

# Journal of Nursing Culture and Technology

April 2024; Volume 1 Number 1

https://journal.rifapublisher.id/index.php/JNC-Tech

ISSN: xxx-xxxx (Print); ISSN: xxxx-xxxx (Online)

# OVERVIEW OF PERSISTENCE DURING ONLINE LEARNING ON NURSING STUDENTS

Ai Mardhiyah<sup>1</sup>, Iyus Yosep<sup>1</sup>, Henny Suzana Mediani<sup>1</sup>, Windy Rakhmawati<sup>1</sup>, Sri Hendrawati<sup>1</sup>

<sup>1</sup>Faculty of Nursing, Universitas Padjadjaran

Email: ai.mardhiyah@unpad.ac.id

#### **ABSTRACT**

Background: Persistence is a key factor in determining the academic success of nursing students. The impact of persistence on students is improved academic performance, development of study skills, professional readiness, mental well-being, and engagement in academic and extracurricular activities. Nursing students' perceptions and practices of persistence are important to understand in the context of higher education. Objectives: This study aims to describe the level of persistence in Padjadjaran University Nursing students. Methods: The research method used is quantitative using the Self-Regulated Online Learning Questionnaire (SOL-Q) which consists of 5 items. The sampling technique in this study used purposive sampling. The number of samples was 100 padjadjaran university nursing students. Results: The results showed that more than half of nursing students at Padjadjaran University had low persistence, which could affect their academic performance. This can be seen from 59 respondents or as many as 59% of students showed low persistence. This findings highlights the importance of developing learning strategies that can improve the persistence of nursing students. Conclusion: In the context of nursing education, there is a need for greater efforts to improve student persistence, especially in developing their persistence, in order to improve the quality of education and their readiness for future nursing practice.

Keywords: nursing, persistence, students

#### Introduction

Online learning in higher education has become an increasingly dominant topic in the realm of higher education. The learning paradigm has experienced a significant shift with the adoption of information and communication technology as one of the main instruments in the educational process (Drissi et al., 2021). There are a number of problems that may arise along with the implementation of online learning. One of them is the challenge of creating a learning experience that actively interacts between lecturers and students (Ding & Zhao, 2020). This can have the impact of losing the social and collaborative interaction aspects that are important in traditional learning. Apart from that, there are also technical obstacles that often hinder the smooth learning process, such as unstable internet network problems or lack of adequate accessibility of technological devices for all students (Qin et al., 2020). Meanwhile, there are also challenges in ensuring equal access to learning materials for students from diverse economic backgrounds.

Online learning at the tertiary level has a significant psychological impact on students. One of the main impacts is an increase in stress and anxiety levels (Hikmat et al., 2022). Students may experience additional stress due to sudden changes in the learning environment, the need to manage technology, and the lack of social interaction that results from virtual learning (Khalil et al., 2020).

23

This can lead to decreased mental well-being, increase the risk of burnout, and even interfere with academic abilities (Yue et al., 2021). In addition, the social isolation experienced by some students can contribute to feelings of loneliness and loss of motivation. These psychological impacts can also affect sleep quality, diet and overall health (Drissi et al., 2021).

Drastic and sudden changes mean that everyone needs to adapt a lot. Likewise for students. Initially students could interact freely, since the pandemic this has become limited. Uncertain economic situation (Cahyadi et al., 2022), risk of contracting or transmitting Covid (Muniroh et al., 2022), having a history of experience with Covid-19 (Alt, 2022), lack of activity physical and recreational activities (Chiu, 2022), limited access to online learning (Bullock et al., 2022), as well as changes in mood caused by online assignments and lectures which are considered less effective, causing students to be vulnerable to having psychological problems (Yue et al., 2021). A systematic literature review study on the prevalence of depression, anxiety, and sleep quality of students during the pandemic showed that symptoms of depression were experienced by 34%, anxiety was experienced by around 32%, and sleep disorders were experienced by 33% (Lim et al., 2021).

