
ABILITY INTEGRATE DIGITAL TECHNOLOGY BY HEALTH PROFESSIONALS DURING THE TEACHING AND LEARNING PROCES IN THE ERA OF GLOBALIZATION: A INTEGRATED RIVIEW

Domingos Soares^{1*}, Marni², Lissa McKenna³, Ferry Efendi⁴, Ahsan⁵, Nelson Martin⁶, Sebastio Perreira⁷, Edinha da Silva Pinto Baptista⁸

Instituto Nacional de Saúde Publica-MoH, Timor-Leste^{1,2}, Universitas Duta Bangsa, Surakarta, Indonesia², Dean, Nursing and Midwifery School of La Trobe University-Australia³, Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia⁴, Faculty of Health, Universitas Brawijaya, Malang, Indonesia⁵, Universidade da Paz, Dili, Timor-Leste⁶, Instituto Superior Cristal, Dili, Timor-Leste⁷, Maternity unit of Hospital Nacional Guido Valadares, Dili, Timor-Leste⁸

*Correspondence Email: domingoss.ins@gmail.com

ABSTRACT

In the era of the industrial 4.0, there is an increase in the availability of portable digital technology equipment that supports the learning process in various sectors including health. It is become a core requirement to support the learning process. Digital technology application media such as You Tube, Google Apps, Zoom, Face books, Skype, Dropbox, twitter, WhatsApp and others have become core health learning tools today. The readiness of health workers to utilize digital applications in the learning process, so in needs to be considered. The aims of this study was to explore the readiness of health professional in using digital technology to facilitate the teaching and learning process. Mechanism of goal attainment in this study using the five measures of Whitmore and Knafl. Researcher searched for articles through the google scholar, ProQuest and Science Direct. Article search of January to August 2022 publication period have concentrated of the health professional use technology digital to facelifted their learning. Was used PRISMA checklist with key word: Ability AND health AND Integration AND digital AND Learning. Was choose a cross sectional study for this study. The total 15 articles selected and included in this study with JBI analysis value is at least 88,5%. The use of digital technology in the learning process in the health sector has proven to be very effective and efficient.

KEYWORDS

Ability, Integration, digital, technology, Health



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INTRODUCTION

Industrial digital technology 4.0 era, there is an increase in the availability of the portable digital technology equipment has supports the human resource capacity building process in various sectors including health. It is become a core requirement to support the learning process. Digital technology application media such as You Tube, Google Apps, Zoom, Face books, Skype, Dropbox, twitter, WhatsApp and others have become core health learning tools today. The readiness of health workers to utilize digital applications in the learning process, so in needs to be considered. Become a professional workforce of tomorrow and today, then students need to be exposed to IR4.0 and Education 4.0. The use of technology is very essential in supporting education at the university level including health sector (Gause et al., 2022).

The era of the industrial revolution 4.0 began to emerge as a global strategy in promoting the proper use of digital technology and becoming a public media adapted to the conditions of each country to catch up. This method is also to promote the protection of people, population, health care professionals and system of service information and human resource development (WHO), 2020).

RESEARCH METHOD

The design of this study was adapts the methods of Whittemore and Knafl (Robin Whittemore. Kathleen Kathleen Knaf, 2005) through five predetermined stages, including: 1) Problem identification, 2) literature search, 3) Data evaluation, 4) data analysis and 5) Data presentation.

Based on the above introduction showed that education and training system in health area has transformed from conventional to digitalization method. A lot of research has been done before on how people use digital technology to facilitate learning activities. Of course, the learner need to improve their digital use ability. So that, researcher defined variables of study such as health professional ability, digital technology integration, teaching and learning, industrial era globalization. population considered in study is the articles where published in January to August 2022 related with the below inclusion and exclusion criteria.

