

Psychological Impact during COVID-19 Pandemic and Academic Performance in Emergency Remote Teaching and Learning (ERTL) among IIUM Kuantan Nursing Students

Nik Nor Amani binti Nik Rusli¹, Sr. Cho Cho Zaw Raheema^{1*}

¹Kulliyah of Nursing, International Islamic University of Malaysia, Jalan Gombak, 53100, Selangor, Malaysia

DOI: [10.36347/sjams.2022.v10i07.017](https://doi.org/10.36347/sjams.2022.v10i07.017)

| Received: 21.06.2022 | Accepted: 27.07.2022 | Published: 30.07.2022

*Corresponding author: Sr. Cho Cho Zaw Raheema

Kulliyah of Nursing, International Islamic University of Malaysia, Jalan Gombak, 53100, Selangor, Malaysia

Abstract

Original Research Article

Introduction: The World Health Organization (WHO) has confirmed Coronavirus as a pandemic and has declared it as a public health emergency of global worldwide concern. The spread of the pandemic triggered widespread fear and caused a variety of changes in people's lives, seriously affecting them, physically and mentally. The epidemic of COVID-19 has effectively impacted nearly all areas of our society, including the higher education, and has prompted higher education institutions around the World to implement a distance learning mode called Emergency Remote Teaching and Learning (ERTL). The transition from face-to-face learning to online learning has brought many challenges to the students including their academic performance. **Aim:** This research conducted to measure the psychological impact during COVID-19 pandemic and academic performance in ERTL among IIUM Kuantan nursing students. **Methodology:** A cross-sectional study was conducted among 202 of IIUM Kuantan nursing students using the convenience sampling method. The data were collected using a questionnaire and analyzed with SPSS 20.0 software for both descriptive and statistical findings. **Results:** The mean anxiety score of the students was 40.62 (± 8.867) which indicated the normal anxiety level among them, in which majority of them 149 (73.8%) have normal level of anxiety, 45 (22.3%) of them with mild to moderate anxiety and 8 (4.0%) with severe level of anxiety. However, ERTL has a substantial negative impact toward the students' academic performance showing a significant association between their psychological impact with $p\text{-value} < 0.05$. **Conclusion:** There is a significant association between the students' psychological impact during COVID-19 pandemic and their academic performance in ERTL. Most of them had been affected by this abrupt change in their study due to the pandemic. Thus, the academic as well as the University management, specifically need to address this issue and provide the best actions and solutions for the students in order to prevent the upcoming issues.

Keywords: Academic performance, COVID-19, ERTL, pandemic, psychological well-being.

Copyright © 2022 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Coronavirus Disease 2019 (COVID-19), an infectious disease caused by Sars-Cov2 (Severe Acute Respiratory Syndrome Coronavirus 2) was first started in China and became a global epidemic. The World Health Organization (WHO) has confirmed that it is a pandemic and has declared it a public health emergency of global worldwide concern [1].

In addition to the physical effects, the spread of the COVID-19 pandemic triggered widespread fear and caused a variety of changes in people's lives. The growing number of provinces and countries afflicted by the pandemic created public anxiety about becoming the next target [2]. This uncertain and unpredictable

COVID-19 has seriously affected people, both physically and mentally including their emotion and cognition. A study performed in 194 cities in China showed that out of 1210, 53.8% of respondents had serious to mild psychological impacts [3].

Many countries have taken stringent steps to discourage this large-scale transmission of disease by postponing the start time of all schools, including Colleges and Universities. The mode of learning for more than one billion students in 129 countries around the world has been disrupted by the pandemic. Even after one year into the pandemic, about half of the world's students are still concerned due to partial or full school closures, and over 100 million additional

Citation: Nik Nor Amani binti Nik Rusli & Cho Cho Zaw Raheema. Psychological Impact during COVID-19 Pandemic and Academic Performance in Emergency Remote Teaching and Learning (ERTL) among IIUM Kuantan Nursing Students. Sch J App Med Sci, 2022 July 10(7): 1142-1149.

children will go lower than the minimum proficiency level in reading. (UNESCO, 2020) [4].

