

## Research Article

# The Relationship between Online Learning and Student Achievement Levels during the Covid 19 Pandemic in Diploma Midwifery Students in Nabire Diploma Midwifery Study Program in 2022

Ninik Indayani<sup>1</sup>, Sitti Mardiana<sup>2</sup>

<sup>1,2</sup>Stikes Abdi Nusantara Jakarta

Email: [ninikindayani45@gmail.com](mailto:ninikindayani45@gmail.com)

Academic Editor: Nguyen Ngoc Anh

Copyright © 2023 Ninik Indayani & Sitti Mardiana. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Abstract.** The purpose of this study was to determine the relationship between online learning and student achievement levels during the Covid 19 pandemic in D3 Midwifery students at D3 Midwifery Study Program Nabire in 2022. This study used an analytic observational study with a cross sectional approach. The number of samples used in this study amounted to 200 respondents. by using chi quare analysis. The results of the analysis using the Chi-Square test obtained a value of X<sup>2</sup> and a value of p = 0.00 < 0.05 so that the results obtained were H<sub>1</sub> accepted and H<sub>0</sub> rejected, which means that there is a significant relationship between online learning and the achievement level of Nabire D3 Midwifery students. Statistically there is a significant relationship between online learning and student achievement levels, where student achievement levels decrease during online learning compared to face-to-face or offline learning. The conclusion of this study is that there is a relationship between online learning methods and student achievement levels. It is hoped that education can improve better learning media so that learning achievement can be maintained.

**Keywords:** *Online Learning, Learning Achievement, Students.*

## A. INTRODUCTION

Education is a very important factor in improving the quality of human life, which basically education should make humans themselves better as a whole both in terms of character, behavior, attitudes or from other aspects (Clark et al., 2021; Realyvasquez et al., 2020). The educational process is a journey that never stops throughout human life and is a very significant thing in human life, because there is a term learning for all time, where learning will never end (Dulay, 2021; AlMahadwi et al., 2021; Oducado & Estoque, 2021).

Corona virus or Covid-19 (Corona virus disease-19) can cause disturbances in the respiratory system, ranging from mild, severe to death. some congenital diseases such as degenerative diseases, age, women who are pregnant, breastfeeding and women who are in labor can make patients with Covid-19 worse. In terms of handling this pandemic, world leaders who later joined a world health organization called WHO (World Health Organization) implemented a super strict policy to break the chain of transmission of Covid-19, including wearing masks, washing hands, and maintaining distance or commonly known as Social Distancing. The world of education is unavoidable from the impact of the Corona virus pandemic (Covid-19) which has resulted in the cessation of the face-to-face learning process being replaced by distance learning methods through an online system (in the network) (Omar et al., 2021; Gopal et al., 2021; Lobos et al., 2021). Of course the adaptation process is needed by students and lecturers to respond to this situation so as to create an effective and flexible learning nuance with the ability to access technology that must be maximized even though in

reality it is still not optimal in mastering access so that this makes this a challenge in itself for both lecturers and students. The use of this technology has an important role in the learning process during the global Covid-19 pandemic (Pakpahan & Fitriani, 2020) (Gusti, 2020).

In accordance with Government directives in the case of the Covid 19 pandemic, students are asked to study at home. This requires students to study independently by relying on the internet network. Learning media that are usually used at the student level are zoom rooms, WhatsApp, and google class rooms. In online learning, lecturers usually send teaching materials and assignments via the WhatsApp group, email or Google class room (Lemay et al., 2021; Hermanto & Srimulyani, 2021; Hidalgo et al., 2021).

Learning using online media is very different from face-to-face learning and has its own advantages and disadvantages. Some examples of online learning models that are commonly used today, such as zoom, google classroom and the like. Problems that usually arise in online learning or also known as online learning require a stable internet connection so that the delivery of material from lecturers can be conveyed clearly and precisely to students, there is no direct interaction with lecturers so there are some students who do not understand if only explained through online. Students tend to be less active in the teaching and learning process with lecturers (Sebrina, 2021).

