Jurnal Aisyah: Jurnal Ilmu Kesehatan

Volume 7, Issue S2, 2022, p. 223–230
ISSN 2502-4825 (print), ISSN 2502-9495 (online)

Nursing Lecturers' Readiness to Teach Online in the 'New Normal' Post COVID-19 Era

Santa Maya Pramusita[1], Riama Marlyn Sihombing[2,*)], Komilie Situmorang[3]

[1,2,3] Universitas Pelita Harapan

ARTICLE INFO

Article history:

Received 15 July 2021
Accepted 29 October 2022
Published 10 November 2022

Keyword:

Nursing
Lecturer
Readiness
online learning

A B S T R A C T

As a way of reducing Covid-19's infection rate, Indonesian students, and teachers at all levels of education are forced to undergo online teaching and learning, without much preparation. This also applies to nursing lecturers of associate degree nursing program (D3). This study attempts to find out the readiness of lecturers D3 nursing program to teach fully remote after this pandemic end, and the most associated variable on D3 nursing lecturers' readiness. This is done to anticipate if full online teaching method is still applied by stakeholder in the 'new normal' era. Inferential quantitative with a cross-sectional approach was utilized. The population encompassed 344 actively working lecturers in private institutions of DKI Jakarta and Banten. The sample in this study was taken using accidental sampling technique, and the data were gained using likert-scale questionnaire. This study analyzed using Chi square test. The results showed that half of the respondents (55.4%) had low readiness. Furthermore, there was a significant correlation between education (p=0.023). These results can be a basis for making recommendation in support of policies and decisions concerning the implementation of online learning.

Kata kunci:

Perawat
Dosen
Kesiapan
pembelajaran daring

**) corresponding author*

Riama Marlyn Sihombing

Faculty of Nursing, Universitas Pelita Harapan
Jl. Boulevard Jend. Sudirman no. 15, Lippo Karawaci Tangerang Banten – Indonesia 15811

Email: riama.sihombing@uph.edu

DOI: 10.30604/jika.v7iS2.1433

A B S T R A K

Sebagai upaya menekan angka penularan Covid-19, siswa dan pengajar di semua jenjang pendidikan Indonesia diminta menjalani kegiatan belajar mengajar secara daring, tanpa banyak persiapan. Demikian pula dosen pada program studi D3 Keperawatan. Penelitian ini bertujuan untuk mengetahui kesiapan dosen D3 keperawatan untuk mengajar daring secara sepenuh setelah pandemi berakhir, dan variabel yang berhubungan dengan kesiapan dosen. Hal ini dilakukan untuk mengantisipasi jika metode pengajaran daring masih diterapkan oleh para pemangku kepentingan di era kenormalan baru. Kuantitatif inferensial dengan pendekatan cross-sectional. Populasi pada penelitian ini adalah 344 dosen aktif yang bekerja di instansi swasta sekitaran DKI Jakarta dan Banten. Sampel diambil menggunakan teknik accidental sampling, dan data dikumpulkan menggunakan kuesioner skala likert. Data kemudian dianalisis menggunakan chi square. Hasil penelitian menunjukkan bahwa setengah dari responden (55,4%) memiliki kesiapan yang rendah. Selanjutnya, terdapat hubungan yang signifikan antara pendidikan (p=0,023). Hasil ini dapat dijadikan dasar untuk membuat rekomendasi dalam mendukung kebijakan dan keputusan terkait pelaksanaan pembelajaran daring

INTRODUCTION

The outbreak of COVID-19 (Corona Virus Disease 2019) caused by coronavirus has been an unprecedented shock to the world. Allegedly starting to spread in December 2019 on Wuhan, China, COVID-19 has now infected many countries, urging WHO to designate it as a global pandemic in early 20201. In Indonesia alone, the first case of COVID-19 was discovered in mid-March 2020 (Keni et al., 2020). A month afterwards, the number of positive cases of COVID-19 in Indonesia exceeded 10,000 patients. This massive spread then triggers dread, particularly after the central government determined the status of non-natural disasters to Large-Scale Social Restrictions (LSSR). Health protocols such as social and physical distancing are hence announced at various levels of society to slow the deployment of coronavirus (Putri, 2020).