In Malaysia, a National “Movement Control Order” (MCO) was declared on 18 March 2020 and aimed at controlling the spread of disease. With the MCO, all Malaysian population was being locked down for a long period of social isolation. This unplanned norm has radically changed people's behaviors and is likely to generate anxiety along with fear of infection [5].

In line with the global response, higher education institutions have closed their campuses either fully or partially to limit the dissemination of COVID-19 and have effectively interrupted the usual conduct of teaching and studying. It prompted higher education institutions around the world including Malaysia to implement a distance learning mode called ERTL.

Many Ministries of Education in different countries have found it essential to implement online learning at all levels of education, and this action has been supported by UNESCO (4), which has confirmed that online learning will help to stop the spread of viruses by direct encounters between people. As a result, new technologies for interactive learning have been innovated according to the needs of each educational institution, making online study simpler, leading to a new age of virtual mass meetings [6]. The only choice for teachers to stay engaged with their students during this crisis is technology and making online classes the only best option [7] as it was mentioned that this online has become a permanent connection in life [8]. Thus, both teachers and students need to adjust in their usage of diverse online medium as it appeared to be the only forum to prevent any wasting of academic years for the students.

However, the transition from face-to-face to online learning has brought many challenges to the students. A study from US recorded that the participants showed more symptoms of mood disorder, perceived stress, and alcohol use compared to the pre-pandemic time [9]. Another study stated that the epidemic has brought immense psychological pressure, in addition to the risk of death, and it revealed that out of 7,143 students surveyed, 0.9% had extreme anxiety, 2.7% had moderate anxiety, and 21.3% had mild anxiety during the COVID-19 pandemic in China [10]. One study from Malaysia conducted among the university students mentioned that the students applied maladaptive coping strategies due to the pandemic and movement control restriction [11].

The students' mental health also deserves attention and taken into consideration as part of the public health emergency. It can affect one's psychological condition in the short term and mental health in the long term. Moreover, it is known that

nursing education has consistently been linked to anxiety among the nursing students, and they should be paid more attention during this pandemic when anxiety is widespread. One research study revealed a high level of anxiety among the nursing students during the ongoing COVID-19 pandemic [12]. This pandemic has not only had a serious effect on physical health, it also even had a significant impact on mental health, such as anxiety, depression, and even emotional damage [13].

Thus, the study on psychological impact among students during this COVID-19 is worth to be examined. In addition, few scholars have been focusing on the effect of this ERTL on the academic performance of students. This research will also be undertaken to determine the impact of this ERTL on student academic performance, since there is inadequate evidence on how this online learning has had an impact on the student learning process from the students' point of view.

In summary, numerous studies on the impact of the COVID-19 pandemic and lockdown from a public health perspective have been performed primarily in China and Western countries. Few studies conducted among the university students in Malaysia have been observed, but no studies were observed to conduct among the nursing students especially to explore their psychological impact, and academic performance on ERTL during the pandemic. It is important to understand the impact of transition to online teaching on student's academic and their coping mechanism during the pandemic. Since the students' success in academics is important for their quality nursing care, more concrete information relevant to ERTL is needed while not neglecting their mental well-being. Thus, this study is planned to explore the psychological impact of nursing students during Covid-19 pandemic and their academic performance in ERTL.

METHODS AND MATERIALS

A cross-sectional study was carried out among the students of Kulliyyah of Nursing, IIUM Kuantan, Pahang. The inclusion criteria were undergraduate nursing students from Kulliyyah of Nursing, IIUM Kuantan and the respondents who were willing to participate in the study. The exclusion criteria for this study were undergraduate nursing students who were currently on study-leave, respondents who were not willing to take part in the study and who do not fulfil the inclusion criteria. The sample size was calculated using Raosoft Sample Size Calculator with margin error 5%, confidence interval of 95%, response rate 50% and the recommended sample size of this research study was 202 respondents from the population sample of 421 students.

The questionnaire applied for this study consisted of three parts: 1. socio-demographic, 2.

psychological impact during COVID-19 and 3. impact of ERTL towards academic performance. Socio-demographic backgrounds included the data such as gender, year of study and CGPA. Part B included 20 questions which were related to the students' anxiety and part C include nine questions with five-point Likert scale.