Author was searched the article from google scholar, ProQuest and Science Direct data base to finding relevant article to include in this study. There is the rule of integrated review as below:



Figure 1. Methosological Issues

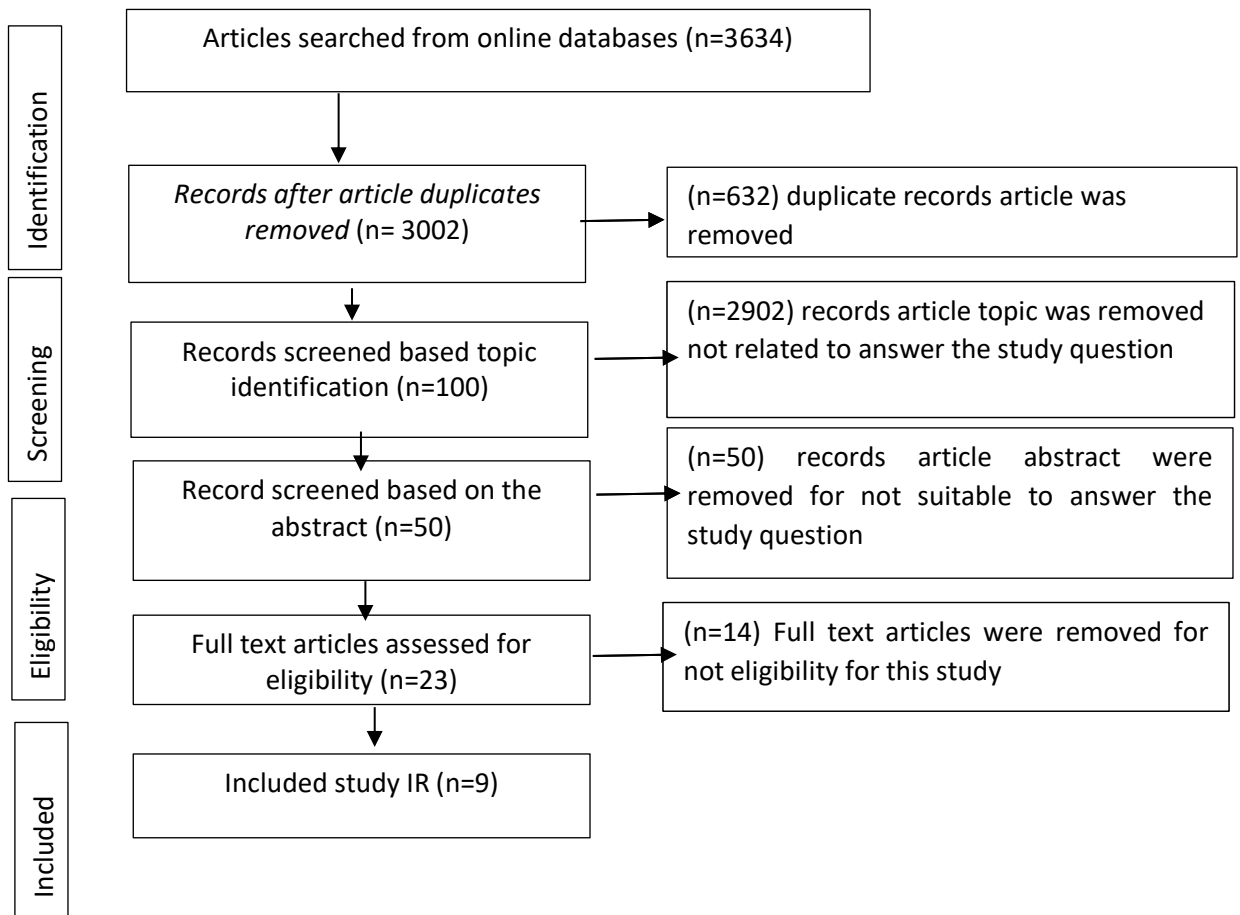


Figure 2. PRISMA Framework

Nine articles was selected to include in Integrated Review (IR) study and adapted the quality appraisal criteria by Kangasniemi, Pakkanen and Korhonen in the (Gause et al., 2022) to make sure appraise quality of the study were published. Was used key word in article searching such as the Readiness, health/nerse, use, digital and Learning. Used data base Google scholar, ProQuest, Cochrane and Science direct. Study appraisal focused on the four indicator namely; aim/objective of study, study design, methods and limitation. Studies evaluated through three scales with classification; “yes, poor and not reported”, coded “Y, P or NR”.

