A STUDY ON PERCEIVED STRESS AMONG NEW TERTIARY EDUCATION INSTITUTION STUDENTS IN MALAYSIA

Mohd Syafiq Abdul Rahman, Norazah Umar, Zuraira Libasin, Ahmad Rashidi Azudin, and Nur Azimah Idris
mohdsyafiq5400@uitm.edu.my, norazah191@uitm.edu.my, zuraira946@uitm.edu.my, ahmadrashidi@uitm.edu.my, nurazimah7083@uitm.edu.my,

Jabatan Sains Komputer & Matematik (JSKM),
Universiti Teknologi MARA Cawangan Pulau Pinang, Malaysia

ABSTRACT

As the number of COVID-19 cases keep fluctuating, the Ministry of Higher Education in Malaysia had ordered all lessons should be conducted remotely in 2020 but exceptions were also given to certain needs. New first-year students were greatly affected as they did not get the chance to experience the university life. Thus, this study aims to analyse the perceived stress level among the first-year students due to remote teaching and learning. 272 students from 6 faculties and three different education levels namely pre-diploma, diploma, and degree from a tertiary education institution in Penang, Malaysia participated in this study. This study adopted a questionnaire by AlAteeq et al. (2020). The survey was developed using Google Form which later disseminated through WhatsApp and Telegram. The demographic and perceived stress data were analysed using frequencies and percentages of each item to see its trend and pattern. The conclusion was made based on the Perceived Stress Scale (PSS) by Cohen et al. (1983). The findings is alarming since 249 from 272 students (91.5%) were categorized in high stress level, followed by moderate stress (7.7%) and low stress (0.7%).

Keywords: COVID-19, remote learning, tertiary education, perceived stress

1.0 Introduction

In December 2019, a new type of coronavirus was identified in Wuhan, China (World Health Organization, 2020), which now known as COVID-19. Since then, the virus spread rapidly and globally (Wu et al., 2020). Researchers are actively experimenting to find the treatment to end the virus (Kupferschmidt and Cohen, 2020; Elengoe, 2020). To date, World Health Organization (WHO) had reported more than 120 million confirmed cases, with deaths exceeding 2 million cases. As of 17th of March 2021, WHO is currently evaluating 15 types of vaccines which are manufactured by Pfizer/Biotech, AstraZeneca, SK Bio, Serum Institute of India, Sinovac and a few others (World Health Organization, 2021).

Even though vaccines are ready, Malaysia just started the first of 3 phases of vaccination on the 24th of February 2021. The prime minister of Malaysia was the first to

receive the vaccine (BERNAMA, 2021). As a precaution, Malaysia still implementing Movement Control Order (MCO) to curb the disease (Shah et al., 2020). Since the first phase of MCO until the eighth phase, COVID-19 has affected Malaysia's higher education sector especially in teaching and learning (Sia and Adamu, 2020). Thus, educational institutions are instructed to move their traditional face to face teaching and learning to online distance learning (Othman et al., 2020).

Teaching and learning scenario changed dramatically since online education has taken place. There are positive and negative sides to online learning. On the positive side, this situation gives more spaces for lecturers to express their creativity in remote teaching and learning implementation. However, mental stress, lack of infrastructure, and less flexibility to interact among students and lecturers are some of challenges faced by educational institutions (Sia and Adamu, 2020; Khojasteh et al., 2021).

Recent studies have shown that the pandemic has impacted individual's physical, mental, emotional, and social well-being. Son et al. (2020) showed that tertiary students in the United States are at increased risk for experiencing adverse mental health outcomes during COVID-19. AlAteeq et al. (2020) revealed significant gender differences in the psychological response to the pandemic among students in Saudi Arabia. According to a research conducted by Cao et al. (2020), due to the pandemic, approximately 24.9% of university students in China suffered from anxiety.

