

**FACTORS AFFECTING LEARNING AND PERCEIVED ACADEMIC
COMPETENCE OF NURSING STUDENTS ENROLLED
IN ONLINE BASED LEARNING**

An Undergraduate Research Output Presented to the
Faculty of the College of Nursing, Midwifery
and Radiologic Technology
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Degree of Bachelor of Science in Nursing

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We hereby declare that this research output is our original work and it has been written by us in its entirety. We have duly acknowledged all the sources of information which have been used in this output.



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APPROVAL SHEET



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ABSTRACT

Online learning is the most widely used type of education due to the COVID-19 pandemic, which has taken over the role of traditional face-to-face teaching. Factors were identified that could affect the learning of the students in online learning such as technological, environmental, and social factors. The students' perceived academic competence in online learning is indicated based on their skills, knowledge, and attitude. This study analyzed the significant relationship between factors affecting learning and perceived academic competence of nursing students enrolled in online based learning in Misamis University during the second semester, school year 2021-2022. A descriptive-correlational research design was utilized. There were 254 nursing students as respondents of the study chosen through random sampling method. Average Weight Mean Standard Deviation and Pearson R Coefficient were the statistical tools used. Study showed respondents' factors affecting learning were high, and the perceived academic competence were good. There was a significant relationship between the technological factors and perceived competence in terms of skills. There was a significant relationship between the environmental factors and perceived competence in terms of knowledge and there was a significant relationship between the social factors and perceived competence in terms of attitude. The study recommends the students to consider upgrading the technology use for it affect them in developing clinical skills. Students should also be given with conducive environment during online class for it affect their study. The university may explore more advanced ICT application and the faculty shall provide activities that promote active interaction among the nursing students for it promotes learning. The future researcher may further investigate the factors affecting learning and the perceived competency in terms of demographic profile. This study may show which part of the profile, e.g., sex, age, status, that relates to the factors that affected the respondent's learning and competence.

Keywords: technological factors, environmental factors, social factors, academic competence, knowledge, skills, attitude

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Chapter 1

INTRODUCTION

The COVID-19 pandemic has disrupted teaching in a variety of institutions, especially in medical schools (Bączek et al., 2021). In many countries, including Philippines, typical face-to-face classes had to be suspended to ensure the safety of students, lecturers, and patients. To minimize the impact of lockdown, medical schools had to find another approach to teach medical students. Fortunately, current technology enabled electronic learning (e-learning) to be the core method of teaching the students during the COVID-19 pandemic (Bączek et al., 2021). These days, online class is one of the most common ways since most schools do online classes as to prevent the transmission of the virus.

Rapid developments in technology have made distance education easy (McBrien et al., 2009). Most of the terms (online learning, open learning, web-based learning, computer-mediated learning, blended learning, m-learning, for example) have in common, which is the ability to use a computer connected to a network, that offers the possibility to learn from anywhere, anytime, in any rhythm, with any means (Cojocariu et al., 2014). Online flexible learning includes the usage of technologies such as desktop computer, laptop, smartphone, and mobile applications which delivers learning contents such as electronic modules, video, audio, podcasts, webcasts, and other digital platforms (CHED, 2020). Online learning can be a tool that make the teaching–learning process more student-centered, more innovative, and even more flexible (Dhawan, 2020). In these environments, students can be anywhere (independent) to learn and interact with instructors and other students (Singh & Thurman, 2019). The synchronous learning environment is structured in

the sense that students attend live lectures. There are real-time interactions between educators and learners. There is also a possibility of instant feedback.

However, even with the use of online learning and the convenience it brings to the students, there are factors that affect the academic competence of the student. External factors that arise are the disturbances from other students when implementing learning using an online application in a virtual classroom (Rasmitadila et al., 2020). The COVID-19 pandemic has forced educational institutes, including instructors and learners, to move online, with which they were not familiar (Henriksen, Creely, & Henderson, 2020). From one's home, a mobile phone or computer, and a good internet connection are one of the most important things for a student to continue education. Without these things, it is very difficult to attend classes on time and catch up to the lessons that the teachers discussed with the fact that this may also lead to a decrease in interest and academic performance of the student. Lack of interest or motivation is one of the main things which hinders the growth of online learning. It also increases the scale of dropouts from the online courses (Aragon & Johnson, 2008).

Nursing students, in particular, have the knowledge and aptitudes for providing the necessary care needed in different clinical scenarios. Because of this, challenges are even greater during this pandemic. This pandemic cannot only affect our health. It also disrupts the activities that are part of nursing education, especially in enhancing and practicing the skills needed in the profession. Challenges to online education reported in the medical literature include issues relating to time management, use of technology tools, students' assessment, communication, and lack of in-person interaction (Rajab et al., 2020). Therefore, nursing students need to improve their knowledge during this online learning in

relation to the course before clinical setting exposure. Online learning can provide students with foundational knowledge and confidence before exposure to real or standardized patients (Ellman et al., 2016).