For psychological impact among students during COVID-19, the anxiety level was assessed using 20 questions with the Likert scales such as "I feel more nervous and anxious than usual", "I feel afraid for no reason at all", "I get upset easily or feel panicky", and so on. The questionnaire as well as the cutting point for the level of anxiety were based on the Zung's Self-rating Anxiety Scale (SAS) [14] in which the Anxiety Index <45 indicates "anxiety within normal range," from 45–59 indicates "mild to moderate anxiety," and a value of 60–74 indicates "marked to severe anxiety," and values ≥ 75 indicates "most extreme anxiety". This has been tested (Cronbach's alpha = 0.897, intraclass correlation = 0.913) and used in many countries.

For the impact of ERTL towards academic performance, 9 questions with the Likert-scale such as "Use of digital learning tools is responsible for my low academic performance", "The volume of assignments via e-learning led to confusion, frustration and poor performance". were assessed. The questionnaires were adopted from the previous study done by Ahmad S. Haider & Saleh Al-Salman (2020) (based on the study entitled Dataset of Jordanian University Students' Psychological Health Impacted by using e-learning Tools during COVID-19) [15].

Pilot study was conducted prior to the actual survey to determine the validity and reliability of the instrument. The internal consistency of the questionnaire was tested using Cronbach's alpha in

which the questionnaires in section B with Cronbach's alpha value of 0.844 and those in section C with 0.879 which is considered to have a good reliability and correlation of the data.

ETHICAL CONSIDERATIONS

The study was approved by the Kulliyah of Nursing Postgraduate Research Committee (KNPGRC) and International Islamic University Malaysia Research Ethics (IREC) Committee (IREC 2021-KON/67). Prior to data collection, a brief explanation about the study was done and the consent was obtained from the participants.

DATA ANALYSIS

Descriptive and statistical analysis was done by using the Statistical Package Social Science (SPSS) version 20.0. Data were interpreted as frequency and percentage for the categorical outcome. Non-parametric test which was Kruskal-Wallis test was used to determine the association between psychological impact and academic performance as the data were not normally distributed. Statistical significance was accepted at $p < 0.05$.

RESULTS

Socio-demographic background of the respondents

Table 1 shows the socio-demographic data of the respondents. Most of them are female with a total of 151 (74.8%) and the minority were male 51 (25.2%). For year of the study, there were 56 (27.7%) respondents of first year, 43 (21.3%) students of second year, 34 (16.8%) students of third year and the rest were fourth year 69 (34.2%). For the CGPA results, most of the students 106 (52.5%) had CGPA of 3.5+ and above, 89 (44.1%) had CGPA of 3.0-3.49 and only 7 (3.5%) students had CGPA below 2.99 (Table 1).

Table 1: Socio-demographic data of respondents (n=202)

| Variables | | Frequency (n) | Percentage (%) |
|---------------|-------------|---------------|----------------|
| Gender | Male | 51 | 25.2 |
| | Female | 151 | 74.8 |
| Year of study | First Year | 56 | 27.7 |
| | Second Year | 43 | 21.3 |
| | Third Year | 34 | 16.8 |
| | Fourth Year | 69 | 34.2 |
| CGPA | 3.5+ | 106 | 52.5 |
| | 3.0-3.49 | 89 | 44.1 |
| | Below 2.99 | 7 | 3.5 |

The psychological impact among nursing students during COVID-19 pandemic

The total score of the anxiety index is 80 and the mean score for level of anxiety among the IIUM

Kuantan nursing students is 40.62 (± 8.867) which indicates that majority of them have normal levels of anxiety (Table 2).

