. Do you feel tired/frustrated upon seeing the increasing number of Covid-19 cases?	118	0	3.43	1.090
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TABLE 4. Percentage distribution of pandemic fatigue level

Pandemic Fatigue Level	Frequency	Percent	Valid Precent	Cumulative Percent
Slight	8	6.8	6.8	6.8
Mild	48	40.7	40.7	47.5
Moderate	54	45.8	45.8	93.2
Severe	8	6.8	6.8	100.0
Total	118	100.0	100.0	

We conducted another three analyses to find out the correlations between gender, Covid-19 history status and pandemic fatigue level using Chi-Square Independence Test. Table 5 demonstrated the correlation between gender and Covid-19 history status. From Pearson Chi-Square row, it showed that it recorded Sig. (p-value) of 0.638 for 2 tailed t-test. Since p > a which a = 0.05, therefore we can reach to a conclusion that gender did not have an influence on Covid-19 history status. Alternative hypothesis (H_1) was rejected. (H_0: No association between gender and Covid-19 history status; H_1: There is an association between gender and

TABLE 5. Data analysis to determine any relationship between gender and Covid-19 history status

Gender * Covid-19 History Status Crosstabulation

			Covid-19 History Status		Total
			Yes	No	
Gender	Male	Count	15	38	53
		Expected Count	16.2	36.8	53.0
	Female	Count	21	44	65
		Expected Count	19.8	45.2	65.0
Total		Count	36	82	118
		Expected Count	36.0	82.0	118.0

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.221[a]	1	.638		
Continuity Correction[b]	.072	1	.788		
Likelihood Ratio	.222	1	.638		
Fisher's Exact Test				.691	.395
Linear-by-Linear Association	.219	1	.640		
N of Valid Cases	118				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 16.17.

b. Computed only for a 2x2 table

Covid-19 history status.)

Next, the analysis result on the correlation between gender and pandemic fatigue level is displayed in Table 6. From Pearson Chi-Square row, it showed that it recorded Sig. (p-value) of 0.236 for 2 tailed t-test. However, since in this case there were more than 20 % of the cells with expected frequencies less than 5, therefore the data was violated and the results might be misleading. In this case, we would take Likelihood ratio in the second row from the table instead of Pearson Chi- Square. It recorded a Sig. (p-value) of 0.203. Since p > a which a = 0.05, therefore we can reach to

TABLE 6. Data analysis to determine any relationship between gender and pandemic fatigue level

Pandemic Fatigue Level * Gender Crosstabulation

			Gender Male	Gender Female	Total
Pandemic Fatigue Level	Slight	Count	5	3	8
		Expected Count	3.6	4.4	8.0
	Mild	Count	24	24	48
		Expected Count	21.6	26.4	48.0
	Moderate	Count	19	35	54
		Expected Count	24.3	29.7	54.0
	Severe	Count	5	3	8
		Expected Count	3.6	4.4	8.0
Total		Count	53	65	118
		Expected Count	53.0	65.0	118.0

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.568[a]	3	.206
Likelihood Ratio	4.601	3	.203
Linear-by-Linear Association	.966	1	.326
N of Valid Cases	118		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 3.59.

a conclusion that gender did not make a difference on pandemic fatigue level. Alternative hypothesis (H_1) was rejected. (H_0: No association between gender and pandemic fatigue level; H_1: There is an association between gender and pandemic fatigue level.)

Lastly, the correlation between Covid-19 history status and the pandemic fatigue level is displayed in Table 7. From Pearson Chi-Square row, it showed that it recorded Sig. (p-value) of 0.710 for 2 tailed t-test. However, since in this case there were more than 20 % of the cells with expected frequencies less than 5, therefore the data was violated and the results might be misleading. In this case, we would take Likelihood ratio in the second row from the table instead of Pearson Chi- Square. It recorded a Sig. (p-value) of 0.711. Since p > a which a = 0.05, therefore we can reach to a conclusion that pandemic fatigue level was independent of Covid-19 history status. Alternative hypothesis (H_1) was rejected. (H_0: No association between Covid-19 history status and pandemic fatigue level; H_1: There is an association between Covid-19 history status and pandemic fatigue level.)