People cannot contradict the fact that the traditional classroom setting has one of the most contribution in terms of the student's learning. In this current situation, one of the challenges in having an online class are the factors that affect the student's learning. Although they are in the comfort of their homes, it does not mean that there will be no distractions. Some common external factors in an online class are the surrounding such as noise, internet connectivity, power interruption, even the study space at home. In an open letter posted on social media, the student network of the Association of Philippine Medical Colleges called for the suspension of online learning and termination of the ongoing semester, citing difficulties that the students had encountered, particularly poor internet connection, limited access to gadgets, and lack of study space at home (Association of Philippine Medical Colleges Student Network, 2020).

The implementation of an online learning system does not ensure a high-quality education. There are still many problems commonly related to technological factors, including issues of access, connection, internet familiarity, etc. Although the advancement of technology has overcome or minimized these obstacles, it seems that the problems have shifted to the learner's side when using a distance learning system. Learners may feel isolated and unmotivated (Saade and Bahli, 2005). Challenges of online based learning that were mentioned previously by past studies can be grouped into technological, environmental, and social factors that affect students' learning. The factors affecting learning is the independent variable of this study.

With the factors affecting online learning mentioned above, it is only right that we assess the students' perceived academic competence, particularly the nursing students. Nursing skills competence in the use of evidence-based procedures is aimed at promoting patient's health by use of applicable procedures. It is made up of various methods and procedures performed at skills laboratories, where skills are improved with each training. Critical thinking is important in performing most of the skills. This has made it possible for students practice as many times as they wish. More training resulted in perfection of hand skills therefore increasing performance of clinical nursing skills among nursing students (Kirwa & Gakere, 2016).

Nurses must not just be good in skill but also knowledgeable in every aspect of care. According to Adamsen & Tewes (2000), the fundamental component of nursing care concerning nursing problems known as Basic nursing care. In relation to personal hygiene, diet, pain management, and medicine, Basic care is the cornerstone nursing care necessary to provide patients with high-quality care.

Learning and practicing clinical skills help students to develop confidence, allowing them to build independence and competent professional skills (Godson et al., 2007). Nurses must study in order to gain knowledge and those knowledges will be put to skills in the actual scenario. Researchers attribute the nursing competency to the chemistry between the nurse and patient, success could be achieved through own interpersonal skills, knowledge and ability to rise to the occasion day in and day out by using learned practical and theoretical knowledge to enrich owns experience as part of care values. Nurse mentors serve to enrich nursing students experience and expectation. The skills learned from such

situation form an integral part and foundation to having a fulfilling career in nursing and health care fields (Kirwa et al., 2016).

In some other countries, nursing education is seen to have a progressive shift towards e-learning (Oducado & Soriano, 2021). The challenges in the shift to online educational delivery are influenced by several factors, such as the prevailing attitude toward e-learning and pedagogy of students. Research into student attitudes is essential in assessing whether students consider the use of technology in education is useful, beneficial, and acceptable for their learning (Carolan et al. 2020).

With these studies, nursing students' academic competence are indicated by their skills, knowledge, and attitude. However, due to privacy rights, the researchers cannot assess the nursing students' academic competence using their actual grades. Therefore, the researchers can only assess through the own perception of the students of their academic competence. Hence, for the accessibility of data, this study aimed to identify the factors affecting learning and perceived academic competence of nursing students enrolled in online based learning.

There are only few literatures that has found the factors affecting learning and perceived academic competence of the student. Even though some researchers investigated the skills, knowledge, and attitude but it does not show the relationship particularly to factors that are mentioned. Some literature is based on the personal and interpersonal factors of the student and does not relate to perceived academic competence. There is no study found that focus specifically to the given factors in learning and perceived academic competence of the student.

Therefore, the study was conducted to determine the factors affecting learning and its relationship to the perceived academic performance of the student. This study could give attention to the possible outcome of the students' learning during online based learning. This study could act as a guide in determining the factors during this online based learning and how it affects the students' learning.

Research Objectives

The study determined the factors affecting learning and perceived academic competence of nursing students enrolled in online based learning in Misamis University. The following are the specific objectives of the study:

1. Identify the respondents' factors affecting learning as to technological, environmental, and social factors,
2. Determine the respondents' perceived academic competence based on their skills, knowledge, and attitude,
3. Explore the significant relationship between respondents' factors affecting learning and their perceived academic competence.

Significance of the study

Respondents. They can be educated by addressing the factors that may negatively affect their perceived academic performance.

Misamis University, College of Nursing. This study can give more idea about the state of their students. It will give the school more data on the perception of nursing

students about online learning so that they may use the data to further improve their delivery of quality education through online means. The data of this study would also provide insight on whether the delivery of nursing procedures and instructions would still be as effective despite it being delivered through online based learning.

