The Relationship of Self-Care Behaviours and Online Learning Engagement Among Nursing Students During the COVID-19 Pandemic

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Abstract

The COVID-19 pandemic and the sudden switch from conventional to virtual classes allegedly raised students' risk of mental health illnesses, adversely influencing their academic engagement and learning outcomes. Nursing students in Malaysia, especially those enrolled in universities in Sabah, have traditionally been accustomed to a conventional face-to-face teaching and learning approach. Due to the COVID-19 pandemic, e-learning or online classes have become one of the learning methods for university nursing students in Sabah, either while they are on campus or at home, to obtain access for educational purposes. The purpose of this study was to assess the relationship between self-care behaviours and online class engagement among the university nursing students in Sabah throughout the pandemic. This study was a quantitative descriptive cross-sectional study that used the Mindful Self-Care Scale (MSCS) and the Online Student Engagement Scale (OSE). SPSS version 26. Pearson Correlation analysis showed moderate level of positive relationship ($r = 0.582$, $p = < 0.001$, $n = 120$). Adequate evidence exists to show that level of self-care is positively moderately related to the online classes' engagement behaviour among the nursing students in this study. Students should possess the self-control to set goals, effectively allocate their time, and avoid procrastination.

Keywords: online classes, online engagement, pandemic, self-care

Abstrak

***Hubungan Perilaku Perawatan Mandiri dan Keterlibatan Pembelajaran* Online *di antara Mahasiswa Keperawatan Universitas di Sabah Selama Pandemi* COVID-19.** *Pandemi* COVID-19 *dan peralihan tiba-tiba dari kelas konvensional ke kelas virtual diduga meningkatkan risiko penyakit kesehatan mental siswa, yang secara negatif memengaruhi keterlibatan akademik dan hasil belajar mereka. Mahasiswa keperawatan di Malaysia, khususnya mahasiswa keperawatan universitas di Sabah, telah terbiasa dengan pengajaran dan pembelajaran tatap muka. Di tengah pandemi* COVID-19, *e-learning atau kelas* online *menjadi salah satu metode pembelajaran bagi mahasiswa keperawatan universitas di Sabah, baik di kampus maupun di rumah, untuk mendapatkan akses untuk keperluan pendidikan. Tujuan dari penelitian ini adalah untuk menilai hubungan antara perilaku perawatan mandiri dan keterlibatan kelas* online *di kalangan mahasiswa keperawatan universitas di Sabah selama pandemi. Penelitian ini merupakan penelitian* cross-sectional *deskriptif kuantitatif dengan menggunakan* Mindful Self-Care Scale (MSCS) *dan* Online Student Engagement Scale (OSE). *SPSS versi 26* Pearson Correlation *menunjukkan tingkat hubungan positif sedang ($r = 0,582$, $p = < 0,001$, $n = 120$). Ada bukti yang memadai untuk menunjukkan bahwa tingkat perawatan mandiri secara positif terkait dengan perilaku keterlibatan kelas* online *di antara mahasiswa keperawatan dalam penelitian ini.*

Kata Kunci: *kelas* online*, keterlibatan* online*, pandemi, perawatan mandiri*

Introduction

The COVID-19 pandemic and the sudden switch from conventional to virtual classes have allegedly raised students' risk of mental health illnesses, adversely influencing their academic

engagement and learning outcomes, stated Cleofas (2021). Nursing students in Malaysia, especially those enrolled in universities in Sabah, have traditionally been accustomed to a conventional face-to-face teaching and learning approach. Due to the COVID-19 pandemic, e-learning or online classes have become one of the learning methods for university nursing students in Sabah, either while they are on campus or at home, to obtain access for educational purposes. While the COVID-19 pandemic has significantly subsided, Malaysia's public higher education institutions continue to offer approximately 30% of their classes online. This blended approach to education reflects both a preference for remote learning and ongoing precautions, even as pandemic-related restrictions have eased.

However, most students are facing the challenges of unexpectedly switching to online classes, such as distractions and time management, adapting to unfamiliar technology, and staying motivated to keep up with their rapidly changing needs. Nevertheless, because of the pandemic, students are required to become familiar with online classes, which adds to their stress. Hence, self-care is not something that should be underestimated by a person, especially for university students since practicing self-care can help protect students from psychological challenges and improve student outcomes.