The emergence of COVID-19 and the imposition of Large-Scale Social Restrictions (LSSR) obviously affect various fields of human life, one of which is education. Referring to the Ministry of Education and Culture on 24 March 2020 issued Circular Number 4 of 2020 on the implementation of education policy amid COVID-19 outbreak, teaching and learning activities at all levels of education must be carried out using distance learning methods. This is done to reduce the spread and transmission of the coronavirus between students. Online teaching alone refers to instructional method supported by computer-based media and internet. It can be done either fully online or blended with face-to-face interaction. Bakia et al., (2012) explicates that fully online teaching and learning is a kind of remote education where all instructions and assessments are done using online-based delivery, thus it highly relies on the internet connection3. Blended teaching, on the other side, offers substantial portions of direct instructions as it combines both face-to-face and online interaction. Within its process, online teaching and learning makes use of technologies like worldwide web, email, chat, new groups and texts, audio and video conferencing. It facilitates the learners to study at their own pace and at their own comfort.

There are several advantages of online teaching conveyed by Dhull and Sakshi, (2017). First, it proposes high accessibility as students can learn and access the materials everywhere. It is not constrained by geographic location, even if it is done in different countries. Second, it may assist the students to be autonomous. They can discover unlimited information by themselves just by turning on the internet connection, and such activity will later train them to be more independent students. Online teaching is also cost-effective because "there are no travel expenses, this type of learning is less costly than learning at a traditional institute" (p.33). Students just have to provide an access to internet service and computer hardware. Lastly, online teaching and learning responses the challenge of globalization. The development of technologies has overcome the issue of geographical barriers especially in education sector. Internet world "connects people all over the globe, therefore, it is vital to experiment with electronic learning situations wherein students share ideas and resources, access information about current events and historical archives, interact with experts, and use online databases" (p.34).

It does not rule out the possibility that Indonesian education keeps applying online learning system even after COVID-19 pandemic is over. Apart from being an alternative solution to prevent another wave of COVID-19 which may hit in the future, online learning is basically in line with the principles of Education 4.0. It is a current educational paradigm integrating technology within teaching and learning process; and aims to enhance students' creativity, critical thinking, communication, and collaboration so that they could later survive in a working world of 21st century (Delipiter Lase, 2019). It is then highly possible for the distance learning system with online learning method to be applied in endemic era, just like what the government has advocated since COVID-19 virus spread (Nishanthi, 2018).

One of the undergraduate programs that has been most affected by this sudden shift is nursing education, particularly the associate degree nursing programs (D3). This is because the curriculum of associate degree nursing programs (D3) mainly consists of clinical practice (60-70%), while the theory is only 30-40% (Viani, 2019). It vividly indicates that the teaching and learning process has been dominated by intense face-to-face meetings to practice students' skills in the medical field. The implementation of online learning, hence, has become a formidable challenge for many nursing lecturers during the pandemic. Those who have been accustomed to face-to-face learning have to adapt quickly to teach virtually, coercing them to reorganize the prepared lesson plans of clinical practice. Not to mention technical problems such as network absence, network connection instability, limited internet facilities, and so on. This phenomenon undeniably leads to a necessity to figure out how ready the nursing lecturers in teaching remotely, if online learning is still applied in 'new normal' Post COVID-19 era. Examining the most influential factors to their readiness would also be deeply relevant.

A person undoubtedly needs readiness, either cognitively, mentally, or competently, in doing particular jobs. This also applies to educational practitioners who always need to equip themselves with series of preparations before teaching. The term 'readiness' literally means a state of being fully prepared for something, including making decisions for anything happens (Vorobyova, 2011). It consists of several major components, one of them is psychological readiness which can be understood as "a complex construct, as an alloy of functional and personal components providing motivational and mental readiness and ability of the subject to implementation of professional activity (Baimenova et al., 2015).

According to Bandura et al. (as cited in Maddox et al., 2000), psychological readiness covers three aspects namely emotive attitudinal readiness, cognitive readiness, and behavioural readiness. Emotional attitudinal readiness includes readiness to carry out responsibilities, to be enthusiastic in doing the task, to be willing to adapt to the tasks at any time, to be independent, and to appreciate every value of the tasks. On the other hand, cognitive readiness involves cognitive skills and critical thinking skills which are substantial during the tasks completion; awareness of strengths and weaknesses; ability to make connection among the tasks performed and the reality; ability to integrate concepts and tools from various scientific disciplines. At last, behavioural readiness encompasses the willingness to working in partnership with colleagues and facilitators; as well as proper time management to achieve the goals of the tasks.