Table 2: The psychological impact among IIUM Kuantan nursing students during COVID-19 pandemic (n=202)

| Variables | Frequency (n) | Percentage (%) | Mean (SD) |
|--------------------------|---------------|----------------|---------------|
| Level of anxiety | | | |
| Normal | 149 | 73.8 | 40.62 (8.867) |
| Mild to moderate anxiety | 45 | 22.3 | |
| Severe anxiety | 8 | 4.0 | |
| Most extreme anxiety | 0 | 0.0 | |

The impact of ERTL towards academic performance among IIUM Kuantan nursing students during pandemic

From 202 respondents, most of them rated agree to the nine questions, which means that these ERTL significantly give negative impact towards their academic performance. It is shown that (61.4%) respondents rated agree for the volume of assignments via e-learning led to confusion, frustration, and poor performance, (47.5%) rated agree for face-to-face interaction contributes significantly to boosting students' academic achievement, (45.5%) rated agree for the question of all the online quizzes and exams making me nervous and panic.

In addition, (54.0%) agree for lack of communication with lecturers to consult academic work related, (44.1%) shown that respondents agree for always having problems with internet connectivity, (45.5%) rated strongly agree to the questions of spending more time on online classes make me loss concentration and tired, (48.0%) rated agree on difficult to work on group assignments and (42.1%) agree and (41.6%) strongly agree to having difficulty to learn on practical lessons in online basis, while for the variable of use of digital learning tools is responsible for my low academic performance showed the result of uncertain from the respondents which consists of (44.6%).

Table 3: The impact of ERTL towards academic performance among IIUM Kuantan nursing students during pandemic (n=202)

| Variables | | Frequency (n) | Percentage (%) |
|--|-------------------|---------------|----------------|
| Use of digital learning tools is responsible for my low academic performance | Strongly disagree | 13 | 6.4 |
| | Disagree | 27 | 13.4 |
| | Uncertain | 90 | 44.6 |
| | Agree | 62 | 30.7 |
| | Strongly Agree | 10 | 5.0 |
| The volume of assignments via e-learning led to confusion, frustration, and poor performance | Strongly disagree | 4 | 2.0 |
| | Disagree | 16 | 7.9 |
| | Uncertain | 35 | 17.3 |
| | Agree | 124 | 61.4 |
| | Strongly Agree | 23 | 11.4 |
| Face-to-face interaction contributes significantly to boosting students' academic achievement. | Strongly disagree | 2 | 1.0 |
| | Disagree | 6 | 3.0 |
| | Uncertain | 17 | 8.4 |
| | Agree | 96 | 47.5 |
| | Strongly Agree | 81 | 40.1 |
| All the online quizzes and exams making me nervous and panic | Strongly disagree | 11 | 5.4 |
| | Disagree | 13 | 6.4 |
| | Uncertain | 55 | 27.2 |
| | Agree | 92 | 45.5 |
| | Strongly Agree | 31 | 15.3 |
| Lack of communication with lecturers to consult academic work related | Strongly disagree | 4 | 2.0 |
| | Disagree | 12 | 5.9 |
| | Uncertain | 34 | 16.8 |
| | Agree | 109 | 54.0 |
| | Strongly Agree | 43 | 21.3 |
| Always having problems with internet connectivity | Strongly disagree | 12 | 5.9 |
| | Disagree | 31 | 15.3 |
| | Uncertain | 39 | 19.3 |
| | Agree | 89 | 44.1 |
| | Strongly Agree | 31 | 15.3 |
| Spending more time on online classes make me loss | Strongly disagree | 4 | 2.0 |

| | | | |
|--|-------------------|----|------|
| concentration and tired | Disagree | 8 | 4.0 |
| | Uncertain | 20 | 9.9 |
| | Agree | 78 | 38.6 |
| | Strongly Agree | 92 | 45.5 |
| Difficult to work on group assignments | Strongly disagree | 12 | 5.9 |
| | Disagree | 16 | 7.9 |
| | Uncertain | 30 | 14.9 |
| | Agree | 97 | 48.0 |
| | Strongly Agree | 47 | 23.3 |
| Difficult to learn on practical lessons in online basis. | Strongly disagree | 5 | 2.5 |
| | Disagree | 9 | 4.5 |
| | Uncertain | 19 | 9.4 |
| | Agree | 85 | 42.1 |
| | Strongly Agree | 84 | 41.6 |

Association between psychological impact and academic performance (CGPA) among IIUM Kuantan nursing students

Table 4 shows there is a significant association between psychological impact and academic performance with $p < 0.05$. Kruskal-Wallis test is

significant ($p < 0.05$) where it suggests that at least one pair has the mean difference between the psychological impact (level of anxiety) and academic performance (CGPA). Bonferroni post-hoc test indicated that there is no pair between the level of anxiety that affects the CGPA of the students.