Furthermore, Oketch-Oboth (2021) found that the main issues that students were worried about were an unsuitable learning environment, internet connectivity problems, a lack of instruction on how to use online learning platforms, unstable electricity supply, the cost of internet bundles, and a lack of online learning tools like laptop computers, especially during exams. Additionally, Wu et al. (2021) found that during the pandemic, there was a higher-than-normal prevalence of depression, anxiety, psychological discomfort, and insomnia among students in various parts of the world. According to Chiu (2021), these pandemic-related mental health problems as well as students' lack of experience with online learning environments can pose difficulties for student involvement. Therefore, according to Brouwer et al. (2021), adopting healthy self-care is essential for mental well-being and a means of mitigating psychological distress. According to Matarese et al. (2018), self-care is a process that includes the mental, physical, social, and spiritual care that a person uses to enhance their own well-being. In addition, according to Cook-Cottone and Guyker (2018), self-care behaviours can enhance academic results and overall school productivity. Thus, this study set out to assess the relationship between self-care behaviours and online class engagement among the university nursing students in Sabah throughout the COVID-19 pandemic.

Methods

This study was a cross-sectional study that was conducted in the Faculty of Medicine and Health Science, Universiti Malaysia Sabah. The sample for this study consisted of 120 students from 1st year, 2nd year, and 3rd year of the nursing programme at the Faculty of Medicine and Health Science (FMHS), Universiti Malaysia Sabah, based on the calculation of the minimum sample size required. A random sampling technique was conducted to choose the students.

This questionnaire was found to have good validity and reliability (Hotchkiss et al., 2023). MSCS is a 33-item scale, with each question assessed using a five-point Likert scale that inquires about the frequency with which each behaviour was performed in the preceding week. The answer selections are Never (0 days), Rarely (1 day), Sometimes (2–3 days), Often (4–5 days), and Regularly (6–7 days). In order to measure the respondents' self-care behaviours, the scoring that was used was 1 for never, 2 for rarely, 3 for sometimes, 4 for often, and 5 for regularly. The MSCS items were developed to align with a set of actionable practices that promote positive embodiment and well-being, according to Cook-Cottone and Guyker (2018). While the OSE is the scale that is used to meas-

ure student respondents' engagement in online classes. The OSE is a 19-item, unidimensional, five-point Likert scale (1-not at all characteristics of me, 2-not really characteristic of me, 3-moderately characteristic of me, 4-characteristic of me, 5-very characteristic of me) that assesses students' skills, emotions, involvement, and performance in online classrooms. The OSE scale offers an easy, valid, and reliable way to measure students' engagement in online courses (Dixson, 2015).

The completion of this study occurred over the course of nine months, starting in September 2021 and concluding in May 2022. The data of the respondents was collected through questionnaires by using these three different sections of questionnaires: demographic information, Cook-Cottone and Guyker's Mindful Self-Care Scale (MSCS) (2018), and Dixson's Online Student Engagement (OSE) (2015). This research was conducted through the distribution of Google Forms questionnaires. The link to the Google Form was created and distributed via

WhatsApp to year 1, year 2, and year 3 nursing students at Universiti Malaysia Sabah's Faculty of Medicine and Health Science. SPSS version 26 was used to analyze the data in this study.

Ethical approval to conduct the study was obtained from the Ethical and Scientific Committee of the Faculty of Medicine and Health Science, Universiti Malaysia Sabah [JKEtika3/21 (8)]. Consent was considered obtained once the participant agreed voluntarily to the online consent form, while detailed explanations about the nature of the study, including the confidentiality of their responses, were assured.