Readiness among person does not emerge with no cause. Amadi (2018) argues that there are some factors stimulating one's readiness. The first is growth and maturation. It has proven that the more mature a person is, the more developed his mindset is, therefore the more prepared he is to do something. Drive is also included as stimulating factors because when a person is driven to obtain the goal, he will be ready to make the best of it. The third is experience in which one's previous pleasant experience develop

willingness to work wholeheartedly in a new situation. "Initial exposure helps to douse tension and doubt" (p.26). The next is instructional contents and techniques. When there is a congruence among what the person desires and what he needs to do, readiness is triggered. Emotion becomes the last factor affecting readiness. Every action that one makes, depicts readiness or otherwise are directed by emotions since it manifests within feelings, cognition, and physical reactions. Given this background, this study seeks to find out: (1) How ready the nursing lecturers of associate degree programs (D3) are towards full online teaching in the post COVID-19 era, especially in terms of knowledge, skills, and attitude; (2) The most influential dimension (among knowledge, skills, and attitude) to nursing lecturers' readiness in teaching online. The research questions are:

1) To what extent nursing lecturers are ready to teach fully online shall the distance learning is still applied in the 'new normal' post COVID-19 era?

2) What is the most associated variable to nursing lecturers' readiness in teaching online in the new normal post COVID-19 era?

The result of this research is expected to give information about the degree of nursing lecturers' readiness to distance learning, specifically the full online teaching method which may still be implemented by education stakeholder in the 'new normal' era in endemic. Furthermore, the researchers attempt to offer an overview which dimension has the most influence in nursing lecturers' readiness to teach entirely online. It is of great urgency as the stakeholders may need an insight of whether their planned policies regarding online teaching and learning is possible for nursing education. On top of that, lecturers' readiness includes as one of noteworthy aspects in pedagogical practices that it helps determining the success of online teaching in the future.

METHOD

This study was done quantitatively using cross-sectional approach. Quantitative research involves the characteristics of particular objects or events, with the aim of revealing the correlation among variables under a population. Meanwhile, cross-sectional approach enables researcher to collect data and at the same time determine the relationship between risk factors and their effects (John W. Creswell, 2009).

Participant characteristics, sampling and research design

The population of this research was 344 actively working lecturers in private institutions of DKI Jakarta and Banten Province offering associate degree nursing program (D3). The sample alone was taken using accidental sampling technique that encompasses respondents who happen to be in a place that matches the research, in this case, private institutions of Jakarta and Banten with associate degree nursing program.

Sample size, power, and precision

To determine the sample size, Lemeshow formula (Pourhoseingholi et al., 2013) as utilized and the result indicated that the estimated minimum sample size was 76 respondents. This research will be conducted in the private institutions providing associate degree nursing programs (D3) in DKI Jakarta and Banten Provinces. The data collection alone will be done for approximately three months.

Measures and covariates

The data of this research was collected using questionnaire. The questionnaire contains 30 questions which are categorized into three aspects; 10 questions for measuring respondents' readiness in terms of knowledge, 11 questions for measuring respondents' readiness in terms of skills, and 9 questions for measuring respondents' readiness in terms of attitudes. Each question is made on a Likert-scale of 1 to 5, with a choice of answers: 1=never; 2=rarely; 3=sometimes; 4; often; 5=always. The lecturers' readiness was then classified into good and poor. It was considered good if the total value was more than 119, and poor if the total value was less than 119. Before being used, this questionnaire had been tested on 20 lecturers who would not be included as the research sample. The test was conducted to ensure the validity and reliability of the instrument. Validity test is necessary to check whether the questionnaire thoroughly measures what the researchers intend to conceive, while reliability test is to find out the consistency of respondents' answers in each statement.

Researchers conducted validity and reliability tests on 20 nursing lecturers. Of the 30 questions, there were 11 valid negative questions, with a correlation coefficient > 0.444. On the readiness instrument, the value of Cronbach Alpha was 0.822. This number was greater than 0.6 so the instrument was declared reliable. In addition, the researcher made corrections for invalid questions, with the consideration that these questions represent the research sub-variables. Thus, the number of questions in this study remained 30 items. At the end of data collection process, the researchers collected 78 filled-out questionnaires. Of this amount, only 65 respondents filled the questionnaire completely. The response rate, hence, reaches 85%.