## **B. METHOD**

The research design used is a quantitative research method, in which research is conducted to answer research questions in ways that follow scientific principles, namely concrete or empirical, objectively structured, rational and systematic, with the results of the research data obtained in the form of numbers and analysis using the method statistics (Syapitri, 2021).

This study uses an analytic observational research type with a cross-sectional approach, where the risk variables or problems that form the research object are estimated or concentrated simultaneously (Adiputra, 2021). The purpose of this study was to find out whether there is a relationship between online learning and learning achievement during the Covid-19 pandemic in Nabire D3 Midwifery students. The test analysis used is the Chi Square correlation test. The test results were analyzed by looking at the significance value  $< 0.05$  ( $p < 0.05$ ).

## **C. RESULT AND DISCUSSION**

### **1. Frequency Distribution of Age and Gender of Students in the Nabire D-III Midwifery Study Program in 2022**

The success of students in attending college depends on their learning process, both studying in groups and studying individually. An effective way of learning in tertiary institutions should provide more opportunities for students to have learning skills (learning to learn), meaning that students not only learn about remembering facts but also being able to interpret these facts. Based on the results of the study, it was found that out of the 200 respondents the most were 20 years old, namely 63 respondents or (31.5%), while the least were 25 years old as many as 13 respondents or (6.3%). It can be concluded that all respondents are in the late adolescent category, namely 17-25 years old. When students occupy higher education benches, students are required to be able to study independently, coupled with the Covid-19 outbreak, students are required even more to be able to arrange study schedules independently from home. Meanwhile, all of the 200 respondents were female, namely 200 respondents or (100%).

In research (Daulay, 2021) said the results of the study showed that new female students were more independent than male new students. Girls think patterns mature faster than boys, so that any learning method used in education will not greatly affect learning achievement.

Based on research conducted by nurussakinah daulay in 2021 with the title motivation and independence of learning for new students, it says that students with demographic factors are female ( $M = 86.90$ ), 17 years old ( $M = 87.83$ ), live with parents ( $M = 86.86$ ), graduates from Islamic boarding schools ( $M = 88.71$ ), firstborn ( $M = 97.39$ ), have a better level of learning independence. Overall, the proposed hypothesis is acceptable. The results of this study also prove that there are differences in learning independence from the age factor indicating that students aged 17 years are considered more independent (Daulay, 2021).

In the author's opinion based on research results and supported by previous research that age greatly influences the independence of a learner in managing his learning patterns so that it will affect his learning outcomes or learning achievement. The more mature the age of a student, the more mature the way of thinking and can manage his learning pattern and his learning achievement will also increase.

## **2. The Relationship between Online Learning Methods and Student Achievement Levels in the Nabire D3 Midwifery Study Program in 2022**

From the results of the study it was found that out of 200 respondents who had a very good level of achievement, only 37 respondents or (18.5%), and the most were those with a good level of achievement, namely 131 respondents or (65.5%), while those who had a fairly high level of achievement as many as 32 respondents or (16.0%).

While the results of the analysis using the Chi-Square test obtained a value of  $X^2$  and a value of  $p = 0.00 < 0.05$  so that the results obtained were  $H_1$  accepted and  $H_0$  rejected, which means there is a significant relationship between online learning and the level of achievement of Nabire D3 Midwifery students. Statistically there is a relationship a significant difference between online learning and student achievement levels, where student achievement levels decrease during online learning compared to face-to-face or offline learning.

The results of this study are in line with the research conducted by Ukhtul Izzah and Evi Novitasari entitled "Relationship of Online/Online Learning Methods with the Evaluation of Student Learning Outcomes in the Bachelor of Nursing Study Program at Stikes Banyuwangi in 2021" that the results of the research with the Chi square SPSS test for windows 0.1, obtained a value of  $p$  value = 0.070 with an alpha value of 10%, meaning that the value of  $p < 0.1$ , the hypothesis  $H_a$  is accepted, meaning that there is a relationship between online/online learning methods and evaluation of student learning outcomes in Bachelor of Nursing Study Program at STIKES Banyuwangi in 2021 (Izzah & Novitasari, 2022; Jou et al., 2022; Mahande et al., 2021).