TABLE 7. Data analysis to determine any relationship between Covid-19 history status and pandemic fatigue level

Pandemic Fatigue Level * Covid-19 History Status Crosstabulation

			Covid-19 History Status		
			Yes	No	Total
Pandemic Fatigue Level	Slight	Count	2	6	8
		Expected Count	2.4	5.6	8.0
	Mild	Count	17	31	48
		Expected Count	14.6	33.4	48.0
	Moderate	Count	14	40	54
		Expected Count	16.5	37.5	54.0
	Severe	Count	3	5	8
		Expected Count	2.4	5.6	8.0
Total		Count	36	82	118
		Expected Count	36.0	82.0	118.0

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.379[a]	3	.710
Likelihood Ratio	1.379	3	.711
Linear-by-Linear Association	.064	1	.801
N of Valid Cases	118		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.44.

Part C

The responses toward the 1st question is presented in the form of a pie chart shown in Figure 1. Majority of the respondents ($n = 101$, 86%) agreed that the onus falls mostly on each individual him/herself to deal with the pandemic fatigue in order to negate its underlying danger. Only 10% did not agree with that view, while the remaining 4% did not provide any response.

The pie chart in Figure 2 presents the breakdown percentages representing a second party deemed to be partly responsible in dealing with pandemic fatigue. Nearly half of the respondents ($n = 51$, 43%) think that the government or relevant authorities should bear the responsibility. However, 15% of the respondents feel that immediate family and friends to assume partial responsibility, while a significant 8% suggested the public (or society in general) and school, respectively. Non-governmental organization (NGO) and media/influencer raked in 7% and 3% of the responses, respectively.

The pie chart in Figure 3 presents the breakdown of percentages representing various suggestions for the best approach towards lessening the effect of pandemic fatigue. The most popular suggestion ($n = 6$, 14%) was to engross oneself in enjoyable activities such as hobbies and entertainment. Indulging oneself in joyful activities is a great way to relieve stress, thus serves as an armour to combat pandemic fatigue. This question however did not entice any response from half of the respondents.
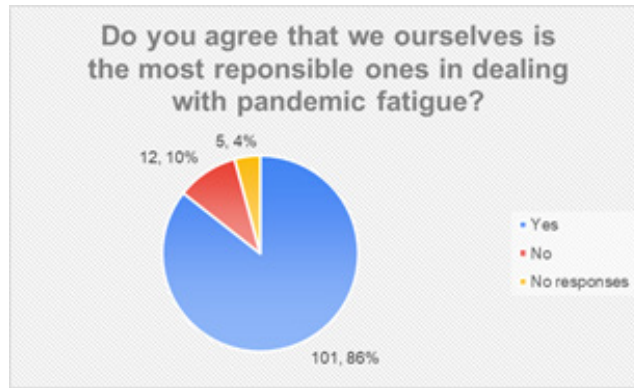
FIGURE 1. Pie chart showing the percentage of the three responses
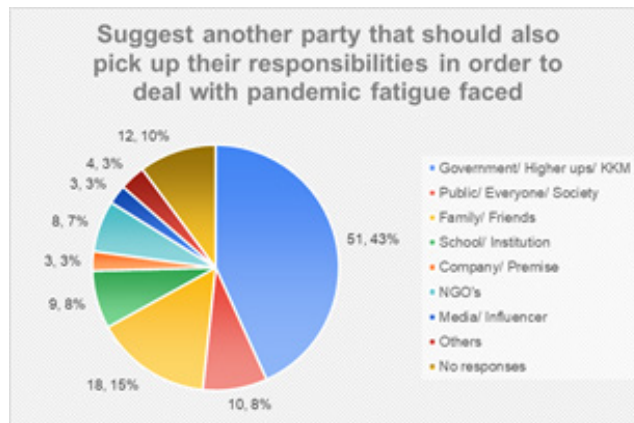