Data analysis

At this stage, the data were analyzed to answer the research questions. The types of analysis applied in this study were univariate, bivariate, and multivariate analysis. The purpose of univariate analysis is to obtain mean, median, and standard deviation and variation of each variable. It was also to describe the objectives. Bivariate analysis was applied to check the relationship among independent variable and dependent variable by means of the chi-square test. Meanwhile, multivariate analysis is used to analyze the dominant dimension affecting the readiness of lecturers in associate degree nursing programs (D3).

RESULTS AND DISCUSSION

This study involved 65 respondents who filled out the questionnaire completely, with demographic characteristics as follows in table 1.

Table 1 indicated that nearly three quarters of the 65 respondents (72.3%) participated in this study were female. The youngest respondent was 27 years old and the oldest was 66 years old, with the mean age of 40.23 ± 11.81 years old. The generation dominating this study was hence millennial generation who was born between 1982-2003. In terms of education, most of the respondents were graduates of the nursing master's program, with a percentage of 66.2%. The remaining 22% were lecturers from non-nursing master programs. Furthermore, as many as 37 respondents have been working for 3-10 years. It means that half of the

respondents have worked at their institution for a long time (56.9%). During the sudden shift to online environment, it was certain that all respondents used laptop to deliver their materials to students (100%). Some also used mobile phone and computer to teach online. In addition, all respondents stated that they were connected to internet, but 45 respondents (69.2%) mentioned that they had network problems.

Table 1
Respondents' Demographic Characteristics

Characteristics		Poor		Good		CI 95%
		n	%	n	%	
Gender	Male	18	27.7	18	27.7	
	Female	47	72.3	47	72.3	
Age	Millennial Generation	4	6.2	4	6.2	37.30 – 43.16
	Generation X	21	32.3	21	32.3	
	Baby Boomer Generation	40	61.5	40	61.5	
Education	S2 Non-nursing program	22	33.8	22	33.8	
	S2 Nursing program	43	66.2	43	66.2	
Teaching Experiences	<3 years	14	21.5	14	21.5	7.40–12.29
	3-10 years	37	56.9	37	56.9	
	>10 years	14	21.5	14	21.5	
Device access	No					
	Yes	65	100	65	100	
Connectivity	No					
	Yes	65	100	65	100	
Network	Yes	45	69.2	45	69.2	
Constraints	No	20	30.8	20	30.8	

Table 2 showed that as many as 34 respondents (52.3%) had inadequate technical skills of online learning. The technical skills in this research referred to the use of online quizzes, the provision of online discussions with students, the use of web-platforms such as Zoom, Adobe Connect, WebEx, Google Meet for online clinical training, and the use of the Learning Management System (LMS) for teaching. Moreover, 31 respondents (52.3%) admitted that they had adequate experiences of teaching virtually, signifying how some of them have actually been knowledgeable of online learning and able to utilize educational technology. In terms of attitude, as many as 33 respondents (50.8%) tended to have a slightly negative attitude towards online learning. This may be due to the newness of full distance learning in Indonesia, particularly in nursing education, so that the lecturers were not accustomed to it and were still wondering its effectiveness. In a nutshell, 36 respondents (55.4%) appeared to be less prepared to teach fully online in endemic situation.

Table 2.
Nursing Lecturers' Readiness and the Related Dimensions

Dimensions	Category				CI 95%
	Poor		Good		
	n	%	n	%	
Technical skills	34	52.3	31	47.7	42.30– 44.35
Knowledge about online learning	31	47.7	34	52.3	40.39– 42.72
Attitude toward online learning	33	50.8	32	49.2	32.83– 35.42
Readiness	36	55.4	29	44.6	116.32– 121.68

According to table 3, respondents who were unready to teach fully online were dominated by female respondents. Nonetheless, gender was not significantly related to the readiness of nursing lecturers to teach online (p=0.767). In terms of age, most of the respondents showing a poor level of readiness came from generation Y. Like gender, age however was not significantly related to online teaching readiness (p=0.376). On the other hand, education level showed a significant relationship with online teaching readiness (p=0.023). This was evident from the findings that most respondents with a master's degree in nursing education had a good level of readiness. In addition, working experience did not show a significant relationship with online teaching readiness (p=1.00). Respondents who were not ready to teach online were mostly those who have 3-10 years of working experience.