Table 4: Association between psychological impact and academic performance (CGPA) among IIUM Kuantan nursing students (n=202)

| Variables | Frequency (n) | Mean (SD) | F-Statistics (df) | p-value |
|--------------------------|---------------|-------------|-------------------|---------|
| Level of anxiety | | | | |
| Normal | 149 | 0.45 (0.53) | 6.124 (2,202) | 0.047 |
| Mild to moderate anxiety | 45 | 0.64 (0.65) | | |
| Severe anxiety | 8 | 0.88 (0.64) | | |
| Most extreme anxiety | 0 | 0.00 (0.00) | | |

Note: Significant level is set at $p < 0.05$ (95% CI), Kruskal Wallis Test, $p < 0.05$ Bonferroni post-hoc test procedures

DISCUSSION

Majority of the nursing students of IIUM Kuantan showed normal level of anxiety (73.8%), (22.3%) students shown mild to moderate anxiety and only (4.0%) students have severe anxiety level. The findings were similar with the studies conducted among the Malaysian university students in which out of 983 participants, 70.1% felt normal anxiety, 20.4% minimal to moderate anxiety, 6.6% severe anxiety, and 2.8% most extreme level of anxiety [11], and out of 983 participants, 92% normal anxiety, 5.2% mild to moderate and 2.8% moderate to severe anxiety during the COVID-19 pandemic [5].

The studies conducted among the college students in China also support the findings that out of 44,447 participants from a large cross-sectional survey, low prevalence in symptoms of anxiety and depression were seen (13) and out of 7,143 participants, 75.1% had normal anxiety, 0.9% extreme anxiety, 2.7% moderate anxiety, and 21.3% mild anxiety during the COVID-19 pandemic [10].

However, the anxiety level among the participants in some studies was seen to have the higher percentage. One study stated that the abrupt change in

learning approaches caused significant effect towards students' mental health and psychological well-being [15] and another study in Spain showed 21.34% had extremely severe symptoms of anxiety [16]. A study from Israel also shows that 42.8%, and 13.1% of students have moderate and severe anxiety, and gender, lack of PPE, and fear of infection were significantly associated with their anxiety [12]. For this, the support and encouragement from nursing department's staff were suggested for enhancing students' quality education and lowering their anxiety.

The normal anxiety level seen in most of the nursing students from this study might be influenced by a few factors. For some students, their need to take part in clinical posting during the pandemic may help them better understanding of COVID-19. They have also been practicing strict infection control guided by the hospital during their clinical posting and exposed to how to prevent the COVID-19 infection, and thus, this experience might help them reduce their anxiety about the pandemic. Moreover, the students have learnt about stress theories and managing stress since their year one according to their curriculum. This knowledge might somehow contribute them dealing with their stress during the pandemic. Furthermore, this study is conducted among the nursing students from

International Islamic University in which their belief and religious practices might help them remain calm and hopeful even in the difficult time. However, more comparative studies are needed to confirm the assumptions.

In addition, majority of them agreed to the nine questions asked regards to their academic performance which indicates ERTL significantly cause negative impact to their academic performance. The finding was synchronized with the previous study conducted in which most of the students have expressed stress related to the online learning and faced difficulties when studying [17]. These may be due to the challenges that they face through online learning which might have interference in their academic performance.

In this study, many respondents admitted that the volume of assignments via e-learning led to confusion, frustration, and poor performance. In a study conducted among 393 South Korea college students showed that they faced some misunderstandings related to their assignments when classes were not face to face and often distracted by other things like exploring social media when in classes [18]. This can also be related with the study done at the University of Cape Coast, Ghana in which students faced stress through online distance learning especially due to 'academic workload', and 'high frequency of examinations' [19]. However, other factors that contribute to their stress include 'financial problems', and 'family/marriage problems' which is not a major concern for this study.

