CONTENTS

Coping Strategies IIUM Malay Undergraduate Students Adopted to Proceed with Online Learning during COVID-19

Nur Atiera Binti Yunus[1] and Iyad M. Y. Eid[2]

Abstract: This study explores the coping strategies adopted by Malay undergraduate students at the International Islamic University Malaysia (IIUM) to proceed with online learning during COVID-19. The study employed a qualitative research approach and implemented face-to-face semi-structured interviews for data collection. Open-ended questions were utilized to enable participants to discuss their experiences freely. Using the purposive sampling technique, ten (10) IIUM undergraduates were selected, 6 females and 4 males, and all the participants were Malay students coming from Malaysia. The results of the study show that Malay undergraduate students could overcome difficulties while studying online by controlling the learning environment, communicating with someone and asking for help, writing a diary, and taking short breaks. This study is significant for showing the coping experiences of IIUM Malay students. It highlights how adopting certain mechanisms allowed them to proceed with online learning for more than two years throughout the challenging time of COVID-19, which negatively impacted a large number of students around the world. Practically, the coping strategies are applicable to students and academic organizations and can support them during challenging times that may threaten students' academic performance.

---

[1] *Nur Atiera Binti Yunus* is an undergraduate student at the Department of Sociology and Anthropology, AbdulHamid AbuSulayman Kulliyyah of IRKHS, International Islamic University Malaysia. She can be reached at atierayunus00@gmail.com.
[2] *Iyad M. Y. Eid* is an Assistant Professor at the Department of Sociology and Anthropology, AbdulHamid AbuSulayman Kulliyyah of IRKHS, International Islamic University Malaysia. He can be reached at iyad@iium.edu.my.

Background of the Study

In 2019, the novel Coronavirus (COVID-19) spread all over the world. According to World Health Organization (WHO), COVID-19 has various symptoms, including a cough, fever, sore throat, and runny nose; 6,508,521 individuals lost their lives during the spread of the pandemic (Hashim et al., 2021). Globally, the new fatal disease has altered human routines and activities. Several countries closed their borders and companies, businesses, and even educational institutions suspended their activities in an effort to control the spread of the disease. Similar to other countries, Malaysians had to deal with the deadly pandemic (Shah et al., 2020). On March 18, 2020, the Malaysian government imposed a Movement Control Order (MCO) and mandated the shutdown of all sectors, including the educational sector (Ramli et al., 2020). Accordingly, all physical activities were suspended, and students stayed at home and shifted to online learning, where the entire teaching and learning process was delivered online (Gewin, 2020; Sia & Adamu, 2020). The new learning mode negatively affected students and governments, who struggled to provide adequate funding for universities to support online learning (Simamora, 2020), which strongly relied on technology and online resources (Adedoyin & Soykan, 2020). It emerged as the best choice for continuing education throughout the COVID-19 period, allowing students and instructors to deliver course contents (Thanji & Vasantha, 2016).

According to Al-Maroof et al. (2020), the lockdown situation and online learning circumstances affected students' feelings toward academic lives and social relationships. Besides technological devices, online learning requires soft skills that educators, institutions, and organizations must possess (Hrastinski, 2008). However, the literature indicates that the rapid shift to online learning without sufficient preparations or instructions forced students to encounter difficulties that interfered with their learning process (Munir et al., 2021); as a result, they started to lose interest in studying.

Despite its advantages, there are several challenges associated with online learning. Previous research indicates that poor internet connection was one of the major barriers to an effective learning process. A study in Pakistan reported that inadequate internet connection resulted in poor learning experiences (Ullah et al., 2021). Another study highlighted that sluggish internet access made students struggle to listen to the lecture properly, and they lagged behind their classmates who had a good internet connection (Marco Jr & Dela Cruz, 2022; Alhamasees et al., 2021). Literature also showed that students in Malaysian public universities, especially those residing in rural areas, considered limited internet connection as a challenge affecting their regular class attendance (Mustapha et al., 2021). Besides intermittent and weak internet connection, the level of digital literacy or competence to use technology for learning was also a drawback. The unexpected shift to online learning made some students stand helpless, affecting their learning process (Nur Salina et al., 2020). Some students had old or unsupported devices, while others could not access learning materials provided by instructors (Mahyoob, 2020).