During the COVID-19 pandemic, it is very challenging for the university students, especially the new students whom started their first semester on October 2020. New students have to complete the registration online and face to face classes were not permitted. This is because the Ministry of Higher Education had advised educational institutions to execute teaching and learning remotely (The Ministry of Higher Education, 2020). Thus, this study aims to analyse the perceived stress level among the first-year students due to remote teaching and learning during the COVID-19 pandemic in Malaysia.

2.0 Methodology

2.1 Population and sampling

This study was conducted in a tertiary education institution in Penang, Malaysia, which involved 272 students from 6 faculties and three different education levels namely pre-diploma, diploma, and degree.

2.2 Instrumentation

This study adopted a questionnaire by AlAteeq et al. (2020). Google Form was used to create a link for the survey and disseminated via WhatsApp and Telegram. The survey has seven questions on socio-demographic such as age, gender, education, and living area, followed by ten items to assess the respondents' stress perception. The responses were evaluated using the 5-point Likert scale representing 1 for never to 5 for very often. A qualitative question about the emotion during the pandemic was also included at the end of the questionnaire. It categorised respondents into three types of emotions; positive, negative or mixed.

2.3 Data Analysis

2.3.1 Reliability Analysis

The questions' reliability was tested using Cronbach's Alpha ranging from zero to one, where zero showing complete unreliability and a value of one representing perfect reliability.

Table 1: Range of Cronbach's Alpha

No	Coefficient of Cronbach's Alpha	Reliability Level
1	More than 0.90	Excellent
2	0.80 – 0.89	Good
3	0.70 – 0.79	Acceptable
4	0.60 – 0.69	Questionable
5	0.50 – 0.59	Poor
6	Less than 0.50	Unacceptable

Source: Adopted from George and Mallery (2003)

2.3.2 Descriptive Analysis

The demographic and perceived stress data were analysed using frequencies and percentages of each item to see its trend and pattern. The score for item 1 to 10 in perceived

stress was calculated for each respondent to determine their stress level. The conclusion was made based on the Perceived Stress Scale (PSS) (Cohen et al.,1983), where the total mean scores of 0 to 13 are considered to be low stress, 14 to 26 indicate moderate stress and 27 to 40 indicate high stress.
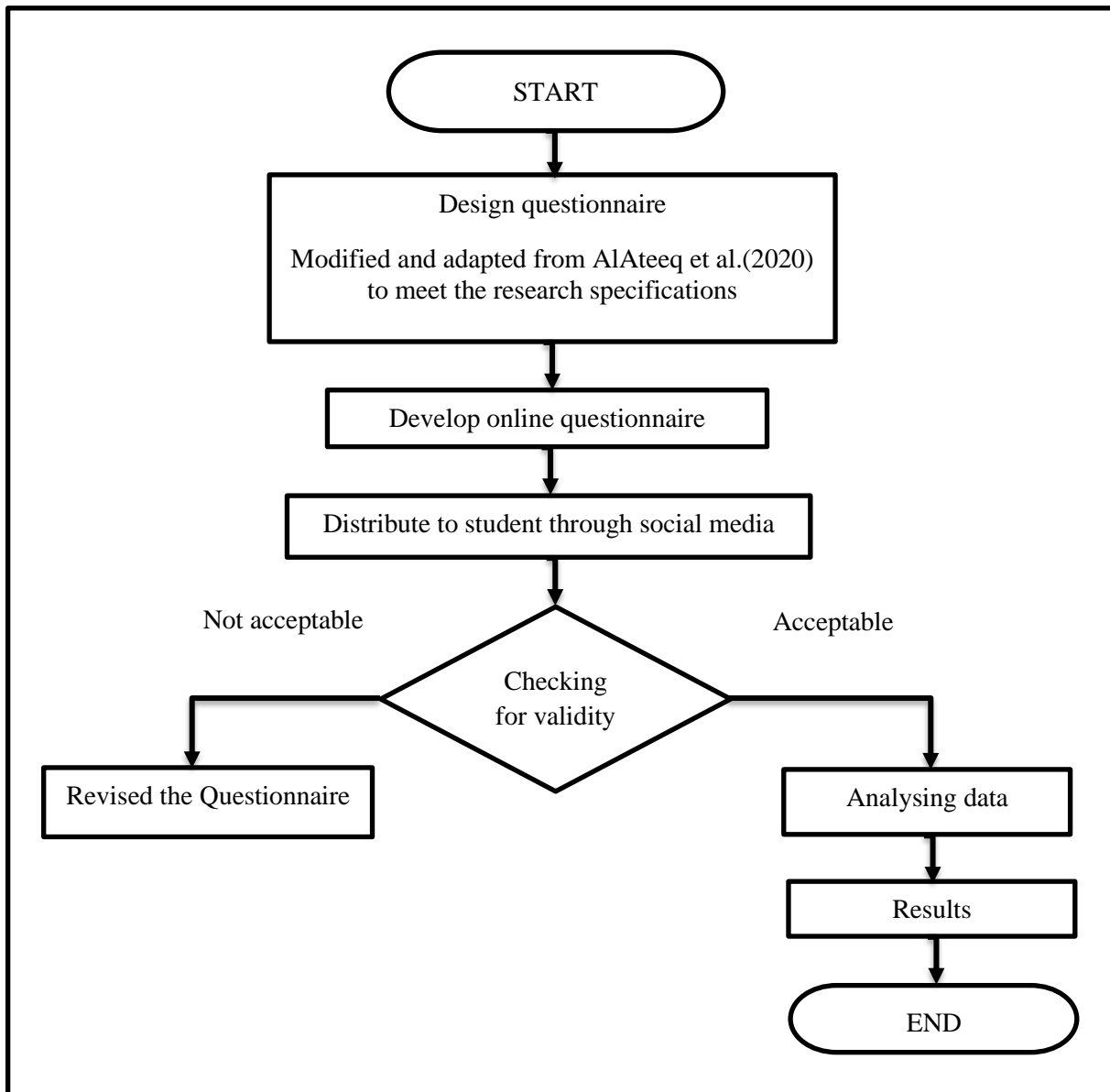