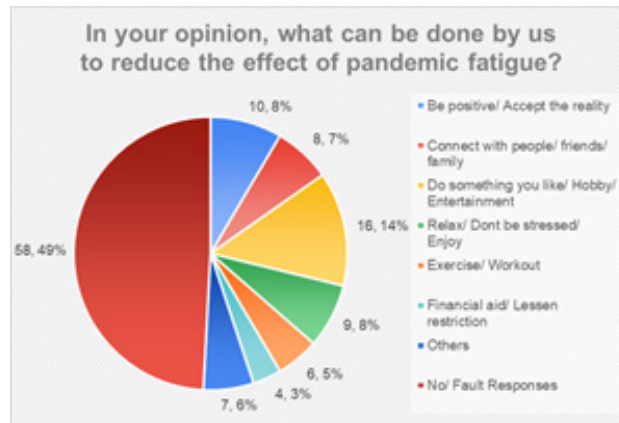FIGURE 2. Pie chart showing the percentage of various suggested parties

FIGURE 3. Pie chart showing the percentage of various suggested activities

This study was conducted to provide a better understanding on the nature and magnitude of pandemic fatigue that could be afflicting ASASIpintar pre-university students. At the same time, the results of this study may possibly imply of a generic situation that prevails among students at higher learning institutions during this pandemic era.

The outcome of this research survey indicated that at least 8 out of every 10 students ($n = 102$, 86.4%) were suffering from mild to moderate level of pandemic fatigue. This number presents a case of concern as students at higher learning institutions is the core of the nation's human capital to steer the progress of the nation. Any large-scale crisis that can potentially

jeopardise the quality of our students should be closely monitored.

In order to clarify any possible effect of gender on the pandemic fatigue level, Chi-Square Independence Test was applied. The analysis showed no variation of pandemic level based on gender. The same technique was applied in order to clarify the effect of COVID-19 history status on the pandemic fatigue level. Again, the test yielded similar result. Therefore, we can safely conclude that the pandemic fatigue level is independent of both gender and respondent's pandemic history status.

However, previous studies had reported that gender affected student's anxiety level, an attribute that is associated with pandemic fatigue (Kamaludin et al., 2020; Mohammed et al., 2022; Sundarasen et al., 2020). Hence, this must be verified further based on a more reliable and valid research setting and analysis method. Several other demographic characteristics such as age, ethnicity, type of study and living condition also were significantly associated with anxiety level. However, our small and confined research population does not allow us to explore the influence of these demographic characteristics.

CONCLUSION

This study had assessed the level of COVID-19 pandemic fatigue among pre-university students under ASASIpintar programme, UKM. It was found that at least 8 out of every 10 students suffered mild to moderate level of pandemic fatigue. Out of a total 118 respondents, 8 students (6.8%) were categorized under severe level.

The level of fatigue was shown to be not dependent on gender and history of covid infection. However, in future study, research population should be extended to allow for the different demographic factors of students in higher education institutions to be investigated with regard to their simultaneous influence which would produce a more meaningful and insightful results.

The outcome of this study implied the need for education providers to devise context-specific methods to assist students in recovering from unpleasant experiences during this pandemic era. Learning transition from face to face to online mode has induced stress in students while posing many challenges to them (Abdullah et al., 2020). Learning stress is compounded further in the scenario of ASASIpintar UKM being a pre-university programme, where students' academic performance become a do or die mission throughout the one-year programme duration. This is because their chance to succeed in their application of first choice degree programme at various public higher education institutions hang entirely on the CGPA (Cumulative Grade Point Average) achieved at the end of the programme.

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