The financial strain imposed a real challenge for students to pay for expensive internet data or other essential study resources for effective studying (Amir et al., 2020). Apart from imposing financial burdens, online learning causes health problems. For example, Ullah et al. (2021) found that prolonged exposure to computer screens caused eye discomfort in certain students. Another study found that study load caused stress and anxiety among online learners (Irawan et al., 2020).

The limitation of learning space as experienced by students in the Philippines distracted them due to uncontrolled noise (Barrot et al., 2020). Similarly, a study conducted in Malaysia mentioned that environmental disturbances, like noise, made it difficult for students to have great learning experiences due to limited space at home (Kapasia et al., 2020). The family's financial status may prevent children from enjoying a private, comfortable place and learning environment. According to Nur Salina et al. (2020), the lockdown forced students to be at home and remain physically close to other family members. Nonetheless, research confirms that students had to face rising difficulties and adapt to the new learning style (Chung et al., 2020). Limited social interaction imposed another challenge on students as they had to remain physically separated and to stop enjoying face-

to-face communication (Alhamasees et al., 2021; Amir et al., 2020; Selvanathan et al., 2020). Physical isolation during learning caused misunderstanding and late feedback from students and their instructors and impacted academic assessments (Marco Jr & Dela Cruz, 2022).

Thus, the reviewed literature demonstrates that online learning involved some common challenges. However, students were expected to proceed with this learning mode as an alternative and cope with difficulties. A study found that there were specific strategies students employed depending on specific challenges and the relevance and availability of resources in their surroundings (Barrot et al., 2021). For this reason, the study investigated the coping mechanisms IIUM Malay undergraduates adopted to proceed with learning during COVID-19, highlighting to what extent employing these strategies helped them to deal with the challenges. In the context of this paper, coping strategies refer to the actions the students practised to overcome physical and emotional difficulties developed during online learning. As using effective coping strategies will be more resilient to physical and emotional obstacles, this paper explores the experiences of IIUM Malay students in adopting four coping mechanisms: controlling the learning environment, talking to someone and asking for help, writing a diary, and taking a short break for stress releasing activities.

Environmental Control

Environmental control means adjusting the surrounding physical learning environment. Environmental distractions hinder students' participation in class discussions (Li & Che, 2022). Therefore, a learning environment must be calm and roomy so students can concentrate better and learn in a comfortable setting (Keser Aschenberger et al., 2022). However, being at home, students can be exposed to environmental noises and disturbances. According to Fransisco (2020), students cope with noises in their surroundings by relocating to another location. A conducive environment can be created by existing in a separate room for study because it can enhance students' concentration and motivation in learning (Keser Aschenberger et al., 2022). Barrot et al. (2021) found that students tended to exist in a quiet learning environment at home even if they needed to study late at night while all family members were sleeping soundly. Similarly, Realyyasques-

Vargas et al. (2020) pointed out that having a designated room for studying helps to increase the academic performance of students since they can control the noises from disturbing them while studying. Thus, the literature shows that students tend to practice environmental control to secure a comfortable learning environment, which motivates them to continue their studies.

The findings of this study also found that most participants employed environmental control to avoid the noise that disturbed their learning. For example, they tended to wake up early while other family members were still asleep. Izzah, one of the participants, viewed that waking up early provided her with a chance to avoid noise and do her work peacefully.

> *"I did work related to my study early in the morning to avoid noise. Everyone was still sleeping, and that gave me peaceful moments to finish my work."*

Nat, another participant, also put herself in her bedroom to avoid noise while attending her online classes.

> *"I usually sat in the living room for most of the classes, but noises coming from the kitchen and my father, who used to have a meeting for his work at the same time, disturbed me. Therefore, I just stayed in my bedroom, which was quieter and helped me avoid being disturbed by noise and loud voices."*

Thus, IIUM Malay students controlled their learning environment to enjoy an effective learning experience, as they were aware that the disturbances that occurred in their surroundings, such as noise, would distract them from concentrating during the online class.

Talking to Someone and Asking for Help

Talking to others is a form of seeking social support, usually from family, friends, and close relatives. According to Chang et al. (2020), receiving social support from family reduces mental stress and, at the same time, works as an effective coping strategy for any stressful situation. It can be in the form of expressing or sharing problems with

others to obtain advice on dealing with burdens or problems rather than keeping them to one's self.