Figure 1: Flowchart of Research Study

3.0 Result

3.1 Reliability Analysis

In this section, the results obtained will be discussed thoroughly. Table 1 presents the result of the reliability test. The Cronbach's alpha coefficient obtained was 0.792, which

indicates that the questionnaire was constructed with slightly high reliability and was acceptable for measuring the variables in this study.

Table 1: Result of Reliability Test

Cronbach's Alpha	Number of items
0.792	10

4.2 Descriptive Analysis

The demographics analysis which include gender, age, level of education, and area of living for the 272 respondents involved in this study are depicted in Table 2. The proportion of male respondents was 56.6% (154 respondents), while the female respondents were 43.4% (118 respondents). The majority of the respondents were less than 20 years old (71.7%) and 68.4% of all respondent were diploma students. This result is not biased because it follows the objective of the study which is to explore the perceived stress level among first-year students due to remote teaching and learning during the COVID-19 pandemic in Malaysia.

Since the Ministry of Higher Education advised educational institutions to execute teaching and learning remotely (The Ministry of Higher Education, 2020), it is relevant to identify the area of living that students are primarily staying in as it influenced their internet accessibility. The result in Table 2 shows that the majority of the students live in the sub-urban area (54%), and followed by urban (32.4%) and rural area (13.6%).

Table 2: Demographic Analysis

Measure	Item	Frequency	Percentage
Gender	Male	154	56.6
	Female	118	43.4
Age	< 20	195	71.7
	20-25	74	27.2
	>25	3	1.1
Level of education	Pre-Diploma	15	5.5
	Diploma	186	68.4
	Degree	71	26.1
Area of living	Urban	88	32.4
	Sub Urban	147	54.0
	Rural	37	13.6

The ten items representing the questions to determine the perceived stress are listed below:

Item 1 : In the last month, how often have you been upset because of something that happened unexpectedly?