The results of the analysis denoted that almost half of the respondents were proficient in operating learning technology. They were accustomed to using a Learning Management System (LMS) of their institutions to complement classroom learning. They were also skilled at sending emails, operating a web-platform for virtual teaching, and holding classes synchronously with the help of technology. It was obvious that they were quite knowledgeable and skillful in running online learning. More than half of respondents, nevertheless, felt that their technical skills and knowledge of online teaching were still inadequate for full distance learning. In line with this, half of the respondents signaled somewhat negative attitudes towards online teaching and learning. Many of them were still upholding belief that a good learning experience occurs with direct interaction. They also felt more comfortable

when clinical training and feedback was delivered face-to-face instead of on screen. Thus, full distance learning in endemic period is still unsuitable for them. Interestingly, this finding is similar with the previous studies in which many educational institutions are still untrained for the full-time online programs. They had insufficient time to provide qualified teaching materials and to learn various new technologies needed in online teaching during the COVID-19 pandemic (Bao, 2020; Scherer et al., 2021; Simamora et al., 2020).

Table 3.
The Relationship among Readiness and Respondents' Characteristics

Characteristics		Readiness						p value	OR (CI 95%)
		Poor		Good		Total			
		n	%	n	%	n	%		
Gender	Male	11	16.9	7	10.8	18	27.7	0.767	0.72 0.23–2.18
	Female	25	38.5	22	33.8	47	72.3		
Age	Millennial Generation	21	32.3	19	29.2	40	61.5	0.376	
	Generation X	11	16.9	10	15.4	21	32.3		
	Baby Boomer Generation	4	6.2	0	0	4	6.2		
Education	S2 Non-nursing program	17	26.2	5	7.7	22	33.8	0.023	4.29 1.34–13.76
	S2 Nursing program	19	29.2	24	36.9	43	66.2		
Teaching Experiences	<3 years	8	12.3	6	9.2	14	21.5	1.000	
	3-10 years	20	30.8	17	26.2	37	56.9		
	>10 years	8	12.3	6	9.2	14	21.5		

From the demographic analysis, it was found that the respondents of this study were dominated by female lecturers with a total of 47 respondents (72.3%), followed with 18 male respondents (27.7%). Of this number, it appeared that as many as 25 (38.5%) female nursing lecturers and 11 (11.9%) male nursing lecturers were not ready to teach fully online. The results of chi-square analysis, however, did not highlight a significant relationship between respondents' gender and readiness in online teaching. It is contradictory with the findings of previous studies that male lecturers are better than female lecturers, especially in terms of sharing ideas with students and solving problems related to online learning (Abd Samad et al., 2018; Hung, 2016; Martin et al., 2019). Another finding showed that female lecturers were less confident and less comfortable in using and exploring educational technology. Research on differences in attitudes between male and female lecturers in online teaching may need to be studied further.

Based on tables 1 and 3, 40 respondents (61.5%) belonged to Millennial Generation. This number was the largest compared to the number of respondents in Generation X (32.3%) and Baby Boomer Generation (6.2%). All generations in this study seemed to be unprepared for the full distance learning. This finding is in line with previous research that 22 respondents (20.56%) aged 37-41 years were in the fair category and 7 respondents (6.53%) aged 32-36 years were in the bad category for online teaching (Mardiana, 2018). Lecturers declaring to be unready were mostly not proficient enough to operate educational technology. On the other hand, respondents in generation Y were basically potential, but many of them still looked for some 'me time' to balance their work and life. It then caused them to be less motivated in learning new teaching approach, in this case, online approach. On top of that, online teaching was believed by Gen Y to require no small amount of funds. This further increased their reluctance in teaching online since most of them were new lecturers whose functional positions were still low and teaching certificate did not yet exist. In other words, most of the respondents in Generation Y were not financially ready for full distance learning (Surata et al., 2020).

In terms of education, 43 respondents or more than half of the total sample of this study (66.2%) were Masters of Nursing graduates, and 22 respondents (33.8%) were non-nursing masters graduates. Of this number, 17 respondents (26.2%) with a non-nursing master's education background seemed less ready to teach fully online. Meanwhile, as many as 24 respondents (36.9%) with a master's degree in nursing were classified to be ready to teach online. In regard to this, education was significantly related to lecturers' readiness in teaching fully online. This is likely because lecturers with master's degrees background have a more positive disposition towards learning, more experiences in educational training, and more chances in using digital devices intensively than lecturers with bachelor's degrees16. Moreover, lecturers with a master's degree in nursing are certainly better at communicating as well as transferring knowledge and experience in nursing area than lecturers with a non-nursing master's degree.