Almost half of the students from this study acknowledge that direct learning via face to face has significant effect in raising students' academic performance. Face-to-face interaction with lecturers may help contribute to their better understanding of the learning contents. However, one study stated that good academic performance had been found among university students that undergo learning via online rather than direct interaction with students [20] while another study mentioned similarly that students whose utilize the use of online learning well, were better than students who truly depend on physical contact interaction merely [21].

Moreover, one meta-analysis study mentioned that the information, communication, and technology (ICT) has positive significant impact on academic achievement of students since it provides suitable access to efficient teaching and learning. And these online learning systems intended to facilitate instruction methods that develop to raise the quality of higher education and also for the students' achievement [21]. It tends to reason that the online learning with ICT might positively benefit to students in normal situation if they are being introduced gradually. The results may be different during the pandemic because of their sudden

adjustment to online learning without having adequate time for preparation.

Furthermore, many participants rated agree to the question that "all the online quizzes and exams making me nervous and panic", and "they are having lack of communication to consult with lecturers for academic work related". It was aligned with one study which revealed students were having problems with lecturers in term of communication and engagement that led them to switch to other tasks rather than studying at the first place [7].

Moreover, majority of them strongly agree that spending more time on online classes make them loss concentration and tired. It was supported by one research in which (54.3%) students revealed spending less time to study with the online classes [20]. The prolonged use of internet might disrupt their attention and working memory, and different activities of teaching and learning should be introduced.

Besides, many of them agree on having difficulty to work on group assignments. It was supported by a study that the need for physical distancing during the pandemic had led to loss of interpersonal contact mainly among students. Conducive environment, co-learners and students' lecturer interactions were significant in contributing to the active participation and learning far easier for the students [7]. Some students also stated that it was hard for them to stay focused on group assignments because the lack of a sense of belonging or a sense of fellowship that felt during online basis [18]. For this, a lecturer may consider assigning them in the same group for all group assessments as possible since familiarity may improve their tasks by reducing their confusion and the need to re-socialize with different members each time. The students should be given the opportunity to meet with lecturer through online small group discussion as needed.

Moreover, many students from this study agree on having difficulty to learn practical lessons online. The practical subjects introduced many challenges to both the lecturers and students due to limited physical interaction and resources [22]. In addition to having heavy course loads, several tests, adjustments need to be done in the clinical environment had developed higher anxiety among them than any other health care student [12]. Without having adequate clinical practice and direct patient care during the pandemic before they received further instructions might make them having difficulty to learn practical online.

However, many of them answered uncertain to the question "digital learning tools is responsible for the low academic performance". It tends to reason that some benefits they obtained through online learning might somehow contribute to their academic

performance. Furthermore, many students in this study appeared to have problems with internet connectivity since majority of them agree to it. A study from India conducted among 232 students showed that about 178 students agreed that low family income would contribute to their low academic performance which could have led them to an adverse learning environment and (32.4%) of them had problems access to internet connectivity due to their location [20]. One study done among 184 learners found that the main problems that influence and impact online EFL learning during COVID-19 are related to technical, academic, and communication challenges [23] while another study showed that some students not able to finish their tasks due to a shortage of individual gadgets [7], and (73.7%) of the students had their android mobile phone for online learning, about (5.3%) of them hired gadgets from family members and (0.9%) borrowed from neighbors [20].

All these problems are associated with the issues of online platform such as internet availability, gadgets, and the internet speed itself. The location of the students is one of the concerns since some area have lack of or poor internet access and studying at home might have some distractions for their learning. For this, the departmental staff may provide aids and pay particular attention to the needy students. They may consider for extension the assessment time or reducing the contents of assessment. The needed students should be offered with low-cost internet package, the gadgets, and the others as required.

In addition to the above, there is a significant association between the psychological impact during COVID-19 and their academic performance in ERTL in this study. It was similar with the findings that reported COVID-19 pandemic lockdown had (96.7%) influence on the academic achievement of the majority of participants in different degrees [24], and students exhibited higher anxiety level score when they are worried about their academic performance [12]. This result was expected because the higher anxiety they have, the more effect could be seen in their individual academic performance. However, academic engagement of the students during their entire school career has significant positive relationships with their academic achievement [25]. Thus, the individual dedication or effort of the students is also important for their academic success especially in this challenging time of pandemic in addition to those of academic staff, management, and policy planners.