Nursing practice can also be aided by evaluating their skills, knowledge, and attitude that they gained during online based learning.

Future researchers can further investigate in the factors affecting students' competency in terms of demographic profile. It is significant to see which profile, such as sex, age, economic status are related to the factors.

Theoretical Framework

A model related to this study is the Technology Acceptance Model (TAM). Developed by Fred Davis in 1986, this model deals with the prediction of an information system's level of acceptability. This model has been widely used to explain an individual's acceptance of an information system (Surendran, 2012). An information system is a combination of hardware, software, and telecommunications networks that people build and use to collect, create, and distribute useful data (Bourgeois & Bourgeois, 2014). According to Surendran (2012), the TAM model has been reliable for there are many researchers that tested it. Technology acceptance model consists of two factors. These are the perceived usefulness and perceived ease of use of the users. Davis defined perceived usefulness as the user's prospective probability that using a specific system will increase or enhance his or her performance. Perceived ease of use refers to the user's prospective probability that the certain system will be convenient or free of effort. These factors, the

perceived usefulness and perceived ease of use, are the most important determinants of the actual system use (Surendran, 2012).

Based on the definition of information system by Bourgeois & Bourgeois (2014) and the definition of online based learning by CHED (2020) which basically means delivering educational contents with the use of technology, online based learning can be considered as an information system. Therefore, applying the Technology Acceptance Model to this study, the information system that is to be analyzed is the online based learning.

Perceived ease of use basically means the easiness of an information system to be used. Factors affect the ease of use of a system. If factors with negative effects are present, the ease of use of the system is low and it is high if factors with positive effects or no factors at all are present. Therefore, by analyzing the factors affecting learning which are the technological, environmental, and social factors, the perceived ease of use of the respondents towards the system which is the online based learning was be evaluated.

Lastly, perceived usefulness basically means how the system is useful in enhancing performance of the students. If the system is very useful, then the performance of the students is good and vice versa. Therefore, the perceived usefulness of online-based learning will be evaluated by analyzing the perceived academic competence of the respondents, which is their skills, knowledge, and attitude.

Conceptual Framework

The independent variable of this study is the factors affecting learning which are classified into three factors. The factors describe the entities from the outside that affects learning, and these are the technological, environmental, and social factors. The dependent

variable is the perceived academic competence of the nursing students. The academic competence is indicated by the skills, knowledge and attitude developed during online learning as perceived by the students.

As mentioned, one of the factors included in this study is the technological factor. Technological factor is defined as variables that are being used for evaluating available alternatives with respect to technological capabilities (Shaw, 2018). Organizations consider it an important tool for improving operations and functions. Colleges and universities use technology at various degrees to create online learning environments. Some instruction is delivered fully online, heavily relying on embedded technological features. Before this pandemic, others use technology to complement face-to-face instruction. Despite some variations, the common thread is a focus on technology as an integral means of providing instruction. A review of the literature by Lee, Chang, and Bryan (2020) highlights three aspects of technology-facilitated instruction: flexibility, usefulness, and ease of use. They addressed flexibility as the first technological subfactor, allows students to pursue degrees across geographical, cultural, professional, and generational borders. Usefulness, the second technological subfactor, refers to the degree to which the technology can enrich and enhance the learning experience and lastly ease of use, the third technological subfactor, refers to the degree to which technology can be used without undue effort or distraction. (Lee, Chang, and Bryan, 2020).

Environmental factor on the other hand, is defined as external to the individual and can have a positive or negative influence on a person's participation (Australian Institute of Health and Welfare, 2003). Explicitly, classroom lighting is a relevant aspect for students' academic performance because lighting has a direct relationship with students'

development (Oselumese et al., 2016). Oselumese et al. (2016), mentioned that poor lighting leads to discomfort and poor academic performance. In line with Jones (2021), students find it difficult to read and focus on a dim light and high bright light, so the light needs to be at optimum luminosity.

The surroundings can highly influence cognition, and everything present in the learning environment has the potential to positively or negatively affect the learner's competence, confidence, and understanding. Research showed that when complex cognitive tasks, such as studying for a test, reading, or writing were performed, about 38% of the students were distracted by the noise and speech in the background in the open study environment. Noise and lighting are aspects that impact on students' performance. Similarly, there are several studies showing that temperature has impacted on university students' academic performance. For example, Baafi (2020) mentioned that classroom temperature impacted on students' academic performance. López-Chao et al. (2017) also mentioned that low-temperature levels tend to distract students and make them more alert, which increases their nervous activity preparing the mind for action. On the other hand, hot environments negatively affect their performance in comparison with thermally neutral environments. According to an article published by Jones (2021), one of the few common environmental factors that affect the learning process is the family size, the children may be in a nuclear or joint family. In a nuclear family, the learner may find silence with a peaceful learning environment but may not get anyone to assist in their lessons. However, it may be a bit noisy and messy in a joint family, but the children can find other individuals, who can help and support their studies and learn better. So, both family size has its pros and cons, affecting the learning process of children.