A study on students in Poland showed that the students used problem-focused coping and emotional coping as adaptation mechanisms to encounter challenges they faced (Babicka Wirkus, 2021). In another study, students sought assistance from family and friends via online platforms to feel more connected during COVID-19 (Son et al., 2020). Mai et al. (2021) and Baloran (2020) also showed that interactions with friends through discussions, communication, and sharing issues developed trust and friendship. That is because sharing a problem with someone can express feelings towards a stressful event. A study in India found that getting social support from peers was an effective coping strategy for facing challenges during COVID-19 (Majrashi et al., 2021). Support may extend to providing help with technology-related problems. In Oketch-Oboth's study (2021), the students pointed out that they borrowed a laptop from a friend or relative when needed. The same finding is consistent with another study conducted by Cahapay (2021) that the students who could not complete an online task on their own devices asked their peers to lend them gadgets to use for studying.

Similarly, many students in the present study considered talking with someone as an outlet to ease physiological burdens. They believed that it was not good to keep problems to themselves, so they frequently met their family and friends via video conferences to talk about critical issues related to their academic lives. For example, Qurr, one of the participants, stated:

> *"I believe it is better to share the problems I have with others instead of bottling them up. I talk to my friends, and sometimes family, about problems I have with my teammates. I'm the kind of person that needs to share my problems with others and receive feedback, and any feedback is good for me."*

Fia also shared her problems with her mother. In this regard, she said:

> *"I talked to my parents, especially my mom, whenever I felt stressed or down. I always share my problems with her, and she always motivates and pushes me."*

The participants also received physical support when they had problems with their devices. Khai mentioned that he asked his neighbor to borrow a laptop.

> *"My neighbour's friend lived opposite my house. He is a student. I usually borrowed his laptop for my study when he did not use it during that time."*

Besides that, when the students had weak or interrupted internet connection, they asked their parents to use hotspots from them. Sha, a participant, explained this support in her words, saying:

> *"I used mobile data for an internet connection, but it was limited. I usually asked for help from my father to connect to the internet via his use hotspot account."*

Thus, asking for social, material, and emotional support was a coping approach that made the students feel that they were never alone. Having a conversation with someone helped them release stress instead of keeping their concerns to themselves.

Writing a Diary

Writing a diary is a kind of expressive writing that some students use as a coping strategy to reduce anxiety, especially when it includes positive wording and insight (Shen et al., 2018). Expressive writing can help students end a stressful day on a positive note, making them feel more relaxed and calmer. According to a study on nursing students, those who wrote a diary during their first clinical trial felt less anxious than those who did not (Goodman & Henry, 2019). Robertson et al. (2021) concluded that by writing about their experiences and emotions, students' anxiety levels could be reduced. Through expressive writing, they find an outlet to express their feelings about what they have been through, and in the end, this helps them to gain a clear mind. Another study showed that using writing as a coping process by students who

faced challenges related to their study resulted in effective relief (Pennebaker & Evans, 2014) and reduced academic stress, making students more comfortable and relieved (Argudo, 2021).

Similarly, writing a diary proved to be an effective coping strategy in the present study. The participants pointed out that expressive writing allowed them to express their feelings and experiences. They viewed that it created inner peace and helped in comforting their minds. For the Malay IIUM undergraduates, writing a diary was a source of motivation to keep studying online. Min, one of the participants, described writing a diary as his coping mechanism strategy. In this regard, he commented:

> *"In my diary, I write motivational sentences that maintain my enthusiasm for learning. For example, I will write 'kau dah buat yang terbaik' (you have done your best)."*

Fia also had the habit of writing a diary to cope with the challenges of online learning, which made her overthink or feel anxious,

> *"I started the habit of writing a diary whenever I overthought or felt anxious. I wrote in the diary to express my feelings, and I could see that it helped me be less preoccupied with my problems."*

Thus, writing a diary was identified as a technique that assisted the students in coping with the obstacles of online learning. They wrote about daily events, and it was seen that writing allowed them to express themselves and gain motivation and excitement for learning.