Results

The respondents' demographic data shows that 85% of respondents are female, as nursing courses are still monopolised by women, and 79% are aged between 18 and 21 years old, as this is a diploma in nursing course. The Mindful Self-Care Scale and the Online Student Engagement Scale are both using a 5-point Linkert scale, with

Table 1. Demographic Data

Total: 120	Year 1	Year 2	Year 3	Frequency	Percentage (%)
Gender					
Male	7	3	8	18	15
Female	24	28	50	102	85
Age					
18–21	27	26	42	96	79.2
22–25	4	5	15	23	20
26–28	0	0	1	1	0.8
29 and above	0	0	0	0	0
Current year of study					
Year 1	31			31	25.8

Table 2. MSCS Frequency

		Mindful Relaxation	Physical Care	Self-compassion & Purpose	Supportive Relationship	Supportive Structure	Mindful Awareness	General
Valid	Never	0	4	2	1	1	1	1
	Rarely	14	36	3	9	11	8	12
	Sometimes	51	52	44	24	44	36	47
	Often	40	22	42	52	46	53	38
	Regularly	15	6	29	34	18	22	22
	Total	120	120	120	120	120	120	120

Table 3. OSE Frequency

		Skill	Emotion	Participation	Performance
Valid	not at all characteristics of me	3	3	3	2
	not really characteristic of me	19	15	21	16
	moderately characteristic of me	52	52	48	49
	characteristic of me	37	39	36	39
	very characteristic of me	9	11	12	14
	Total	120	120	120	120

Table 4. Pearson Correlations

		Self-care	Online student Engagement
Selfcare	Pearson Correlation	1	.582**
	p-value		<.001
	N	120	120

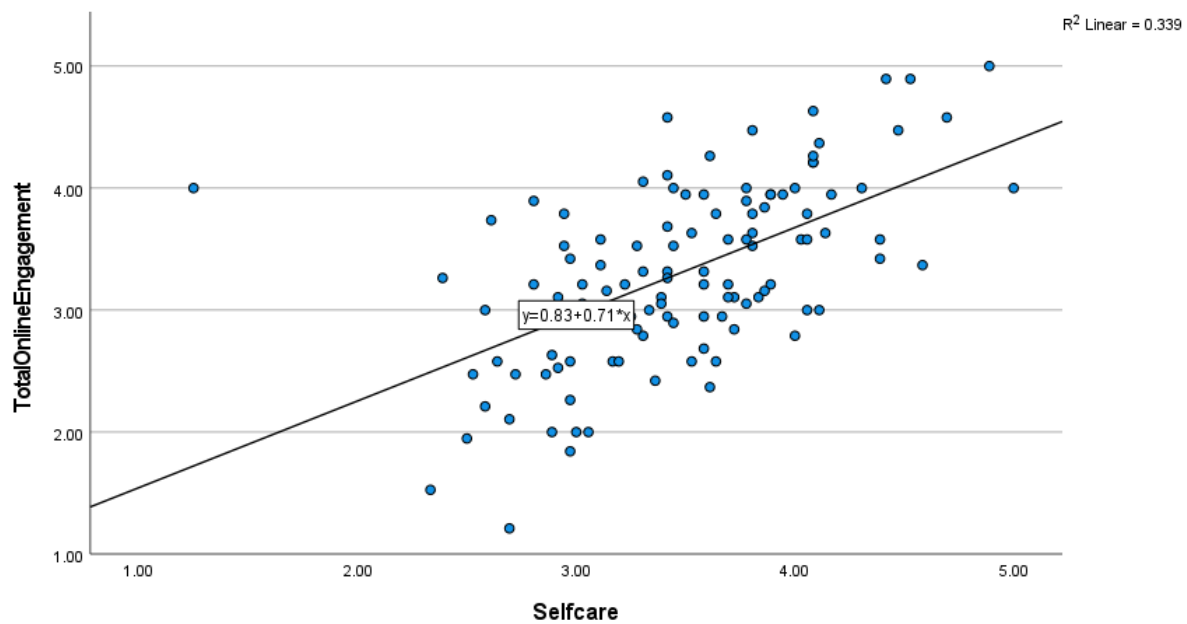**. Correlation is significant at the 0.01 level (2-tailed)

Figure 1. The scatter plot showing the relationship between online student's engagement and self-care

1 score being the lowest, 5 score being the highest, 1 score being the least reflecting the respondent and 5 score being the most reflecting the respondent.

Generally, the demographic data in Table 1 provides a snapshot of the gender distribution, age distribution, and current year of study among a total of 120 students. It indicates a predominantly female student population, with the majority falling within the 18–21 age group and a significant proportion in Year 1 of their studies.