Lastly for the factors affecting learning, social factor is defined as phenomena of a society that can affect or be affected by its interactions and relationships (Stuart & Hooper, 2009). The interaction for online courses can take place through the use of both synchronous tools (videoconferencing, audio channels, online chat rooms) and asynchronous tools (e-mail, discussion boards) (Alamri & Tyler-Wood, 2017). Ku et al. (2013), suggested in online courses, interaction is an important factor for perceived student learning and motivation. Moore (2002) found instructor-learner interaction to be the most significant factor in student satisfaction as well as in student learning outcomes. Knapp (2018) stated that online classes have been using the Learning Management System (LMS) for many years, but the system often lacks the valuable collaborative spaces for students to do real-time, collective discussion and learning. Another negative factor regarding online learning was that online classes lack personal contact with the teacher and peers. Several research studies reported that some students had feelings of isolation and loneliness when they were required to face a computer screen (Ullah et al., 2017). They were in mode of privation regarding face-to-face contact with the instructor as found in traditional classroom (Ponzurick, et al., 2000).

To provide concepts for the perceived academic competence of students starting with the skills, Kirwa & Gakere (2016) defined nursing skills competence as the use of evidence-based procedures that is aimed at promoting patient's health by use of applicable procedures. It is made up of various methods and procedures performed at skills laboratories, where skills are improved with each training. Critical thinking is important in performing most of the skills. Today's nurses are faced with ongoing pressure to demonstrate proficiency in a variety of nursing skills. Clinical nursing skills include the

ability to adhere to hygiene standards, properly make a hospital bed, take a patient's blood pressure, and give an injection (Johns, 2019). Baczek, Zagańczyk-Bączek, Szpringer, Jaroszyński, & Woźakowska-Kapłon (2021) stated that online classes have limitations, including problems with internet access, poor internet connection quality, and insufficient digital skills of the respondents. According to their study, e-learning gave them the same opportunity to learn more than traditional learning did. However, their respondents believed that e-learning is much less effective at improving their clinical and social abilities. They added that e-learning is most effective to teach clinical skills when combined with traditional classes. According to the American Association of Colleges of Nursing (AACN), hands-on job experience prepares nursing students for a diverse patient-care environment in a variety of settings. This is due to the broad field of nursing as a whole. There are many specialties, care settings, positions, and more. Clinical nursing practice is providing patient-centered care to achieve certain objectives. In line with Fukada (2018), nurses are always challenged on how they can contribute to society as professionals. They are expected to take professional responsibilities for continuously providing direct care, protecting individual lives and supporting activities of daily living. Nurses provide everyday care in fast-changing clinical settings using abilities acquired through knowledge and skill acquisition processes.

Learning from real patients in a clinical setting is crucial for medical education and it cannot be fully replaced with distance learning. To some extent, a solution to this issue could be the use of virtual patients (VPs). VPs are designed to simulate real-life clinical scenarios and they enable the learner to prepare his/herself before a real patient encounter

(Bączek, et. al., 2021). But virtual patients cannot satisfy the need of the students to master skills in real life scenarios.

Knowledge is defined as a theoretical or practical understanding of a subject (Bolisani & Bratiano, 2018). Gaining knowledge raises an awareness of personal and professional accountability and the dilemmas of practice. Knowledge is what improves care if the nurse is aware of the best knowledge or evidence to use in practice (Defining Nursing Knowledge, 2005). Understanding knowledge use in everyday nursing practice is important to the improvement of educational preparation and quality in health care (Skår, 2010). In lieu with Cipriano (2012), the cycle of building nursing knowledge begins with collection of data. When aggregated, summarized, and organized into logical patterns, data become information. Information becomes knowledge after analytics are applied, and it is displayed so that it is actionable for decision making. The depth of nursing practice goes beyond basic knowledge and the ability to care. Nursing encompasses a distinct body of knowledge coupled with the art of caring. As stated in Butcher (2006), a unique body of knowledge is a foundation for attaining the respect, recognition, and power granted by society to a fully developed profession and scientific discipline. Nurses use critical thinking as they apply knowledge, evidence, and caring to the nursing process and become competent. In keeping with Bączek, et al. (2021), e-learning enables to increase knowledge to the same extent as traditional learning. E-learning is definitely less effective in terms of increasing clinical and social skills. E-learning to teach clinical skills is most effective when combined with traditional classes because students can easily interact with their professors and ask questions, clarify concepts, and share ideas. Instead of using text-based materials, video instruction seems to be superior in teaching practical skills during online

classes. Clinical experience before entering the professional world in full provides a vast wealth of knowledge to nursing students. In supervised learning environments, nursing students can practice their skills and hone key traits with real patients but under the watchful eye of tenured professionals. This safety net helps them develop a mastery of their skills faster, without sacrificing quality patient outcomes (The Importance of Clinical Experience, 2020). An important aspect connecting knowledge and skills is clinical judgment. The clinical judgment process involves reflection, which connects one's own actions and their outcomes. Integrating knowledge and skills in clinical settings is a feature of nursing competency and is associated with a core ability to provide care based on the needs of the person who is receiving the care.