Related to the teaching experience category, data in table 1 revealed that 37 respondents (56.9%) of this study had worked for 3-10 years. This number was the largest compared to respondents with <3 years of working (21.5%) and those with >10 years of working (21.5%). Of respondents with 3-10 years of working, 20 (30.8%) of them seemed to be not ready to teach fully online. Meanwhile, of respondents with a length of work > 10 years, 8 (12.3%) of them were in the category of not being ready to teach entirely online. This finding is in line with previous research that working experience does not significantly affect lecturers' readiness to teach online (Eslaminejad et al., 2010; Ventayen, 2018). It was, however, slightly different with the study of Martin et al., (2019) finding out a significant difference between lecturers who had experience in teaching synchronously and asynchronously with those who are only accustomed to teaching face-to-face. Lecturers with online teaching experience were more confident in designing online learning and were more skilful in operating technology.

In addition, this research also explored the availability of devices for online learning. All research respondents stated that they owned a laptop and used it to teach during the pandemic. Most of them also used mobile phones to deliver materials (73.85%). Meanwhile, those who used personal computers for teaching were around 23.08% of the total respondents. Those who owned and used the three devices were 14 respondents (21.54%). These findings are in line

with Khairi et al., (2021) explicating that one of the important components in online learning is laptop of which types and brands are widely distributed in the market such as Acer, Asus, Compaq, Apple models and others. Every laptop needs to be replaced every two or three years and it is necessary to ensure its memory capacity. Thus, lecturers need to increase adequate knowledge related to technology. Similarly, Callo & Yazon, (2020) explained that digital learning tools, such as computers and handheld devices support learning for 24 hours a day and seven days a week. Besides accelerating learning process, it can also enhance students' engagement and motivation.

The challenge to online learning found in this study was related to unstable internet access. The stability of internet connection is deeply substantial to ensure that lecturers are able to provide effective online learning as well as to measure institutions' readiness in preparing hardware and software needed to teach online (Khairi et al., 2021). To add, the study found that all respondents had an internet connection, but most experienced problems in internet access where the internet network could suddenly be cut off, specifically when it rained, strong winds and power outages. Some respondents also had to buy internet quota with personal funds since the institution did not provide internet network. This is similar to several previous studies revealing that poor internet connections, lack of technology, infrastructure, and technical assistances were the most common problems faced by lecturers during online learning (Elewa & Mohamed, 2022; Rosalina et al., 2020).

The findings were in line with research done by Abd Samad et al., (2018) finding that the knowledge, skills and attitudes of respondents in online learning were included in the moderate level. The initial stage of using information technology requires knowledge of handling equipment and software. Without knowledge, creativity and skills, lecturers will find it difficult to attract students' attention and maintain their focus on the subjects being taught. Lack of knowledge is assuredly an obstacle in the use of information technology and the teaching process. Nursing lecturers are thus encouraged to explore technology-related knowledge through courses or independent study from sources which are widely distributed on the internet

LIMITATION OF THE STUDY

Some limitation must be considered concerning the generalization of the results. This study was conducted using cross-sectional instead of experimental design, and hence it only enabled researchers to establish correlation among variables. This study also had small sample size and the data were collected using self-reported questionnaire.

CONCLUSIONS AND SUGGESTIONS

The analysis revealed that nearly three quarters of the respondents were female lecturers. Most of the respondents were classified into millennial generation born in 1982-2003 and were the graduates of nursing master's program. Additionally, more than half of respondents of this research had been working as the lecturers for 3-10 years. The preliminary data also exhibited that during the COVID-19 pandemic, all respondents have utilized various devices to teach and been connected to internet despite some connection issues. Three dimensions of readiness were examined in this study, and the results showed that half of respondents are lack of technical skills needed to operate educational technology. Even so, they have possessed some online teaching experiences, and hence having an idea of what online learning is. In relation to attitudes, half of the respondents hinted a slightly negative attitude towards online learning that they seemed to be questioning its efficacy. Overall, more than half of respondents were unprepared for full distance learning in endemic era. Of all the characteristics of the respondents, educational background had the most significant relationship with the readiness of nursing lecturers to teach entirely online. Of the three dimensions, technical skills were the most influential ones. Based on the findings, the researchers suggest lecturers with limited online teaching experience to take part in trainings of online teaching. Related educational institutions could also support by providing facilities for lecturers to explore online learning and develop transformational online learning concepts

Acknowledgment

The authors would like to thank all respondents involved in this research, and to the Center for Research and Community Development (LPPM) Universitas Pelita Harapan who have funded this research with proposal no: P-008-K/FoN/XI/2020.