Overall, the descriptive analysis of the MSCS frequency (Table 2) suggests that respondents' engagement in these dimensions related to mindfulness, physical care, self-compassion, pupose, relationships, structure, mindful awareness, and general well-being varied. "Sometimes" and "Often" were the most common response categories across most dimensions, indicating that many respondents reported engaging in these

behaviours or attitudes at least occasionally. "Rarely" and "Regularly" were less common response categories, and "Never" was the least chosen option in most dimensions.

Whilst, the descriptive analysis of the OSE Frequency (Table 3) suggests that respondents' self-perceptions vary across these dimensions related to skills, emotions, participation, and performance. "Moderately characteristic of me" was a common response category for most dimensions, indicating that many respondents felt moderately confident in these areas. However, there were also significant proportions of respondents who characterized themselves as "characteristic of me" or "not really characteristic of me" for each dimension. The "very characteristic of me" and "not at all characteristics of me" categories had fewer respondents.

The Person Correlation show moderate level of positive relationship ($r = 0.582$, $p = <0.001$, and $n = 120$, relationship between online student engagement and self-care) since the probability value (Pearson Correlation) (<0.001) is less than the predetermined alpha value (0.05), thus the null hypothesis was rejected. Adequate evidence exists to show that level of self-care is positively moderately related to the online engagement behaviour among the nursing students, as presented in Table 4. This conclusion is made at the significant level, $\alpha = 0.05$ (5%) or confidence level (95%).

The above scatter plot graph shows a better view of the relationship between self-care and online students' engagement (Figure 1). A scatterplot summarises the results: overall, there was a moderate, positive correlation between self-care and online student engagement among nursing students in this study. Increases in self-care were correlated with increases in online student engagement.

Discussion

Online learning, also known as eLearning, encompasses various forms of online education.

In this study, "virtual learning" describes scheduled online classes during the COVID-19 pandemic for nursing students, limiting flexibility. Passive learning typically characterizes traditional face-to-face learning, which involves in-person interactions with instructors. Due to the pandemic, nursing students had to attend scheduled online classes. Despite the shift to online learning, their academic performance remained strong. The study acknowledges the scarcity of prior research on this specific topic. The literature review relies on citing previous studies but lacks sufficient data due to this research gap. Studies by Cleofas (2021) and Brouwer et al. (2021) highlight the importance of self-care in mitigating the adverse effects of the pandemic on students' mental health. Javed et al. (2019) emphasizes the importance of self-care for nursing students, especially as they'll care for others in their careers. Moore and Wilhelm (2019) and Ayala et al. (2018) also explore self-care among students in different fields. Romero (2019) discusses how self-care enhances emotional well-being and control over emotional demands. The studies by Baticulon et al. (2021), Oketch-Oboth (2021), and Alavudeen et al. (2021) explore self-care challenges during the pandemic, particularly in online learning environments. Muflih et al. (2021) and Baticulon et al. (2021) mention barriers to online learning, including technological issues and students' preferences for traditional classroom settings. The studies collectively emphasize the need for self-care, especially during challenging times like the pandemic. Barriers to online engagement need to be addressed for effective online education. In conclusion, the studies highlighted the significance of self-care practices in mitigating the psychological and emotional challenges faced by students, particularly during the COVID-19 pandemic. While online learning became a necessity, various barriers and challenges emerged. Addressing these barriers and promoting self-care among students are essential steps towards ensuring their well-being and success in the evolving landscape of education. Future research and interventions should continue to explore and support students in navigating these

challenges effectively. Recognizing the many demands and problems of students is crucial for educational institutions and lecturers, especially in times of crisis like the pandemic. This understanding can result in the creation of specialized support networks, self-care techniques, and enhanced online learning methodologies. Students, lecturers, and institutions working together will be essential to building success and resilience in the face of new and unheard-of obstacles in the educational system.

Conclusion

To engage effectively in online learning, students need to have self-control. Self-control involves managing distractions and staying focused on their studies. Self-care is a crucial aspect of a healthy and fulfilling life. It means prioritizing emotional and physical well-being. However, students often get so busy that they forget to take care of themselves. Practicing self-care can improve mood and overall well-being, leading to a better quality of life.

While self-care is essential for enhancing online student engagement, the demanding and mentally exhausting nature of online programmes can make it challenging for students to find time for meaningful self-care activities. Students must exercise self-control to set goals, manage their time effectively, and avoid procrastination.

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