Taking a Short Break

Taking a short break means suspending academic work for a short time. It is a self-coping strategy that is proven to release stress (Yasmin et al., 2020). According to Blasche et al. (2018), having a break from academic duties enhanced motivation and enthusiasm among students and made them more relaxed after the break. Having a break also decreases fatigue. Students can engage in relaxing or physical activities (Son et al., 2020). Rotas and Cahapay (2021) found that students dealt with the difficulties of online learning by

refocusing their attention from academic-related activities to leisure pursuits like watching movies or gardening. In another study by Kwaah and Essilfie (2017), it was mentioned that self-distractions like watching movies and listening to music are the second most common coping mechanisms used during online learning after meditation. However, in some cases, students take a break to escape the academic workload and engage in creative activities such as music and painting (Chandra, 2020). They can also watch a movie, listen to music, or play a video game. Therefore, a short escape from academic matters can energize students and improve their performance and well-being when encountering a stressful situation.

Likewise, taking a short break was one of the coping mechanisms used by all IIUM Malay undergraduates in the current study. They tended to suspend studying for a while and rest. However, they differed on the types of entertainment they engaged in. Dam, for example, stopped studying and entertained himself by watching movies and listening to music.

> *"I used to forget about my study for a while. I spent time sleeping, binge-watching movies, or listening to music."*

Riff preferred to play video games.

> *"During the online classes, there was also a long period of lockdown, and that created a stressful situation for me as I could not go out. I took a short break from studying to play video games."*

Thus, the students believed that taking a short break would boost their energy. For this reason, they took it as a coping strategy to deal with stressful situations during online learning.

The previous sections presented the coping strategies that IIUM undergraduates consciously adopted to overcome the physical and psychological challenges while experiencing online learning during COVID-19. For most of the students, online learning was described as challenging. It was clear that they were aware of the problems that developed during the new learning mode, so they applied what they felt were appropriate methods of dealing with the problems. The

common strategies they adopted included controlling the learning environment, talking to someone and asking for help, writing a diary, and taking a short break.

Discussion

According to Folksman and Tedlie (2004), as cited in Algorani and Gupta (2021), coping is how an individual manages stressful events occurring internally or externally, either through thoughts or behaviours. This study presented the coping mechanisms that IIUM Malay undergraduates adopted to overcome the challenges they faced during online learning, as shown in Figure1 below.
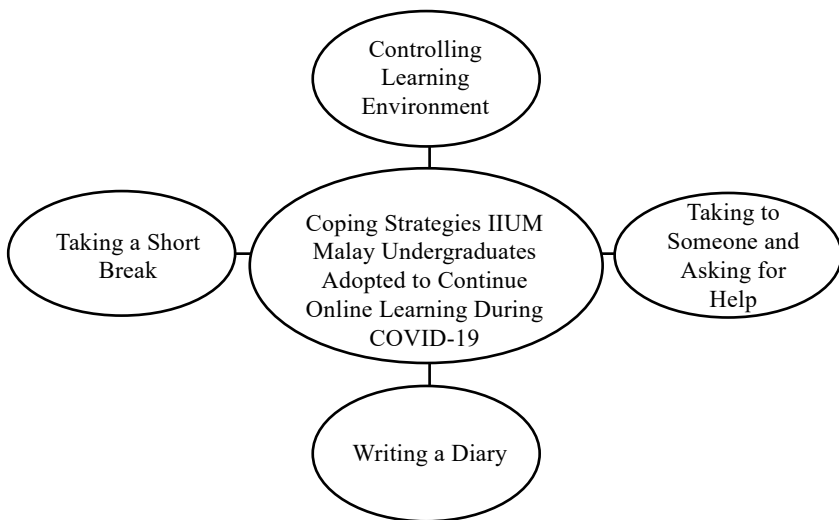
Figure 1: Research Design on Coping Strategies IIUM Malay Undergraduates Adopted to Continue Online Learning During COVID-19

The students controlled their learning environment because they wanted to avoid noise and distractions to secure an optimal place for studying. Some students moved to a separate room, while others woke up early and studied while the rest of the family slept. This finding is consistent with the results of a study conducted by Keser Aschenberger

et al. (2022), who stated that improving students' concentration and motivation for learning can come through environmental control, which is creating a conducive environment; for example, staying in a separated study area.