Attitude is defined as a set of emotions, beliefs, and behaviors toward a particular object, person, thing, or event (Cherry, 2021). The challenges in the shift to online educational delivery are influenced by several factors, such as the prevailing attitude toward e-learning and pedagogy of students. Research into student attitudes is essential in assessing whether students consider the use of technology in education useful, beneficial, and acceptable for their learning (Wong and Fong, 2014; Carolan et al., 2020). Students' attitudes are also affected via the excellence and easiness of using course of online learning, usability of online learning, and students' level and skills in computer. Their computer experiences, which consists apparent self-use, gratification and effectiveness and application of online learning play a dominant role. After all, positive attitudes of students' and behaviors regarding online learning are important and necessary towards the acceptance and adoption of online learning (Selim, 2007; Aixia, 2011; Liaw, 2011). Yang (2006) conducted a quantitative study, using structured questionnaire at the University of

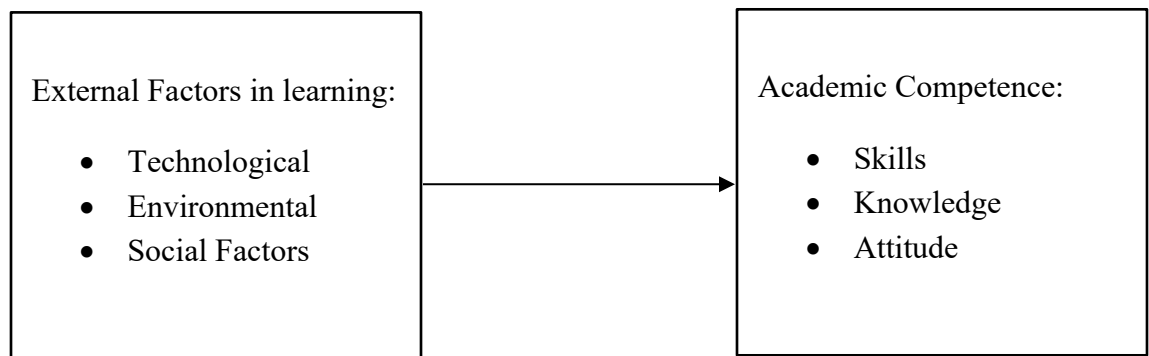
Taiwan, School of Nursing to explore attitudes towards web-based distance learning and found positive attitudes of students toward online learning because of the feasibility and new ways of learning. However, not all studies towards the students' attitude had a positive outcome. The negative attitudes of students towards online learning were identified with low level of computer skills, technological anxiety, and computer hardware problems, as well as poor study skills, low motivation, and an inability to work independently (Smith, et al., 2000; Govindasamy, 2001; Rosenberg, 2001).

The operational definitions of all the factors affecting learning are formulated as: (a) technological factors affecting learning that are technological in nature such as devices and internet connection; (b) environmental factors affecting learning that are found in the environment such as noise and lighting; and (c) social factors are affecting learning by interactions of the students with their instructors and classmates.

On the other, perceived academic competence includes: (a) skills that refers to the ability of the nursing students to demonstrate nursing procedures well; (b) Knowledge that refers to the understanding and information gained by the nursing students; and (c) attitude that refers to the behavior embodied by the nursing students during the course of online learning.

The independent variable of this study is the factors affecting learning. On the other hand, the dependent variable is the perceived academic competence of college nursing students. The relationship between the factors affecting learning and students' perceived competence is illustrated in Figure 1 below.

Figure 1. Schematic Presentation of the Study



Definition of Terms

The following terms used in this work are operationally defined as:

Online based learning refers to the educational system that includes online delivery of academic information which encloses synchronous and asynchronous learning.

Technological factors are factors affecting learning that are technological in nature such as devices and internet connection.

Environmental factors are factors affecting learning that are found in the environment such as noise and lighting.

Social factors are social aspects that affect learning such as the interactions of the students with their instructors and classmates.

Perceived Academic Competence is the students' evaluation of learning based on their own perception and is reflected by skills, knowledge, and attitude.

Skills refers to the ability of the nursing students to demonstrate nursing procedures well.