CONCLUSION

From this study, the findings illustrated that there is a significant association between the psychological impact during COVID-19 pandemic and academic performance in Emergency Remote Teaching and Learning (ERTL) among IIUM Kuantan nursing

students. Majority of the respondents from this study showed the normal level of anxiety, however, some of them are having mild to moderate anxiety, and severe anxiety level even though the percentage is not too high. Most of them also agreed that they had been affected by these abrupt changes caused by the pandemic, and thus, the recommendations and discussions have been done accordingly. The findings suggested that the academics, the university management as well as the policy planners need to address this issue and provide the best possible actions and support to the students especially who are at risk. It is hoped that this study will serve as awareness and insights on improving the educational and psychological well-being of the students. This study serves as a source for understanding the conditions of nursing students from IIUM Kuantan during the pandemic. However, it might not represent the students from other Faculty and further studies are recommended to conduct among other students from different Faculty with a larger sample size to obtain the comparative results.

Conflict of Interest: The authors declare they have no conflict of interest in this study.

REFERENCES

1. Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., Iosifidis, C., & Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International Journal of Surgery*, 76(February), 71–76. <https://doi.org/10.1016/j.ijssu.2020.02.034>
2. Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-nCoV epidemic: address mental health care to empower society. *The Lancet*, 395(10224), e37–e38. [https://doi.org/10.1016/S0140-6736\(20\)30309-3](https://doi.org/10.1016/S0140-6736(20)30309-3)
3. Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the COVID-19 outbreak. *The Lancet*, 395(10228), 945–947. [https://doi.org/10.1016/S0140-6736\(20\)30547-X](https://doi.org/10.1016/S0140-6736(20)30547-X)
4. United Nations Educational, Scientific and Cultural Organization (UNESCO) [(accessed on 1 June 2020)]; online: <https://en.unesco.org/covid19/educationresponse>.
5. Sundarasan, S., Chinna, K., Kamaludin, K., Nurunnabi, M., Baloch, G. M., Khoshaim, H. B., Hossain, S. F. A., & Sukayt, A. (2020). Psychological impact of COVID-19 and lockdown among university students in malaysia: Implications and policy recommendations. *International Journal of Environmental Research and Public Health*, 17(17):6206, 1–13. <https://doi.org/10.3390/ijerph17176206>
6. le Roux, D. B., Parry, D. A., Totolo, A., Iyawa, G., Holloway, J., Prenter, A., & Botha, L. (2021).