RESULT AND DISCUSSION

The total 9 articles selected and included in this study with JBI analysis value is at least 88,5%. Google scholar 4 articles, ProQuest 2 articles, Cochrane 1 articles and Science direct 2 article, so that the total including article in this study are 9 articles. The key point of the result was revealed in the articles in this study are the following mentioned component: (1) Digital technology tool, Have two technology-enhanced learning tools (iBooks Author þ SoftChalk and SoftChalk alone). digital supplemental learning tool. Friedman test results demonstrated significant differences for perceived engagement [$\chi^2(2) = 15.74, P < 0.001, W = 0.23$] but not for perceived learning. Survey responses demonstrated that perceived engagement was greatest with the non-digital supplemental

learning tool compared with the two technology-enhanced learning tools (iBooks Author þ SoftChalk and SoftChalk alone). Multivariate regression analyses demonstrated statistically significant relationships between the non-digital supplemental learning tool and anatomy practical scores ($P < 0.00$) and most effective tools in e-learning nowadays and then how to deal with them for a better teaching and learning experience. (2) Individual characteristic, Gender: A significant difference by gender was identified in the individual approach to student learning, greater student independence, and ongoing monitoring of student results for teachers, parents, and students. Age and Satisfaction, Low awareness of IR4.0 among student and graduates where they are not ready to enter IR4.0.

Students agreed that challenges such as the traditional construction management structure. Healthcare professionals' perceptions of digital health competence are connected to competence to provide patient-centric care through digital channels, using technology and digital health systems, interacting with the patient through digital means, evaluating what digital health is and combining digital and traditional methods. Professionals' perceptions of their own digital health competence were divided, with the participants either reporting sufficient competence or perceiving a lack of skills in some specific areas. A significant difference by gender was identified in the individual approach to student learning, greater student independence, and ongoing monitoring of student results for teachers, parents, and students. a significant difference was found by gender in the difficulty in implementing the core curriculum content as well as by school type in the lack of proper home equipment, absence of or limited Internet access, and problems with connecting the computer, tablet, or smartphone to the Internet. Moreover, PETs stated that OLPE teaching is not only the best way to transfer basic information, but it also gives them an opportunity to learn digital technology by devoting time for research for self-improvement. However, they stated that students do not perceive OLPE as a lesson, as student participation is lacking. Moreover, there are deficiencies in students' social-emotional development. They also stated that the content of the lessons was insufficient, and they were unable to make the lesson interesting. (3) Social economic, Social emotional development, Social media platforms are associated with high satisfaction, but learning outcome data are scarce. The findings supported the influence of PE, EE, and FC on intention toward m-learning use but did not support the significant influence of SI. Moreover, system, intention, and user satisfaction were found to positively and significantly influence m-learning-system usage, with system, information, and service quality being top drivers of such user intention and satisfaction. The results reflect the required information concerning the strategies of higher institutions to enhance m-learning-system acceptance among students, with general implications for learning acceptance and usage. A total of 195 m-Health users participated in the survey. Of the total participants, 25.1% were overweight and 21.0% were obese. The workout frequency of most users was rarely (32.3%) and three to four times a week (29.2%). 55.9% of the users agreed that the application they use served all fitness levels and >80% either agreed or strongly agreed that it was easy for them to learn how to use the application. More than 70% of users agreed or strongly agreed that the application enhanced their knowledge of workouts and physical activity and >90% would recommend the application to others. There were no differences identified between the male and female participants and younger (40 y) participants with respect to perceived usefulness and ease of use, attitudes, experiences and subjective quality. significant differences were observed between participants 40 y of age in terms of perceived ease of use of mHealth applications.(4) Benefit , higher education institutions could benefit from the forced COVID-19 migration to digitally-enabled assessment. Podcasts and webinars have strong evidence for satisfaction and moderate support for improving learning outcomes, Five key challenges were identified: 1) The challenge of