To understand the coping strategies used by IIUM students, it had become a habit to wake early even before the pandemic, to prepare themselves for morning classes. Hence, they chose to continue with this kind of habit during online learning as they encountered several challenges that distracted them from learning during class. Accordingly, they used a familiar coping strategy to do everything related to their studying that fit their current situation.

Besides, having a conversation and asking for help from close people can make individuals feel better as they express their thoughts and problems (Yasmin et al., 2020). Similar to the participants in the current study, having a conversation with their friends or family concerning their problems is a better option for the participants rather than keeping it to themselves. Seeking help from close friends or people in the surrounding can be helpful in every challenge encountered by the students. Majrashi et al. (2021) agreed that asking for and receiving help from friends was an effective coping strategy that can be used for different challenges during COVID-19. It should be noted that talking with friends and asking for help is a normal practice among IIUM students during their physical learning, and it has become part of the culture at IIUM through exchanging ideas, things, and belongings. Unconsciously, students practiced the same method as their coping strategies during COVID-19 time.

Moreover, expressive writing was also found as an effective coping strategy for reducing stress and anxiety (Shen et al., 2018; Argudo, 2021). Writing a positive sentence and motivational word, for example, helps in reducing the level of anxiety among students. The participants in this study employed coping strategies through journaling their day in a diary and having motivational and spirit sentences to develop their motivation and enhance their enthusiasm for online learning. For IIUM students, expressive writing using motivational expressions was habitual during physical learning. They noticed having notice boards in their rooms to boost their motivation for learning when feeling

gloomy. Hence, expressive writing effectively boosts one's spirit with new motivation to keep on going without looking back to the past.

Other than that, taking a short break through entertainment was found to be one of the coping strategies among the participants, such as enjoying a movie or playing a video game. Referring to Dam and Riff's situation, both used coping strategies in taking a short break through entertainment, such as watching a movie and playing a video game. A study by Yasmin et al. (2020) mentioned that it is encouraged to take a break to release stress due to the workload of academic life. A previous study has found that having a break from academic-related issues enhances the motivation and enthusiasm among students to continue learning (Blasche et al., 2018). It is important to mention that before COVID-19, IIUM students used to cope with stress and escape from academic pressure by hanging out with their friends, going to the park, and engaging in outdoor activities within IIUM. However, to deal with stressful conditions during COVID-19, they adopted new coping activities such as watching a movie, listening to music, or playing computer games to maintain enthusiasm and lessen stress and anxiety, which affected their academic performance.

Conclusion

This study explored the coping strategies adopted by IIUM Malay undergraduates to deal with the challenges they encountered while studying online during COVID-19. They adopted various mechanisms to motivate them to maintain their academic performance, especially during the pandemic, as fear, uncertainty, and anxiety took over one's emotions. The coping strategies included controlling the learning environment, talking to someone close about their problems and asking for help, writing a diary, and taking a short break. Even though the study investigated the significant experience of online learning, it has certain drawbacks. It was based on a small sample size and included IIUM Malay students studying at AbdulHamid AbuSulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences. Therefore, future research should involve more Malaysian and international students from various faculties to examine different experiences of adopting coping techniques.

References

Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive learning environments*, 1-13.

Algorani, E. B., & Gupta, V. (2021). Coping mechanisms. In *StatPearls [Internet]*. StatPearls Publishing.

Almahasees, Z., Mohsen, K., & Amin, M. O. (2021, May). Faculty's and students' perceptions of online learning during COVID-19. In *Frontiers in Education* (Vol. 6). Frontiers Media SA.

Al-Maroof, R. S., Salloum, S. A., Hassanien, A. E., & Shaalan, K. (2020). Fear from COVID-19 and technology adoption: The impact of Google Meet during Coronavirus pandemic. *Interactive Learning Environments*, 1-16.

Amir, L. R., Tanti, I., Maharani, D. A., Wimardhani, Y. S., Julia, V., Sulijaya, B., & Puspitawati, R. (2020). Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia. *BMC medical education, 20*(1), 1-8.

Argudo, J. (2021). Expressive writing to relieve academic stress at university level. *Profile Issues in TeachersProfessional Development, 23*(2), 17-33.