There is a close connection between persistence factors and mental health problems. Factors that contribute to persistence, such as motivation, mental resilience, and time management, also play a role in determining a student's mental health (Han et al., 2021). Nursing students who are able to maintain high motivation in the face of online learning challenges may have a lower risk of mental health problems (Koh et al., 2023). However, the inability to manage academic pressure, technological confusion, and lack of social support can hinder their persistence and contribute to ongoing stress. In this case, persistence is not only the key to academic success, but also a factor that influences mental health (Buie et al., 2020). Additionally, a lack of social interaction necessary for collaborative learning and emotional support can lead to feelings of loneliness and isolation, which in turn can harm mental health (Johnson et al., 2020).

Perseverance has a central role in the success of nursing students during online learning. In this context, persistence not only includes perseverance in completing academic tasks, but also involves the ability to stay motivated and adapt to face challenges that arise during online learning (Han et al., 2021). Nursing students are required to have high mental resilience in facing high workloads, academic pressure, and sudden changes in the learning environment. Perseverance allows them to stay focused on their academic goals despite technical obstacles, busy schedules, or lack of face-to-face interaction with professors and classmates (Cornine, 2020). In addition, persistence also plays an important role in overcoming feelings of isolation and loneliness that may arise in online learning while maintaining motivation and connection with the academic community. Based on this, researchers are interested in knowing the description of persistence in nursing students during online learning.

### Method

This study used descriptive quantitative. Descriptive research is a type of research that aims to describe certain characteristics or phenomena without manipulating independent variables. The aim is to provide a comprehensive picture of the condition or phenomenon being studied. In the context of this research, descriptive research was used to identify and describe a picture of nursing students' persistence during online learning.

The sample for this study consisted of nursing students from Padjadjaran University. Inclusion criteria include active students who are currently undergoing online learning during a certain semester. Exclusion criteria included students who did not participate in online learning and did not provide consent to participate in the research. The research location was carried out in the online learning environment of Padjadjaran University. The total samples taken were 100 Unpad nursing students. Data was collected through online distribution of questionnaires to respondents. The questionnaire used is the Self Regulated in Online Learning Questionnaire (SOL-Q) which consists of 5 items. This questionnaire has gone through a validation and reliability process to ensure the reliability and validity

of the data obtained. Ethical considerations in this research include basic principles such as autonomy, justice, beneficence and maleficence, and confidentiality. This includes ensuring that student participation is voluntary, that fair treatment is provided to all participants, and that personal data is kept confidential.

Data analysis was carried out using descriptive statistics. It includes univariate analysis involving the frequency distribution, mean value, min-max value, and standard deviation of the data obtained from the SOL-Q questionnaire. This analysis aims to provide a clear picture of the level of persistence of nursing students during online learning.

#### **Results**

The research findings were based on a sample size of 100 participants. A data tabulation consisting of demographic information such as age, gender, academic level, campus location, and internet usage duration among the respondents is presented in the table provided.

Table 1. Respondent characteristics (n= 100)

Characteristics		Frequency	Percentage	
	18 - 20	72	72	
Age	years			
	21 - 23	28	28	
	years	20		
Gender	Male	13	13	
	Female	87	87	
Class	2017	21	21	
	2018	27	27	
	2019	30	30	
	2020	22	22	

Based on table 1, it was found that the majority of respondents were 18-20 years old, namely 72 respondents (72%). Then, the most common gender is female, namely 87 respondents (87%). Respondents in this study consisted of various classes, the largest being the 2019 class with 30 respondents (30%).

Table 2. Results of distribution of persistence (n=100)

Variables Mean	Standard	Min -	Frequ	ency (f)	Percentage (%)		
	mean	deviation	Max	High	Low	High	Low
Persistence	22.65	5,992	5-35	41	59	41	59

In table 2, it was found that persistence among nursing students had a mean of 22.65, a standard deviation of 5.992, and a minimum value of 5 and a maximum value of 35. More than half of the respondents had low persistence when learning online, namely 59 respondents (59%).