ETHICAL CONSIDERATIONS

All procedures performed in this study were in accordance to the ethical considerations of Mochtar Riady Institute for Nanotechnology (Protocol Number 2012033-04) and other common considerations such as informed consent, anonymity, and confidentiality. The researchers attached informed consent sheet containing the aims of research and possible impacts during and after the data collection. Those who were willing to be respondents can tick the "agree" column before accessing the questions section. While those who refused to be respondents can tick the "disagree" column and they were automatically unable to access the questions. To ensure the anonymity, respondents were asked to write their initial names on the questionnaire, that can be in abbreviations or pseudonyms. The questionnaire was then given a specific code which was only known by the researchers to simplify the data analysis process. Furthermore, this study maintained the confidentiality of respondents' information by ensuring that the questionnaire link can only be accessed by the researchers. In processing the data, the researchers also made sure that the computer database was equipped with a password and after five years of being kept in a locked folder, the data would be erased.

Funding Statement

The research leading to these results received funding from the Center for Research and Community Development (LPPM) Universitas Pelita Harapan who have funded this research with proposal no: P-008-K/FoN/XI/2020.

Conflict of Interest Statement

The authors declare no conflict of interest.

REFERENCES

Abd Samad, N., Wan Ahmad, W. M. R., Harun, H., Mohd Noor, S. N. F., Ismail, A., Abd Rahman, M. W., & Justin, R. (2018). The readiness level of using e-learning among teacher graduate programme (TGP). *MATEC Web of Conferences*, *150*. https://doi.org/10.1051/matecconf/201815005004

Amadi, G. N. (2018). Horse-stream truism in Thorndike's law of readiness: Educational implications. *International Journal of Multidisciplinary Research and Development*, *5*(7), 25–28. http://www.allsubjectjournal.com/archives/2018/vol5/issue7/5-6-45

Baimenova, B., Bekova, Z., & Saule, Z. (2015). Psychological readiness of future educational psychologists for the work with children in the conditions of inclusive education. *Procedia - Social and Behavioral Sciences*, *205*(May), 577–583. https://doi.org/10.1016/j.sbspro.2015.09.082

Bakia, M., Shear, L., Toyama, Y., & Lasseter, A. (2012). *Understanding the implications of online learning for educational productivity center for technology in learning SRI international*. U.S. Department of Education. http://www.ed.gov/technology

Bao, W. (2020). COVID-19 and online teaching in higher education: a case study of Peking university. *Hyman Behavior and Emerging Technologies*, *2*(2), 113–115. https://doi.org/10.1002/hbe2.191

Callo, E. C., & Yazon, A. D. (2020). Exploring the factors influencing the readiness of faculty and students on online teaching and learning as an alternative delivery mode for the new normal. *Universal Journal of Educational Research*, *8*(8), 3509–3518. https://doi.org/10.13189/ujer.2020.080826

Delipiter Lase. (2019). Education and industrial revolution 4.0. *Jurnal Handayani*, *10*(1), 48–62. https://jurnal.unimed.ac.id/2012/index.php/handayani/article/view/14138

Dhull, I., & Sakshi, M. (2017). Online learning. *International Education & Research Journal*, *3*(8), 32–34. https://doi.org/10.4324/9781003132783-13

Elewa, A. H., & Mohamed, S. (2022). Online teaching readiness, challenges and satisfaction as perceived by nursing faculty members during COVID-19 pandemics. *International Egyptian Journal of Nursing Sciences and Research*, *2*(2), 568–579. https://doi.org/10.21608/ejnsr.2021.108704.1140

Eslaminejad, T., Masood, M., & Ngah, N. A. (2010). Assessment of instructors' readiness for implementing e-learning in continuing medical education in Iran. *Medical Teacher*, *32*(10). https://doi.org/10.3109/0142159X.2010.496006

Hung, M. L. (2016). Teacher readiness for online learning: Scale development and teacher perceptions. *Computers and Education*, *94*, 120–133. https://doi.org/10.1016/j.compedu.2015.11.012

John W. Creswell. (2009). *Research design: qualitative, quantitative, and mixed method approaches* (3rd ed.). SAGE Publications Ltd.