Online learning is learning that takes place in a network where the instructor is taught not to meet face to face. Online learning is a system that can facilitate students to learn more broadly, more and variedly, not only in verbal form, but in a more varied way, such as visual, audio and motion. In general, online learning is very different from conventional learning, online learning places more emphasis on the accuracy and foresight of students in receiving and processing information presented online (Pohan, 2020; Salsabila, 2021).

Online learning is a learning process that is carried out through a network (computer network), usually via the internet or intranet. E-learning means the process of transforming learning from teacher-centered to learning-centered. Learning does not depend on the teacher, because access to information (knowledge) is broader and more complete, so students can learn anytime and anywhere (Sebrina, 2021). Online learning is a teaching and learning process where learning is technology-based, where learning can run well if media such as cellphones or computers, as well as stable networks are available and can be used by educators and students (Elzainy et al., 2020; Younas et al., 2022; Kim et al., 2022).

Learning achievement is generally related to aspects of knowledge while learning outcomes include aspects of forming the character of students (Rosyid, 2019; Li & Che, 2022). Sudjono in Nasution said that learning achievement is the achievement of students on the material they receive in the educational process within a certain period of time. In this case, learning achievement is the result of all abilities that students devote to mastering knowledge and skills according to the applicable curriculum (Daulay, 2021).

#### D. CONCLUSION

From some of the opinions of the experts above regarding learning achievement, it can be concluded that learning achievement is the result of student abilities in various fields, expressed in the form of numbers, letters or sentences that can be achieved after taking tests, such as the GPA value as an indicator of the extent to which students have mastered the subjects taught by the lecturer. The online learning method has something to do with student learning outcomes in this case is learning achievement, which can be seen from the KHS of each student, due to several factors, namely there are internal factors and external factors, where internal factors are as follows internal factors, health factors, disability, psychological factors, including intelligence, attention, interest, talent, motivation, maturity, readiness, while the external factors are as follows: family circumstances the family is the main environment in the learning process, circumstances in the family have a big influence on achievement learning, for example, the way parents educate, family member relations, home atmosphere, family economic situation, and understanding of parents, the state of the school, the school environment is an environment where students learn, systematically. This condition includes teaching methods, curriculum, teacher-student relations. In external factors here it is stated that the environment in which students learn is also a point which is a factor that influences learning achievement in this case is online learning.

#### REFERENCES

1. Adiputra, S., & Made, D. (2021). *Metodologi Penelitian Kesehatan*. Yayasan Kita Menulis.
2. AlMahdawi, M., Senghore, S., Ambrin, H., & Belbase, S. (2021). High School Students' Performance Indicators in Distance Learning in Chemistry during the COVID-19 Pandemic. *Education Sciences*, 11(11), 672.
3. Clark, A. E., Nong, H., Zhu, H., & Zhu, R. (2021). Compensating for Academic Loss: Online Learning and Student Performance during the COVID-19 Pandemic. *China Economic Review*, 68, 101629.
4. Daulay, S. (2021). *Pengaruh Pembelajaran Online terhadap Prestasi Peserta Didik Di Mts N 9 Sleman Yogyakarta*.
5. Elzainy, A., El Sadik, A., & Al Abdulmonem, W. (2020). Experience of E-Learning and Online Assessment during the COVID-19 Pandemic at the College of Medicine, Qassim University. *Journal of Taibah University Medical Sciences*, 15(6), 456-462.
6. Gopal, R., Singh, V., & Aggarwal, A. (2021). Impact of Online Classes on the Satisfaction and Performance of Students during the Pandemic Period of COVID 19. *Education and Information Technologies*, 26(6), 6923-6947.
7. Gusty, S., Nurmiaati, N., Muliana, M., Sulaiman, O. K., Ginantra, N. L. W. S. R., Manuhutu, M. A., ... & Warella, S. Y. (2020). *Belajar Mandiri: Pembelajaran Daring di Tengah Pandemi Covid-19*. Yayasan Kita Menulis.
8. Henny, S. D. (2021). *Buku Ajar Metodologi Penelitian Kesehatan* (Terbitan P). Ahlimedia Book.
9. Hermanto, Y. B., & Srimulyani, V. A. (2021). The Challenges of Online Learning during