#### **Discussion**

Data analysis revealed that some nursing students showed a low level of persistence, namely 59%. This indicates that there are significant challenges in maintaining motivation and persistence during the online learning process. This low persistence can be influenced by various factors, including high academic pressure, lack of social interaction in online learning, and difficulties in managing time and technology. In this context, further efforts are needed to support students to overcome these obstacles and increase their level of persistence during online learning (Koh et al., 2023). Steps such as increasing social support, providing better resources and services, and developing interesting and

effective learning strategies can be solutions to increase the level of persistence of nursing students in facing the challenges of online learning (Han et al., 2021).

Several potential factors that may cause some nursing students to have low levels of persistence need to be considered. High academic pressure is often the main factor influencing persistence levels. In the context of online learning, students often face large workloads, busy schedules, and demands to meet high academic standards, which can lead to decreased motivation and mental fatigue (Puccia et al., 2021; Yosep, Suryani, et al., 2023). Additionally, the lack of social interaction and emotional support in online learning may also be a factor influencing persistence. Limitations in collaborating with classmates and lecturers, as well as a lack of feeling connected to the academic environment, can reduce student motivation and mental resilience (Puccia et al., 2021). In addition, technical challenges such as unstable internet network problems or lack of accessibility of technological devices can also interfere with concentration and affect the level of persistence (Kulusakli, 2022; Yosep, Mardhiyah, et al., 2023).

Although some nursing students showed a low level of persistence, it should be noted that 41% of the total respondents showed a high level of persistence. This suggests there is significant variation in levels of persistence among nursing students engaged in online learning. These findings confirm that not all nursing students experience the same challenges in maintaining motivation and persistence during the learning process (Thomas et al., 2023; Travis & Bunde, 2022). This high level of persistence may be reflected in the presence of supporting factors, such as strong internal motivation, good social support, and the ability to manage academic pressure effectively (Flett et al., 2020; Reynolds & Cruise, 2020). These findings provide hope that the majority of nursing students will be able to overcome the challenges of online learning and maintain high levels of persistence.

Persistence has a significant impact on nursing students in the online learning context. Students who have a high level of persistence tend to be more able to survive and adapt in facing challenges that arise during the learning process (Heilporn & Lakhal, 2021; Johnson et al., 2020). They tend to be more motivated to achieve their academic goals, are better able to manage time and pressure effectively, and are more persistent in completing academic assignments (O'Grady et al., 2020; Wu et al., 2020). The positive impacts of this persistence include improved academic performance, increased psychological well-being, and the formation of a strong attitude of professionalism among nursing students (Mohagheghi et al., 2022). In addition, students who have high persistence tend to have a better chance of being successful in their careers as nurses in the future (Gonzales et al., 2020).

Efforts to increase persistence in nursing students require a series of holistic and sustainable efforts from various related parties. A learning approach supported by lecturers who understand student needs and challenges can help create a supportive and motivating learning environment (Borjalilu et al., 2019). Lecturers can provide constructive feedback, offer academic guidance, and provide relevant resources to help students overcome academic obstacles (Ngo et al., 2021). In addition, educational programs can also introduce innovative learning strategies that encourage active and collaborative involvement, thereby strengthening students' motivation and mental resilience. Social support is also an important factor in increasing persistence (Manrique et al., 2020; Zis et al., 2021). The formation of a solid learning community, whether in the form of a study group or online discussion forum, can provide emotional support and mutual assistance between students (Campbell et al., 2022; Gadi et al., 2022). Coaching and mentoring programs can also help students develop time management skills, effective study strategies, and resilience in facing challenges (Kihumuro et al., 2022).

#### **Conclusions**

The conclusions of this study confirm the existence of variations in the level of persistence among nursing students during online learning, with some showing low levels of persistence (59%) and others showing high levels of persistence (41%). These findings underscore the importance of developing supportive strategies aimed at increasing nursing student persistence, especially in the

context of online learning. There is a need for intervention measures that focus on increasing motivation, overcoming technical barriers, and strengthening social support to ensure the well-being and academic success of nursing students.

The implication of this research is the importance of developing supporting strategies aimed at increasing nursing student persistence, especially in the online learning context. Recommendations for future research include further exploration of factors influencing nursing student persistence, as well as evaluation of the effectiveness of various interventions designed to increase nursing student persistence and well-being in online learning environments.