Item 2 : In the last month, how often have you felt that you were unable to control the important things in your life?

Item 3 : In the last month, how often have you felt nervous and stressed?

Item 4 : In the last month, how often have you felt confident about your ability to handle your personal problems?

Item 5 : In the last month, how often have you felt that things were going your way?

Item 6 : In the last month, how often have you found that you could not cope with all the things that you had to do?

Item 7 : In the last month, how often have you been able to control irritations in your life?

Item 8 : In the last month, how often have you felt that you were on top of things?

Item 9 : In the last month, how often have you been angered because of things that happened that were outside of your control?

Item 10 : In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Table 3: Perceived stress

Items	Never (1)	Seldom (2)	Sometimes (3)	Fairly often (4)	Very often (5)	Mean	Std. dev
1	4 (1.5%)	25 (9.2%)	83 (30.5%)	103 (37.9%)	57 (21%)	3.68	0.956
2	9 (3.3%)	26 (9.6%)	88 (32.4%)	95 (34.9%)	54 (19.9%)	3.58	1.017
3	2 (0.7%)	22 (8.1%)	63 (23.2%)	106 (39%)	79 (29%)	3.88	0.948
4	6 (2.2%)	53 (19.5%)	122 (44.9%)	66 (24.3%)	25 (9.2%)	3.19	0.928
5	10 (3.7%)	60 (22.1%)	126 (46.3%)	61 (22.4%)	15 (5.5%)	3.04	0.902
6	8 (2.9%)	35 (12.9%)	95 (34.9%)	89 (32.7%)	45 (16.5%)	3.47	1.009

7	11 (4%)	46 (16.9%)	131 (48.2%)	68 (25%)	16 (5.9%)	3.12	0.897
8	26 (9.6%)	64 (23.5%)	130 (47.8%)	39 (14.3)%	13 (4.8%)	2.81	0.959
9	7 (2.6%)	37 (13.6%)	89 (32.7%)	84 (30.9%)	55 (20.2%)	3.53	1.041
10	9 (3.3%)	34 (12.5%)	88 (32.4%)	97 (35.7%)	44 (16.2%)	3.49	1.013

Table 3 shows the percentage for each items from Item 1 to Item 10 for perceived stress that were calculated to determine their stress level. All items show an average mean score above 3.00, except Item 8, which got a mean score less than 3.00 (2.81) with a 0.959 standard deviation. It shows that sometimes they often felt negatives feeling last month, which led to stress eventually. The level of stress can be identified from these ten items using the Perceived Stress Scale (PSS) (Cohen et al.,1983). Table 4 indicates the students' level of stress.

Table 4: Level of stress

Level	Score	Frequency	Percentage
Low Stress	0-13	2	0.7%
Moderate Stress	14-26	21	7.7%
High Stress	27-40	249	91.5%

The findings is quite surprising since 249 from 272 students (91.5%) were grouped in high stress category. It followed by moderate stress (7.7%) and low stress (0.7%), respectively. It is alarming that most students felt stressed doing online distance learning during this pandemic. This is because the students felt the burden since the classes are more self-paced and high number of workloads to be completed.

4.0 Conclusion

The conclusion obtained in this case hold globally as online learning significantly changes the nature of interactions between students, their peers, and also lecturers. Since students can participate in online courses at any time and from any location, it gives flexibility for them to plan their daily schedules. Nevertheless, it may also be a challenge for students who are not able to manage their time wisely. Living with families while studying remotely during this pandemic can be a motivation for some and can also be a distraction for some which could naturally induce stress in them.

The high level of stress the students endured during remote learning should not be taken lightly and must be addressed properly by all educational institutions including the ministry related. There are many factors that relate stress and mental health issue such as sleeping patterns, loneliness and resilience. Hence, the students should learn to control their level of stress as their mental health are more likely to be affected during this pandemic (Varma et al., 2021). In addition, there is also a need to study on the level of stress experienced by the lecturers during remote learning.

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