Knowledge refers to the understanding and information gained by the nursing students.

Attitude refers to the behavior embodied by the nursing students during the course of online learning.

Scope and Delimitation

This study focuses only on the factors affecting learning, the students' perceived academic performance and their relationship. Specifically, the factors affecting learning are the technological factors, environmental factors, and social factors. The perceived academic performance is indicated by their perceived knowledge, skills, and attitude.

REVIEW OF RELATED LITERATURE

During the COVID -19 pandemic, educational institutions were forced to shift their learning style to online based learning. Online learning refers to a learning environment that uses the internet and other technological devices and tools for synchronous and asynchronous instructional delivery and management of academic programs (Huang, 2019). Synchronous online learning involves real-time interactions between the teacher and the students, while asynchronous online learning occurs without a strict schedule for different students (Singh & Thurman, 2019). Academically, although it is virtually possible for students to learn anything online, learning may perhaps be less than optimal, especially in courses that require face-to-face contact and direct interactions (Franchi, 2020).

Factors Affecting Learning

Nowadays, educational technologies have quickly evolved along with the prompt development of information and communication technology (Al-Emran and Shaalan, 2017; Salloum et al. 2017). However, the transition was smooth for some schools but rough for others, particularly those from developing countries with limited infrastructure (Pham & Nguyen, 2020; Simbulan, 2020). This only means that some were able to adopt immediately, causing few to no effects on their academic performance. However, some could not adopt it immediately, causing effects on their academic performance. According to Asianet Broadband (2019), when numerous devices are connected to the same internet link, internet bandwidth can be compromised, resulting in slow performance as each device receives a lesser bandwidth share. Some of them have concerns regarding the bandwidth

access and the quality of the device they use during synchronous classes that they think may contribute to their lessons' understanding and comprehension level, affecting their academic performance.

According to an article published by Jones (2021), the surroundings can highly influence cognition, and everything present in the learning environment has the potential to affect the learner's competence, confidence, and understanding positively or negatively. Also, he stated that one of the few common environmental factors that affect the learning process is the family size; the students may be in a nuclear or joint family. Research from Ragpala (2021), in online education, particularly in their study room, some have stated that noise, insufficient light, inappropriate temperature, and bad air quality are all makeup and confounding factors in the disruption of their learning process. As stated by the respondents of the said research, noise harms their learning process and academic performance. As a result, they procrastinate their outputs due to noises from vehicles, animals, neighbors, family members, and devices, and their concentration during synchronous classes is disrupted. Therefore, noise levels must be kept under precise limitations for effective education and instruction.

A field study was done at universities in the Netherlands to obtain further insight into the assessment of noise in an open-plan learning environment, and it was found out that noise bothered more than one-third of the students based on the result gathered by the authors in Braat-Eggen , Heijst, Hornikx, & Kohlrausch (2017). In the study of Ragpala (2021), some respondents also considered light as one of the environmental factors that affect their academic performance. They said that the light in their study room is not enough to concentrate on their studies. Furthermore, according to Oselumese,Omoike, &

Ojemhenkele (2016), room lighting is also an essential component for students' academic performance because light has a direct association with students' growth and causes discomfort and poor academic performance if the light is poor. In addition, in the study conducted by the Heschong Mahone Group, students exposed to high amounts of natural light scored up to 18% higher on tests than students exposed to low levels of natural light (Oselumse, Omoike, & Ojemhenkele, 2016).

Social factor is a phenomena of a society that can affect or be affected by its interactions and relationships (Stuart & Hooper, 2009). The interaction for online courses can take place using both synchronous tools (videoconferencing, audio channels, online chat rooms) and asynchronous tools (e-mail, discussion boards) (Alamri & Tyler-Wood, 2017). Ku et al. (2013) suggested in online courses that interaction is an important factor for perceived student learning and motivation. Poor interaction between learners and facilitators and lack of clarity of the purpose and goals of the learning can impede the learning process (Ku et al, 2013).

Knapp (2018) stated that online classes have been using the Learning Management System (LMS) for many years, but that the system often lacks the valuable collaborative spaces for students to do real-time, collective discussion and learning. Another negative factor regarding online learning was that online classes lack personal contact with the teacher and peers. Several research studies reported that some students had feelings of isolation and loneliness when they were required to face a computer screen (Ullah et al., 2017). They were in mode of privation regarding face-to-face contact with the instructor as found in traditional classroom (Ponzurick et al., 2000).

Perceived Academic Competence

Baczek et al. (2021) stated that online classes have limitations, including problems with internet access, poor internet connection quality, and insufficient digital skills of the respondents. According to their study, e-learning gave their respondents the same opportunity to learn more than traditional learning did. However, their respondents believed that e-learning is much less effective at improving their clinical and social abilities. They added that e-learning is most effective to teach clinical skills when combined with traditional classes.