Keni, R., Alexander, A., Nayak, P. G., Mudgal, J., & Nandakumar, K. (2020). COVID-19: emergence, spread, possible treatments, and global burden. *Frontiers in Public Health*, *8*(May). https://doi.org/10.3389/fpubh.2020.00216

Khairi, M. A. M., Faridah, I., Norsiah, H., & Zaki, M. A. A. (2021). Preliminary study on readiness to teach online due to covid-19 pandemic among university academician in Malaysia. *International Journal of Information and Education Technology*, *11*(5), 212–219. https://doi.org/10.18178/ijiet.2021.11.5.1514

Maddox, N., Forte, M., & Boozer, R. (2000). Learning readiness: an underappreciated yet vital dimension in experiential learning. *Developments in Business Simulation & Experiential Learning*, *27*, 272–278. https://journals.tdl.org/absel/index.php/absel/article/view/914

Mardiana, H. (2018). Lecturer's attitude towards advance technology and its impact to the learning process: case study in tangerang city campuses. *Journal of Educational Science and Technology (EST)*, *4*(1), 12–25. https://doi.org/10.26858/est.v4i1.4974

Martin, F., Budhrani, K., & Wang, C. (2019). Examining faculty perception of their readiness to teach online. *Online Learning Journal*, *23*(3), 97–119. https://doi.org/10.24059/olj.v23i3.1555

Nishanthi, R. (2018). The importance of learning english in today world. *International Journal of Trend in Scientific Research and Development*, *3*(1), 871–874. https://doi.org/10.31142/ijtsrd19061

Pourhoseingholi, M. A., Vahedi, M., & Rahimzadeh, M. (2013). Sample size calculation in medical studies. *Gastroenterology and Hepatology from Bed to Bench*, *6*(1), 14–17.

Putri, R. N. (2020). Indonesia dalam menghadapi pandemi Covid-19. *Jurnal Ilmiah Universitas Batanghari Jambi*, *20*(2), 705. https://doi.org/10.33087/jiubj.v20i2.1010

Rosalina, E., Nasrullah, & Elyani, E. P. (2020). Teacher's challenges towards online learning in pandemic era. *LET: Linguistics, Literature and Language Teaching Journal*, *10*(2), 71–88. https://doi.org/10.18592/let.v10i2.4118

Scherer, R., Howard, S. K., Tondeur, J., & Siddiq, F. (2021). Profiling teachers' readiness for online teaching and learning in higher education: Who's ready? *Computers in Human Behavior*, *118*(December 2020). https://doi.org/10.1016/j.chb.2020.106675

Simamora, R. M., De Fretes, D., Purba, E. D., & Pasaribu, D. (2020). Practices, Challenges, and Prospects of Online Learning during Covid-19 Pandemic in Higher Education: Lecturer Perspectives. *Studies in Learning and Teaching*, *1*(3), 185–208. https://doi.org/10.46627/silet.v1i3.45

Surata, I. K., Sudirgayasa, I. G., Sudiana, I. M., & Madurianna, I. M. (2020). The readiness of biology lecturers to conduct e-learning during the covid 19 pandemic. *Indonesian Journal of Education Research and Review*, *3*(3), 99–105. https://ejournal.undiksha.ac.id/index.php/IJERR/article/view/30331

Ventayen, R. J. (2018). Teachers' readiness in online teaching environment: a case of department of education teachers. *Journal of Education, Management and Social Sciences*, *2*(1), 94–106. www.psurj.org/jemss

Viani, S. D. (2019). Dilema penghapusan pendidikan keperawatan jenjang D-3. *Kompasiana*. https://www.kompasiana.com/senaldadefa/5ce2c3d73ba7f740cd791fe2/dilema-penghapusan-pendidikan-keperawatan-jenjang-d-3

Vorobyova, D. V. (2011). Understanding of psychological and professional readiness of teachers in work with children with OVZ in inclusive practice. *3nd International Correspondence Scientific and Practical Conference.*, *23*(Russia, paper B).

 ISSN 2502-4825 (print), ISSN 2502-9495 (online)