- the Covid-19 Pandemic. *Jurnal Pendidikan dan Pengajaran*, 54(1), 46-57.
10. Hidalgo-Camacho, C., Escudero, G. I., Villacís, W., & Varela, K. (2021). The Effects of Online Learning on EFL Students' Academic Achievement during Coronavirus Disease Pandemic. *European Journal of Educational Research*, 10(4), 1867-1879.
  11. Izzah, U., & Novitasari, E. (2022). Hubungan Metode Pembelajaran Online/Daring dengan Evaluasi Hasil Belajar Mahasiswa Prodi S1 Keperawatan di Stikes Banyuwangi Tahun 2021. *Jurnal Penelitian Keperawatan*, 8(1), 73–84.
  12. Jou, Y. T., Mariñas, K. A., & Saflor, C. S. (2022). Assessing Cognitive Factors of Modular Distance Learning of K-12 Students Amidst the COVID-19 Pandemic towards Academic Achievements and Satisfaction. *Behavioral Sciences*, 12(7), 200.
  13. Kim, S., Jeong, S. H., Kim, H. S., & Jeong, Y. J. (2022). Academic Success of Online Learning in Undergraduate Nursing Education Programs in the COVID-19 Pandemic Era. *Journal of Professional Nursing*, 38, 6-16.
  14. Lemay, D. J., Bazelais, P., & Doleck, T. (2021). Transition to Online Learning during the COVID-19 Pandemic. *Computers in Human Behavior Reports*, 4, 100130.
  15. 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.
  16. Lobos Peña, K., Bustos-Navarrete, C., Cobo-Rendón, R., Fernández Branada, C., Bruna Jofré, C., & Maldonado Trapp, A. (2021). Professors' Expectations About Online Education and Its Relationship with Characteristics of University Entrance and Students' Academic Performance during the COVID-19 pandemic. *Frontiers in Psychology*, 12, 642391.
  17. Mahande, R. D., Malago, J. D., Abdal, N. M., & Yasdin, Y. (2021). Factors Affecting Students' Performance in Web-Based Learning during the COVID-19 Pandemic. *Quality Assurance in Education*.
  18. Malika, S. (2021). *Hubungan Antara Motivasi Belajar dengan Hasil Belajar Akidah Akhlak di MTS Nurul Falah Serpong* (Doctoral dissertation, Fakultas Agama Islam Universitas Muhammadiyah Jakarta).
  19. Nikita, S. E. P. (2021). Pengaruh Pembelajaran Online terhadap Prestasi Belajar. *Pengaruh Pembelajaran Online terhadap Prestasi Belajar Siswa SMP Al-Falah Bekasi*, 7(2), 353–362.
  20. Oducado, R. M., & Estoque, H. (2021). Online Learning in Nursing Education during the COVID-19 Pandemic: Stress, Satisfaction, and Academic Performance. *Journal of Nursing Practice*, 4(2), 143-153.
  21. Omar, H. A., Ali, E. M., & Belbase, S. (2021). Graduate Students' Experience and Academic Achievements with Online Learning during COVID-19 Pandemic. *Sustainability*, 13(23), 13055.
  22. 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.
  23. Rosyid, M. Z., Mansyur, M., IP, S., Abdullah, A. R., & Pd, S. (2019). *Prestasi belajar. Literasi Nusantara*.
  24. Satriani, D. H., Rukayah, H. R. H., & Kadir, A. Hubungan Antara Pembelajaran Daring Masa Pandemi Dengan Prestasi Belajar Siswa Kelas V SDN 10 Manurungge. In *Seminar Nasional LP2M UNM*.



25. Younas, M., Noor, U., Zhou, X., Menhas, R., & Qingyu, X. (2022). COVID-19, students satisfaction about e-learning and academic achievement: Mediating analysis of online influencing factors. *Frontiers in Psychology, 13*.