establishing and maintaining large heterogeneous, multi-agency partnerships to deliver new models of healthcare; 2) The need for resilience in the face of barriers and set-backs including the backdrop of continually changing external environments; 3) The inherent tension between embracing innovative co-design and achieving delivery at pace and at scale; 4) The effects of branding and marketing issues in consumer healthcare settings; and 5) The challenge of interoperability and information governance, when commercial proprietary models are dominant. (5) Method or mechanism, Podcasts/webinars learning traditional methods of education with the learning outcome literature suggesting equivalency between podcasts/webinars and traditional methods of education. higher education institutions could benefit from the forced COVID-19 migration to digitally-enabled assessment. digitally enabled assessment to be enhanced it requires collaboration between various institutional stakeholders. three categories: Organization of Continuing Education before the pandemic; Changes in Continuing Education resulting from the pandemic; and Long-term implications for Continuing Education in the face of the pandemic. (1) Sustainability, Long-term implications for Continuing Education in the face of the pandemic. digitally enabled assessment to be enhanced it requires collaboration between various institutional stakeholders. A total of 195 m-Health users participated in the survey, (2) Limitation, They also stated that the content of the lessons was insufficient, and they were unable to make the lesson interesting. Lack of IR4.0 facilities hindered the implementation of IR4.0 in construction managements education.

Digital technology tools are very important media in the process of using digital in the learning process, where it is stated that computer, smartphones and other media are very important. So, according to (Bains et al., 2022) from texas said that the two tools, including SoftChalk and SoftCalk Writer iBooks, are tools for learning. So it is true that the tools described here help determine the readiness of health professionals to adapt themselves to the use of digital technology to support their learning, wheter at university, in services or in related training.

Individual characteristics such as age, gender and perception play an important role in determining learning using digital technology, this is in synchronization with the opinion (Al Ansari et al., 2022) from Audi Arabia, it is said that there is a difference between 40 years of age in terms of perceptions of using the m-Health application. So it can be inspired for us that if a person's age is in the category of young adults, they certainly have very high energy and enthusiasm for learning to learn theory and practice using digital technology to support their learning process going forward, in responding to the current demands of IR4.0.

Social economy is stated that is the determining factor for someone to adapt and implement the utilization of digital technology itself. Where, it plays an important role and as a person's ability to prepare materially in digital learning technology that is development today. This is in line with the results of the research being developed. Digital technology is believed to be a very effective and efficient tool in supporting the e-learning process and how to deal with it to support a better and more useful learning process (Altaieb et al., 2022), Hungary. Judging from the advantages that have been proven that is has a very positive impact on the learning process effectively and efficiently. Actually, this is very important to continue to be developed in the future, so that it can help health workers continue to learn to use digital technology to streamline their learning wherever they are.

The use of digital technology utilization has strengthened and deepened learning in health area in an innovative and creative way. Which has been stated by (Konukman et al., 2022), Turkey, that it provides opportunities to learn digital technology through self-development research. So with the benefits of using digital technology to support the rooting learning process, it really determines the direction of a person's self-development

research. So, with the benefits of using digital technology to support the learning process, it really determines the direction of a person's self-development process, especially the health professionals themselves in the IR4.0 era as it is today.

CONCLUSION

The result of this integrated review shows that many benefits were actually found in previous research related to the use of digital technology in the teaching and learning process. The use of digital technology has proven to be very effective and efficient in one's self-development in the health sector. The research conducted by the researchers contained in this selected article provides very in-depth information regarding the use of digital technology to answer the challenges of the IR4.0 era. One's self-development progresses much faster if it is balanced with the use of digital technology.

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