

CHAPTER I

INTRODUCTION

1.1 Background

The development of technology has impacted almost every aspect of human life. Nuryanto (2012) perceives technological developments in various activities as a catalyst that improves performance, efficiency, precision, and accuracy, thereby increasing work productivity. There are several types of technology-based activities present today, such as e-government, e-commerce, e-education, e-medicine, e-laboratory, among others (Nuryanto, 2012).

In 2018, the Central Bureau of Statistics (*Badan Pusat Statistik*) found that Indonesia has experienced a 62.41% increase in the population using a cellular phone and also noted the increase in computer ownership by 20.05% and 66.22% for household internet access in 2018. Moreover, it was estimated that access to the internet among the Indonesian population increased from 17.14% in 2014 to 39.90% in 2018.

The delivery of education is one of the many aspects of life that is greatly affected by technological developments (Uppal, Ali & Gulliver, 2017). Raja and Nagarsubramanai (2018) found that the application of technology in education increases students' interactions, widens students' exposure to various fields of interests, improves the effectiveness and ease in the transfer of knowledge. Thus, educational institutions ought to adapt to the changes brought about by technological developments. The rapidly evolving technology may challenge

traditional approaches to learning that have long been employed by higher education institutions (Uppal et al., 2017).

Traditionally, formal learning involves in-person interactions and requires physical presences that provides students more chances to interact with lecturers and other students. However, progress in technology has brought developments that allow formal education to be experienced with minimal in-person interactions through online learning (Plante & Asselin, 2014).

Online learning is a learning method in which the learning materials can be accessed through the internet; thus, teachers and students are not required to gather at the same time and place (Gros & García-Peñalvo, 2016). It may involve asynchronous or synchronous learning methods or a combination of both. An asynchronous learning method emphasizes self-directed learning wherein a student independently reads learning materials, watch learning videos, and interact with their instructors and classmates through online discussion forums. The synchronous learning method, on the other hand, usually utilizes a virtual classroom where teachers and students meet online at a specified time (Bezhovski & Poorani, 2016). The benefits of using online learning include : (1) easier to access to learning materials, (2) access to wider and more recent sources of information, (3) flexibility in the schedule of the learning process, (4) active interaction via the internet, (5) increased opportunities for collaboration, and (6) decrease in educational cost (Liang & Chen, 2012; Raoufi et al., 2020).

The past decade has seen an increasing trend in the utilization of online learning methods, especially in higher education. However, the current Covid-19

pandemic that required institutions to minimize, if not totally prevent, in-person interactions, have made online learning a necessity in most parts of the world (Lovrić et al., 2020). On March 17, 2020, the Ministry of Education and Culture of the Republic of Indonesia (Kementerian Pendidikan dan Kebudayaan Indonesia) issued Circular No. 36962 / MPK. A / HK / 2020 implementing the adoption of distance learning and work from home schemes to prevent the spread of COVID-19. The circular stipulates that in areas affected by COVID-19, students are to continue their studies online learning methods and teachers, as well as other employees are to work from their homes. Teaching-learning activities are conducted through video conferencing, digital documents, and other online means. In compliance with the policies issued by the Ministry of Education and Culture, Universitas Pelita Harapan issued circular No. 618 / R-UPH / VI / 2020. This university circular mandates that the teaching and learning processes shall be conducted online for the entire duration of the odd semester for the academic year 2020-2021.

Technological competency is a vital aspect to be considered in promoting the success of the online learning method in a technology-rich environment (Bigatel et al., 2012). Nursing education, as with education in other disciplines, continue to cope with challenges of the current trend of education delivery. The nurse educators and students have to modify their teaching and learning styles to adapt to this new method of education delivery (Bezerra, 2020; Fawaz et al., 2018; Raoufi et al., 2020).

Communication and information technologies are vital tools in online learning (Chugh, 2010). Levett-Jones et al., (2009) define information and communication technology competence as “the ability to function with information systems, networks, software, and web applications through the use of computers and other technology” (p. 612). With the challenges brought about by the current pandemic, technological competency has become a necessity in adapting to online learning (Espino-Díaz et al., 2020; Iivari, Sharma, & Ventä-Olkkonen, 2020; König, Jäger-Biela, & Glutsch, 2020). Espino-Díaz et al., (2020) assert the importance of training teachers to enable them to navigate the complexities of an online learning environment with technology competency and maximize its effectiveness in facilitating online learning.