## Acknowledgements

All authors thank the Faculty of Nursing, Universitas Padjadjaran, Bandung, Indonesia which has helped us in facilitating the database for us to review the study.

#### References

- Alt, D. (2022). Professional and psychological precursors of instructional approaches used in distance learning during COVID-19. *Current Psychology*. https://doi.org/10.1007/s12144-022-03406-2
- Borjalilu, S., Mazaheri, M. A., & Talebpour, A. (2019). Effectiveness of Mindfulness-Based Stress Management in The Mental Health of Iranian University Students: A Comparison of Blended Therapy, Face-to-Face Sessions, and mHealth App (*Aramgar*). *Iranian Journal of Psychiatry and Behavioral Sciences*, 13(2), e84726. https://doi.org/10.5812/ijpbs.84726
- Buie, J. N. J., Zhao, Y., Burns, S., Magwood, G., Adams, R., Sims-Robinson, C., & Lackland, D. T. (2020). Racial Disparities in Stroke Recovery Persistence in the Post-Acute Stroke Recovery Phase: Evidence from the Health and Retirement Study. *Ethnicity & Disease*, *30*(2), 339–348. https://doi.org/10.18865/ed.30.2.339
- Bullock, A. N., Colvin, A. D., & Jackson, M. S. (2022). "All Zoomed Out": Strategies for Addressing Zoom Fatigue in the Age of COVID-19 BT Innovations in Learning and Technology for the Workplace and Higher Education (D. Guralnick, M. E. Auer, & A. Poce (eds.); pp. 61–68). Springer International Publishing.
- Cahyadi, A., Hendryadi, Widyastuti, S., & Suryani. (2022). COVID-19, emergency remote teaching evaluation: the case of Indonesia. *Education and Information Technologies*, 27(2), 2165–2179. https://doi.org/10.1007/s10639-021-10680-3
- Campbell, F., Blank, L., Cantrell, A., Baxter, S., Blackmore, C., Dixon, J., & Goyder, E. (2022). Factors that influence mental health of university and college students in the UK: a systematic review. *BMC Public Health*, 22(1), 1778. https://doi.org/10.1186/s12889-022-13943-x
- Chiu, T. K. (2022). Applying the self-determination theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *J. Res. Technol. Educ.*, 54. https://doi.org/10.1080/15391523.2021.1891998
- Cornine, A. (2020). Reducing Nursing Student Anxiety in the Clinical Setting: An Integrative Review. *Nursing Education Perspectives*, 41(4). https://journals.lww.com/neponline/fulltext/2020/07000/reducing\_nursing\_student\_anxiety\_in\_t he\_clinical.6.aspx
- Ding, Y., & Zhao, T. (2020). Emotions, engagement, and self-perceived achievement in a small private online course. *Journal of Computer Assisted Learning*, *36*. https://doi.org/10.1111/jcal.12410
- Drissi, N., Ouhbi, S., Marques, G., De La Torre Díez, I., Ghogho, M., & Janati Idrissi, M. A. (2021). A Systematic Literature Review on e-Mental Health Solutions to Assist Health Care Workers during COVID-19. *Telemedicine and E-Health*, 27(6), 594–602. https://doi.org/10.1089/tmj.2020.0287
- Flett, J. A. M., Conner, T. S., Riordan, B. C., Patterson, T., & Hayne, H. (2020). App-based mindfulness meditation for psychological distress and adjustment to college in incoming university students: a pragmatic, randomised, waitlist-controlled trial. *Psychology & Health*, 35(9), 1049–1074.