According to Van Laar et al. (2019), having up-to-date skills means having digital literacy, digital competence, digital skills, and e-skills. In this sense, individuals with 21st century skills are expected to have high levels of readiness for online learning. Those with the required skills benefit more from online learning opportunities (Van Laar et al., 2019). The Duquesne University School of Nursing (2020) states that, for nurses, however, the traditional internship has a different spin such as clinical experience. According to a white paper published by the American Association of Colleges of Nursing (AACN), hands-on job experience prepares nursing students for a diverse patient-care environment in a variety of settings. This is due to the broad field of nursing as a whole. There are many specialties, care settings, positions, and more.

Clinical experience before entering the professional world in full provides a vast wealth of knowledge to nursing students. In supervised learning environments, nursing students can practice their skills and hone key traits with real patients but under the watchful eye of tenured professionals. This safety net helps them develop a mastery of their skills faster without sacrificing quality patient outcomes (The Importance of Clinical Experience, 2020).

As studied by McCutcheon et al. (2018), only when it comes to teaching clinical supervision to undergraduate nursing students, blended learning is superior to online learning in terms of the students' motivation and attitudes toward learning clinical supervision, their satisfaction with the learning modality, and their knowledge. Aguilera-Hermida (2020) emphasize that with relation to their future abilities and sense of self-efficacy, pupils may benefit from the knowledge and experience gained. Faculty members have been inundated with information about enhancing instructional materials and urged to adopt multimedia-enhanced content and educational software based on prior understanding of online learning. According to Kim et al. (2020), academic competence refers to a student's knowledge and abilities to process new information in the context of academic performance. It includes linguistic competence, knowledge competence, skill competence, cognitive competence, and affective competence. Hence, they proposed a separate, mandatory core curriculum, along with an optional curriculum, to enable students to further enhance their specific academic competence.

According to Kim et al. (2018), the amount of digital competence and attitude toward using digital technologies in college are both favorably predicted. They elaborated that college students' perceptions of their digital competence and attitudes are influenced by their learning agility, or their capacity for ongoing learning and readiness to put newly learned skills to use.

In research from Zhu et al. (2020.), it was discovered that the participants' attitudes toward online learning were generally positive and improved after completing the course. The Self-regulatory factors and attitudes, through perceived online social interactions, significantly predicted the participants' continued intention to learn online. Sarfraz et al.

(2022) indicated that the learner's characteristics are critical in that they affect the success of online learning. As studied by Dong et al. (2020), on early childhood educational settings, Chinese parents often favoured traditional learning over online learning due to their negative attitudes and views about the values and advantages of online learning. The way that students feel about using mobile technology for language study has a big impact on that intention. Due to COVID-19, the students' attitudes and their level of cognitive engagement during online learning were closely associated. Therefore, a learner-positive attitude towards online learning contributes to success in academic performance (Dong et al. 2020).

To sum up everything that has been stated for the factors affecting learning, technological factors include internet bandwidth share and quality of device. Everything in the environment has the potential to affect learning. Noise, family size, insufficient light, inappropriate temperature, bad air quality are all environmental factors that disrupts learning. Interaction is an important factor for motivation. For social factors, online based learning lacks valuable collaborative spaces for students and lack of contact causes isolation and loneliness.

On perceived academic performance further, it was less effective at improving clinical and social abilities. Having up to date digital skills enhances readiness for online learning but hands on job experience prepares nursing students for a diverse patient-care environment in a variety of settings because environment promotes learning through experience. Despite that, there are studies that found that the participants' attitudes toward online learning were generally positive and improved

Chapter 3

RESEARCH METHODOLOGY

This chapter presents the description of the research design, research setting, study respondents, research instruments, validation of instruments, data gathering procedure, ethical considerations.

Research Design

This research study utilized a quantitative descriptive-correlational research design to assess respondents' factors affecting in learning and their perceived academic competence. Descriptive correlational studies describe the variables and the relationships that occur naturally between and among them (Sousa, Driessnack & Mendes, 2007). It examines the relationship between variables by determining how changes in one variable relate to another variable.

Research Setting

This study was conducted in Misamis University, located at H.T. Feliciano St., Ozamiz City. Misamis University is a privately owned, non-sectarian, non-profit educational institution. The researcher chose the Misamis University because the target respondents are the nursing college students who are currently studying at Misamis University and for the accessibility purposes of the researcher.

The department of the College of Nursing, Midwifery and Radiologic Technology is located at the 3rd floor, administration building. It has a population of 555 nursing students from level 1 to 4, and 25 members of faculty including the dean of the college of nursing as of first semester school year 2021-2022. In the school year 1975–1976, the Misamis University College of Nursing opened its doors as a five-year general baccalaureate program. After then, the program was shortened to four years by Department

Order No. 42 Series of 1976 from the Department of Education and Culture. Students whose programs covered under the five-year curriculum received their diplomas in March 1980.