Simms & Watson (1979) espoused that “caring is considered as one central feature within the metaparadigm of nursing knowledge and practice” (p.19). Nursing education, therefore, ought to promote the integration of the human caring paradigm into the nursing educational program (Salehian et al., 2017). A caring teaching-learning environment is one that facilitates the development of a mutual participative relationship between the teacher and the students to achieve meaningful learning (Cohen JA, 1993 as cited in Salehian et al., 2017).

Cheney and Nelsen (2011) asserts that “carefully designed virtual learning environments may provide opportunities for interpersonal interactions similar to those experienced in traditional classrooms”. In addition, online learning can foster an educational relationship that is not developed in a traditional classroom setting. The virtual learning community is perceived to support the ongoing development

of student-focused inquiry, promotes the ongoing development of the critical analysis capacity (Cheney & Nelsen, 2011). In contrast, traditional classrooms that must constantly renegotiate the dynamics of social interaction so as not to fall back into a transmission mode of teaching and learning (Cheney & Nelsen, 2011). The competent use of various technologies to support the learning process presents great potential in creating unique experiences that communicate care in an online learning environment. Thus, the researchers are interested in conducting a research study on how student nurses would prefer their teachers to use technology to create a caring online learning environment.

1.2 Statement of the Problem

The use of online learning in higher education presents additional challenges and emerging problems for educators and students. There some common problems that faced by students in online learning: (1) limitation in accessing the internet, some of the students lived in a suburban area, impacting less internet access. The internet signal had not been spread evenly so that some of the borderline areas faced problems in internet connection. Another problem causing internet access was caused by the limitation of internet quota, (2) economically disadvantaged family background, the students who were not well-off family found difficulty in having appropriate facilities, they were: the smartphone and the internet quota, (3) parents' support system, the parents as the controller for students in studying at home played an important role in supporting the e-learning system. Some of the parents were busy, or they had a lack of education, impacting on the avoidance of their children's learning (Lestiyanawati & Widyanoro, 2020).

Aside from its impact on students, online learning also impacts teachers who facilitate the learning process. Some teachers struggle with shifting from face-to-face learning methods to online learning methods. In some cases, teachers are also confronted with the challenge of delivering learning materials using various technologies. There are also teachers who struggle in adjusting their preparation time for the learning materials, claiming that online learning requires more extended preparation time compared to face-to face learning. In addition, maintaining meaningful and timely communication using technology also presents significant challenges. Some teachers claim that they experience difficulties in communicating without seeing their students' faces. In some cases, teachers cannot give direct feedbacks and feedbacks sent to students' emails cannot be followed up promptly (Kebritchi, Lipschuetz, & Santiago 2017).

It is important to note that the goal of education is not merely the acquisition of knowledge, but also the holistic transformation of an individual. Several studies found that role modelling plays an important role in the development of caring behaviour among nursing students (Baldwin et al., 2014; Hunowu & Arofiati, 2019; Labrague et al., 2016 & Kuntarti et al., 2018). Thus, the ability of the educators to model care is an important factor that can potentially enhance the caring behaviour of students. Salehian et al. (2016) posits that caring interactions are those that equally considers the actions and feelings of both teachers and students.

Physical presence enhances the caring atmosphere in a traditional classroom. However, physical presence is limited or even absent in online learning (Plante & Asselin 2014). One of the challenges in online learning is the

development of strategies that will enable educators to express and model caring behaviours, thus creating a caring learning environment for the students (Gallagher Lepak et al., 2009 cited in Plante & Asselin 2014).

1.3 Statement of the Purpose

The purpose of this research study is to describe how student nurses prefer their teachers to use technology in creating a caring online learning environment.

1.4 Research Questions

This study aims to answer the question “How do students prefer their teachers to use technology to create a caring online learning environment?”. In addition, the researchers will also aim to answer the question “What are the themes that represent the students’ preferences?”

1.5 The Benefits of the Study

1.5.1 Theoretical

The result of this research can enhance the students’ and lecturers’ knowledge about the competent and appropriate use of technology to create a caring online learning environment. This research also can be used as a reference for the researchers who will conduct studies on the use of technology in different disciplines or areas of practice. In addition, the result of this study can explore that applicability of the Theory of Technological Competency as Caring in Nursing in the context of nursing education.

1.5.2 Practice

With the increasing trend of online learning in the University environment, it is necessary to recognize the needs of technology competency for both lecturer and students to support the learning process. This research study can offer regulations in nursing education and can be applied for the ongoing learning process effectively to achieve positive experiences for educators, students and school administrators. The result of this study can aid educators in adopting techniques and strategies in the use of technology to create a caring online learning environment that considers students' preferences. School administrators can also utilize this study to create policies regarding the use of technology to create a caring online learning environment and subsequently improve the quality of the learning process.