- https://doi.org/10.1080/08870446.2019.1711089
- Gadi, N., Saleh, S., Johnson, J.-A., & Trinidade, A. (2022). The impact of the COVID-19 pandemic on the lifestyle and behaviours, mental health and education of students studying healthcare-related courses at a British university. *BMC Medical Education*, 22(1), 115. https://doi.org/10.1186/s12909-022-03179-z
- Gonzales, G., Mola, E. L., Gavulic, K. A., McKay, T., & Purcell, C. (2020). Mental health needs among lesbian, gay, bisexual, and transgender college students during the COVID-19 pandemic. *Journal of Adolescent Health*, 67. https://doi.org/10.1016/j.jadohealth.2020.08.006
- Han, J., Zhang, X., He, S., & Jia, P. (2021). Can the coronavirus disease be transmitted from food? A review of evidence, risks, policies and knowledge gaps. *Environmental Chemistry Letters*, 19(1), 5–16. https://doi.org/10.1007/s10311-020-01101-x
- Heilporn, G., & Lakhal, S. (2021). Environmental Facilitators and Barriers to Student Persistence in Online Courses: Reliability and Validity of New Scales. *The Journal of Continuing Higher Education*. https://doi.org/10.1080/07377363.2020.1847972
- Hikmat, R., Hermayanti, Y., Praptiwi, A., & Putri, A. M. (2022). Self-regulated Learning Among Undergraduate College Students with Parental Divorce. *Jendela Nursing Journal*, 6(2), 78–84. https://doi.org/10.31983/jnj.v6i2.9164
- Johnson, M. D., Sprowles, A. E., Goldenberg, K. R., Margell, S. T., & Castellino, L. (2020). Effect of a Place-Based Learning Community on Belonging, Persistence, and Equity Gaps for First-Year STEM Students. *Innovative Higher Education*, 45(6), 509–531. https://doi.org/10.1007/s10755-020-09519-5
- Khalil, R., Mansour, A. E., Fadda, W. A., Almisnid, K., Aldamegh, M., Al-Nafeesah, A., Alkhalifah, A., & Al-Wutayd, O. (2020). The sudden transition to synchronized online learning during the COVID-19 pandemic in Saudi Arabia: a qualitative study exploring medical students' perspectives. *BMC Medical Education*, 20(1), 285. https://doi.org/10.1186/s12909-020-02208-z
- Kihumuro, R. B., Kaggwa, M. M., & Kintu, T. M. (2022). Knowledge, attitude and perceptions of medical students towards mental health in a university in Uganda. *BMC Med Educ*, 22. https://doi.org/10.1186/s12909-022-03774-0
- Koh, J. H. L., Daniel, B. K., & Greenman, A. C. (2023). Adaptiveness for Online Learning: Conceptualising 'Online Learning Dexterity' from Higher Education Students' Experiences. *New Zealand Journal of Educational Studies*, 58(2), 379–397. https://doi.org/10.1007/s40841-023-00287-2
- Kulusakli, E. (2022). Exploring self regulated online learning skills of EFL learners in distance education. *Turkish Online Journal of Distance Education*, 23(1), 86–96. https://doi.org/10.17718/tojde.1050356
- Lim, J. M., Kim, S. H., Baek, M. J., & Kim, K. H. (2021). The effect of university students' learning flow, self-directed learning, and learning outcomes on uncontacted online class satisfaction. *Journal of Digital Convergence*, 19.
- Manrique, M., Allwood, M. A., Pugach, C. P., Amoh, N., & Cerbone, A. (2020). Time and support do not heal all wounds: Mental health correlates of past bullying among college students. *Journal of American College Health*, 68(3), 227–235. https://doi.org/10.1080/07448481.2018.1538999
- Mohagheghi, M., Pourmohamadreza-Tajrishi, M., Shahshahanipour, S., Movallali, G., & Vahedi, M. (2022). The Effectiveness of Assertiveness Training on Anxiety Symptoms in School-Age Children With Specific Learning Disorder TT الثربخشى آموزش جرأتورزى بر نشانههاى اضطراب كودكان USWR, 22(4), 408–429. مدرسه مدرسه https://doi.org/10.32598/RJ.22.4.487.15
- Muniroh, L., Cahyanti, I. Y., & Puspikawati, S. I. (2022). Penguatan peran orang tua dalam pemenuhan gizi dan kesehatan mental anak sekolah selama pembelajaran daring di masa pandemi Covid-19.