- Media multitasking, online vigilance, and academic performance among students in three Southern African countries. *Computers and Education*, 160, 104056.
<https://doi.org/10.1016/j.compedu.2020.104056>
7. Noor, S., Ali, M. N., & Husnine, S. M. (2020). Performance of online classes in Lahore, Pakistan during Covid-19. *Performance Improvement*, 59(9), 33-42.
<https://doi.org/10.1002/pfi.21938>
 8. Sindiani, A. M., Obeidat, N., Alshdaifat, E., Elsalem, L., Alwani, M. M., Rawashdeh, H., Fares, A. S., Alalawne, T., & Tawalbeh, L. L. (2020). Distance education during the COVID-19 outbreak: A cross-sectional study among medical students in North of Jordan, *Annals of Medicine and Surgery*, 59, 186-194.
<https://doi.org/10.1016/j.amsu.2020.09.036>
 9. Charles, N. E. (2020, June 17). Increased mood disorder symptoms, perceived stress, and alcohol use among college students during the COVID-19 pandemic. *PsyArXiv*,
<https://doi.org/10.31234/osf.io/rge9k>
 10. Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287(March), 112934. <https://doi.org/10.1016/j.psychres.2020.112934>
 11. Kamaludin, K., Chinna, K., Sundarasan, S., Khoshaim, H.B., Nurunnabi, M., Baloch, G. M., Sukayt, A., & Hossain, S. F. A. (2020). Coping with COVID-19 and movement control order (MCO): experiences of university students in Malaysia. *Heliyon*, vol 6, Issue 11, 2020. <https://doi.org/10.1016/j.heliyon.2020.e05339>
 12. Savitsky, B., Findling, Y., Ereli, A., & Hendel, T. (2020). Anxiety and coping strategies among nursing students during the COVID-19 pandemic. *Nurse Education in Practice*, 46(May), 102809. <https://doi.org/10.1016/j.nepr.2020.102809>
 13. Wang, Z. H., Yang, H. L., Yang, Y. Q., Liu, D., Li, Z. H., Zhang, X. R., Zhang, Y. J., Shen, D., Chen, P. L., Song, W. Q., Wang, X. M., Wu, X. B., Yang, X. F., & Mao, C. (2020). Prevalence of anxiety and depression symptom, and the demands for psychological knowledge and interventions in college students during COVID-19 epidemic: A large cross-sectional study. *Journal of Affective Disorders*, 275, 188–193.
<https://doi.org/10.1016/j.jad.2020.06.034>
 14. Zung, W. W. K. (1971). A Rating Instrument for Anxiety Disorders. *Psychosomatics*, 12(6), 371–379. [https://doi.org/10.1016/S0033-3182\(71\)71479-0](https://doi.org/10.1016/S0033-3182(71)71479-0)
 15. Ahmad, S. H., & Al-Salman, S. (2020). Dataset of Jordanian university students' psychological health impacted by using e-learning tools during COVID-19. *Data in Brief*, 32. <https://doi.org/10.1016/j.dib.2020.106104>
 16. Odriozola-González, P., Planchuelo-Gómez, Á., Irurtia M. J., & de Luis-García, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry Research*, 290(May), 113108. <https://doi.org/10.1016/j.psychres.2020.113108>
 17. Patricia, A. (2020). College Students' Use and Acceptance of Emergency Online Learning Due to COVID-19. *International Journal of Educational Research Open*, 100011. <https://doi.org/10.1016/j.ijedro.2020.100011>
 18. Shim, T. E., & Lee, S. Y. (2020). College students' experience of emergency remote teaching due to COVID-19. *Children and Youth Services Review*, 119(July), 105578. <https://doi.org/10.1016/j.childyouth.2020.105578>
 19. Kwaah, C. Y., & Essilfie, G. (2017). Stress and coping strategies among distance education students at the University of Cape Coast, Ghana. *Turkish Online Journal of Distance Education*, 18(3), 120–134. <https://doi.org/10.17718/tojde.328942>
 20. Kapasia, N., Paul, P., Roy, A., Saha, J., Zaveri, A., Mallick, R., Barman, B., Das, P., & Chouhan, P. (2020). Impact of lockdown on learning status of undergraduate and postgraduate students during COVID-19 pandemic in West Bengal, India. *Children and Youth Services Review*, 116, 105194. <https://doi.org/10.1016/j.childyouth.2020.105194>
 21. Mothibi, G. (2015). A Meta-Analysis of the Relationship between E-Learning and Students' Academic Achievement in Higher Education. *Journal of Academic Achievement in Higher Education. Journal of Educational and Practice*, 6(9), 6–10. <https://files.eric.ed.gov/fulltext/EJ1082408.pdf>
 22. Esposito, S., & Principi, N. (2020). School Closure During the Coronavirus Disease 2019 (COVID-19) Pandemic: An Effective Intervention at the Global Level? *JAMA Pediatr*, 174(10), 921–922. doi:10.1001/jamapediatrics.2020.1892
 23. Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners. *Arab World English Journal*, 11(4), 351-362. DOI: <https://dx.doi.org/10.24093/awej/vol11no4.23>
 24. Iyer, P., Aziz, K., & Ojcius, D. M. (2020). Impact of COVID-19 on dental education in the United States. *Journal of Dental Education*, 84(6), 718–722. <https://doi.org/10.1002/jdd.12163>
 25. Kim, H. J., Hong, A. J., & Song, H. D. (2019). The roles of academic engagement and digital readiness in students' achievements in university e-learning environments. *International Journal of Educational Technology in Higher Education*, 16, 21. <https://doi.org/10.1186/s41239-019-01>