Babicka-Wirkus, A., Wirkus, L., Stasiak, K., & Kozłowski, P. (2021). University students' strategies of coping with stress during the coronavirus pandemic: Data from Poland. *PLoS One*, 16(7), e0255041.

Baloran, E. T. (2020). Knowledge, attitudes, anxiety, and coping strategies of students during COVID-19 pandemic. *Journal of loss and trauma, 25*(8), 635-642.

Barrot, J. S., Llenares, I. I., & Del Rosario, L. S. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and Information Technologies, 26*(6), 7321-7338.

Blasche, G., Szabo, B., Wagner-Menghin, M., Ekmekcioglu, C., & Gollner, E. (2018). Comparison of rest-break interventions during a mentally demanding task. *Stress and Health, 34*(5), 629-638.

Chandra, Y. (2020). Online education during COVID-19: Perception of academic stress and emotional intelligence coping strategies among college students. *Asian education and development studies*.

Chang, J., Yuan, Y., & Wang, D. (2020). Mental health status and its influencing factors among college students during the epidemic of COVID-19. *Nan fang yi ke da xue xue bao= Journal of Southern Medical University, 40*(2), 171-176.

Chung, E., Subramaniam, G., & Dass, L. C. (2020). Online learning readiness among university students in Malaysia amidst COVID-19. *Asian Journal of University Education, 16*(2), 45-58.

Folkman, S., & Tedlie, J. (2004). Coping: Pitfalls and promise. *Annual review of psychology, 55*, 745.

Francisco, R. (2021). Virtual learning: Challenges and coping mechanisms of language learners in rural areas. *Journal of Learning and Development Studies, 1*(1), 40-52.

Gewin, V. (2020). Five tips for moving teaching online as COVID-19 takes hold. *Nature, 580*(7802), 295-297.

Goodman, J., & Henry, M. (2019). Reflective journaling to decrease anxiety among undergraduate nursing students in the clinical setting. *Journal of Nursing Education and Practice, 9*(5).

Hashim, J. H., Adman, M. A., Hashim, Z., Mohd Radi, M. F., & Kwan, S. C. (2021). COVID-19 epidemic in Malaysia: Epidemic progression, challenges, and response. *Frontiers in public health, 9*, 560592.

Hrastinski, S. (2008). Asynchronous and synchronous e-learning. *Educause quarterly, 31*(4), 51-55.

Irawan, A. W., Dwisona, D., & Lestari, M. (2020). Psychological impacts of students on online learning during the pandemic COVID-19. KONSELI: Jurnal Bimbingan dan Konseling (EJournal), 7(1), 53-60.

Kapasia, N., Paul, P., Roy, A., Saha, J., Zaveri, A., Mallick, R., ... & 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.

Keser Aschenberger, F., Radinger, G., Brachtl, S., Ipser, C., & Oppl, S. (2022). Physical home learning environments for digitally-supported learning in academic continuing education during COVID-19 pandemic. *Learning Environments Research*, 1-31.

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.

Li, J., & Che, W. (2022). Challenges and coping strategies of online learning for college students in the context of COVID-19: A survey of Chinese universities. *Sustainable Cities and Society, 83*, 103958.

Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 pandemic experienced by EFL Learners. *Arab World English Journal (AWEJ), 11*(4).

Mai, Y., Wu, Y. J., & Huang, Y. (2021). What type of social support is important for student resilience during COVID-19. *A latent profile analysis. Front Psychol, 12*, 646145.

Majrashi, A., Khalil, A., Nagshabandi, E. A., & Majrashi, A. (2021). Stressors and coping strategies among nursing students during the COVID-19 pandemic: Scoping review. *Nursing Reports, 11*(2), 444-459.

Marco Jr, N., & dela Cruz, R. A. (2022). Perception on the online classes challenges experienced during the COVID-19 pandemic by LSPU computer studies students. *International Journal of Learning, Teaching and Educational Research, 21*(2), 268-284.

Morisano, D., Hirsh, J. B., Peterson, J. B., Pihl, R. O., & Shore, B. M. (2010). Setting, elaborating, and reflecting on personal goals improves academic performance. *Journal of applied psychology, 95*(2), 255.