28

- *Transformasi: Jurnal Pengabdian Masyarakat*, 18(1 SE-Articles), 59–72. https://doi.org/10.20414/transformasi.v18i1.4712
- Ngo, A. T., Tran, A. Q., Tran, B. X., Nguyen, L. H., Hoang, M. T., Nguyen, T. H. T., Doan, L. P., Vu, G. T., Nguyen, T. H., Do, H. T., Latkin, C. A., Ho, R. C. M., & Ho, C. S. H. (2021). Cyberbullying Among School Adolescents in an Urban Setting of a Developing Country: Experience, Coping Strategies, and Mediating Effects of Different Support on Psychological Well-Being. *Frontiers in Psychology*, *12*, 661919. https://doi.org/10.3389/fpsyg.2021.661919
- O'Grady, C., Melia, R., Bogue, J., O'Sullivan, M., Young, K., & Duggan, J. (2020). A Mobile Health Approach for Improving Outcomes in Suicide Prevention (SafePlan). *J Med Internet Res*, 22(7), e17481. https://doi.org/10.2196/17481
- Puccia, E., Martin, J. P., Smith, C. A. S., Kersaint, G., Campbell-Montalvo, R., Wao, H., Lee, R., Skvoretz, J., & MacDonald, G. (2021). The influence of expressive and instrumental social capital from parents on women and underrepresented minority students' declaration and persistence in engineering majors. *International Journal of STEM Education*, 8(1), 20. https://doi.org/10.1186/s40594-021-00277-0
- Qin, L., Zhang, Y., Xue, M., Xu, B., Wang, L., & Zhang, J. (2020). Nursing students' perceptions towards online learning during the COVID-19 pandemic. *Health Vocat Educ*, 38.
- Reynolds, J., & Cruise, S. (2020). Factors that Influence Persistence Among Undergraduate Students: An Analysis of the Impact of Socioeconomic Status and First-Generation Students. *Interchange*, 51(2), 199–206. https://doi.org/10.1007/s10780-020-09408-y
- Thomas, L., Hovdhaugen, E., & Sweetman, R. (2023). Professional or student identity and commitment? Comparing the experiences of nursing students with literature on student success. *Tertiary Education and Management*. https://doi.org/10.1007/s11233-023-09115-0
- Travis, J., & Bunde, J. (2022). Self-regulation in college: The influence of self-efficacy, need satisfaction, and stress on GPA, persistence, and satisfaction. *Current Psychology*, 41(9), 6185–6195. https://doi.org/10.1007/s12144-020-01091-7
- Wu, Y., Han, X. R., & Qian, D. F. (2020). Study on status of mental health among college students during the COVID-19 epidemic. *Chinese Journal of Health Education*, 36.
- Yosep, I., Mardhiyah, A., & Sriati, A. (2023). Mindfulness Intervention for Improving Psychological Wellbeing Among Students During COVID-19 Pandemic: A Scoping Review. *Journal of Multidisciplinary Healthcare*, 16, 1425–1437. https://doi.org/10.2147/JMDH.S411849
- Yosep, I., Suryani, S., Mediani, H. S., Mardhiyah, A., & Maulana, I. (2023). Digital Therapy: Alleviating Anxiety and Depression in Adolescent Students During COVID-19 Online Learning A Scoping Review. *Journal of Multidisciplinary Healthcare*, 16, 1705–1719. https://doi.org/10.2147/JMDH.S416424
- Yue, S., Zhang, J., Cao, M., & Chen, B. (2021). Knowledge, Attitudes and Practices of COVID-19 Among Urban and Rural Residents in China: A Cross-sectional Study. *Journal of Community Health*, 46(2), 286–291. https://doi.org/10.1007/s10900-020-00877-x
- Zis, P., Artemiadis, A., Bargiotas, P., Nteveros, A., & Hadjigeorgiou, G. M. (2021). Medical studies during the COVID-19 pandemic: the impact of digital learning on medical students' burnout and mental health. *Int J Environ Res Public Health*, *18*. https://doi.org/10.3390/ijerph18010349