Munir, F., Anwar, A., & Kee, D. M. H. (2021). Online learning and students' fear of COVID-19: Study in Malaysia and Pakistan. *International Review of Research in Open and Distributed Learning, 22*(4), 1-21.

Mustapha, R., Mahmud, M., Burhan, N. M., Awang, H., Sannagy, P. B., & Jafar, M. F. (2021). An exploration on online learning challenges in Malaysian Higher Education: The post COVID-19 pandemic outbreak. *International Journal of Advanced Computer Science and Applications, 12*(7).

Nur Salina, I., Mazlina, N., Bakar, A., & Sharifah Wajihah Wafa, S. S. T. W. (2020). Online learning challenges during pandemic COVID-19 in Malaysian higher learning institution. *Universal Journal of Educational Research, 8*(12), 7151-7159.

Oketch-Oboth, J. W. (2021). Online learning challenges, stress experience and coping strategies among University Students during the lockdown due to COVID-19 Pandemic. *Journal of Pedagogy, Andragogy and Heutagogy in Academic Practice*/ISSN:2708-261X, *2*(1), 15–27.

Pennebaker, J. W., & Evans, J. F. (2014). *Expressive Writing: Words that Heal: Using Expressive Writing to Overcome Traumas and Emotional Upheavals, Resolve Issues, Improve Health, and Buid Resilience*. Idyll Arbor, Incorporated.

Ramli, M. F., Majid, M., & Badyalina, B. (2020). Impeding factors towards the effectiveness of online learning during covid-19 pandemic among social sciences students. *International Journal of Learning and Development*, *10*(4), 37.

Realyvásquez-Vargas, A., Maldonado-Macías, A. A., Arredondo-Soto, K. C., Baez-Lopez, Y., Carrillo-Gutiérrez, T., & Hernández-Escobedo, G. (2020). The impact of environmental factors on academic performance of

university students taking online classes during the COVID-19 Pandemic in Mexico. *Sustainability, 12*(21), 9194.

Robertson, S. M., Short, S. D., Sawyer, L., & Sweazy, S. (2021). Randomized controlled trial assessing the efficacy of expressive writing in reducing anxiety in first-year college students: the role of linguistic features. *Psychology & health, 36*(9), 1041-1065.

Rotas, E., & Cahapay, M. (2021). From stress to success: Exploring how Filipino students cope with remote learning amid COVID-19 pandemic. *Journal of Pedagogical Sociology and Psychology, 3*(1), 27-35.

Selvanathan, M., Hussin, N. A. M., & Azazi, N. A. N. (2020). Students learning experiences during COVID-19: Work from home period in Malaysian Higher Learning Institutions. *Teaching Public Administration,* 0144739420977900.

Shah, A. U. M., Safri, S. N. A., Thevadas, R., Noordin, N. K., Abd Rahman, A., Sekawi, Z., ... & Sultan, M. T. H. (2020). COVID-19 outbreak in Malaysia: Actions taken by the Malaysian government. *International Journal of Infectious Diseases, 97*, 108-116.

Shen, L., Yang, L., Zhang, J., & Zhang, M. (2018). Benefits of expressive writing in reducing test anxiety: A randomized controlled trial in Chinese samples. *Plos one, 13*(2), e0191779.

Sia, J. K. M., & Adamu, A. A. (2020). Facing the unknown: Pandemic and higher education in Malaysia. *Asian Education and Development Studies*.

Simamora, R. M. (2020). The Challenges of online learning during the COVID-19 pandemic: An essay analysis of performing arts education students. *Studies in Learning and Teaching, 1*(2), 86-103.

Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of medical internet research, 22*(9), e21279.

Thanji, M., & Vasantha, S. (2016). ICT factors influencing consumer adoption of ecommerce offerings for education. *Indian J Sci Tech, 9*(32), 1-6.

Ullah, A., Ashraf, M., Ashraf, S., & Ahmed, S. (2021). Challenges of online learning during the COVID-19 pandemic encountered by students in Pakistan. *Journal of Pedagogical Sociology and Psychology, 3*(1), 36-44.

Yasmin, H., Khalil, S., & Mazhar, R. (2020). COVID 19: Stress management among students and its impact on their effective learning. *International technology and education journal, 4*(2), 65-74.