In Misamis University, online flexible learning is being utilized. For almost 15 years, Misamis University has been using a combination of face-to-face learning and online learning through MU-OLE for their academic programs which makes their teachers become experienced and competent in delivering online education (Office of PR and Marketing, 2020) but Misamis University started total online learning to all levels and programs on March 2020 during the start of COVID-19 pandemic.

Research Respondents

There were 254 respondents of this study who are students in the College of Nursing and were enrolled during the first semester of school year 2021 to 2022 in Misamis University, Ozamiz City. There was a total of 555 students who were enrolled. Raosoft tool was utilized to determine the number of target population with 5% margin of error, 95% as confidence level, 555 as the population size and 50% as the standard response distribution, resulting to 228 as the total number of target population. Random sampling was used in determining the research respondents.

Research Instrument

Researcher-made questionnaires were utilized as the primary data gathering instrument for this study. Pilot testing was done for item analysis with 10% of the target population which was of 23 respondents. It was then tested for validity and reliability using Chronbach's Alpha and have gotten 0.8 and above scores of each item making the researcher-made questionnaire acceptable, valid, and reliable for data gathering. To gather

necessary data and information, the researcher provided a questionnaire formulated into two parts: Respondents' Factors Affecting in Learning, and Perceived Academic Competence Questionnaire. A four-point Likert scale was used in the survey questionnaire.

A. Factors Affecting in Learning Questionnaire. This was a researcher-made questionnaire that assessed the respondents' factors affecting in learning as to technological, environmental, and social factors. The continuum presented below was used to interpret and analyze the data gathered.

Weight	Continuum	Responses	Interpretation
4	3.26-4.00	Always (A)	Very High (VH)
3	2.51-3.25	Often (O)	High (H)
2	1.76-2.50	Sometime (S)	Low (L)
1	1.00-1.75	Never (N)	Very Low (VL)

B. Perceived Academic Competence Questionnaire. This was a researcher-made questionnaire that assessed the respondents' perceived academic competence based on their skills, knowledge, and attitude. The continuum presented below was used to interpret and analyze the data gathered.

Weight	Continuum	Responses	Interpretation
4	3.26-4.00	Strongly Agree (SA)	Very Good (VG)
3	2.51-3.25	Agree (A)	Good (G)
2	1.76-2.50	Disagree (D)	Poor (P)

1	1.00-1.75	Strongly Disagree	Very Poor (VP)
		(SD)	

Data Gathering Procedure

The researchers conducted the study with the nursing students of Misamis University as respondents who were in community-quarantine through an online survey. Before the actual administration of the research instrument, the researcher asked a permission from the Dean of College of Nursing, Midwifery and Radiologic Technology to allow the researcher to conduct the study.

Upon the approval of the request in distributing the questionnaire, as the face-to-face distribution of the survey is prohibited, the researchers utilized an online survey by sending a link of the questionnaire on social media sites such as twitter and messenger, and an application called microsoft teams. The respondents answered the survey through Google Forms, and the responses were directly tallied.

Google forms is a survey administration software included in the google docs editor's software suite, which allows collecting information from users through surveys. In administering the questionnaire link, the researcher used the time allotted where the respondents were available. After the respondents answered the questionnaire, the researcher collected the data from the google spreadsheet for analysis and interpretation. Based on the collected data and the result of the interpretation, the researchers provided a conclusion and recommendation for this study.

The tally provided by the spreadsheet was sent to the statistician for the statistical treatment of the data. The results of the computation were analyzed and interpreted.

Ethical consideration

The principles of ethical considerations by Bryman and Bell (2007) were complied with in this study. First, before the researcher conducted the online survey with the respondents, consent was obtained from the respondents before the study. The researcher asked permission from the respondents if they could volunteer to participate in the study. The research ensured the respondents was not subjected to harm in any way, and the respondents' dignity was respected and prioritized. Also, the researcher ensured the protection of the privacy of research respondents, an adequate level of confidentiality of the research data, and the anonymity of individuals participating in the research study. Moreover, the researcher avoided deception and exaggeration about the aims and objectives of the research, and any misleading information and representation of primary data findings. Affiliations in any form, sources of funding, and any possible conflicts of interest were avoided and declared. Lastly, communication about the research was done with honesty and transparency.

The data, results, methods, and procedures were collected and conducted without any manipulation. The absence of manipulation was provided in the actual results of this study without manipulation. The researcher made the respondents aware of the research objectives and aims of the learning. Furthermore, the researcher did not threaten or force the respondents to participate in the research study. Instead, the researcher let the respondents participate or volunteer for this study of their own will and have the freedom to withdraw anytime if they wanted to.

Data Analysis

The researchers utilized the following statistical methods and techniques for the analysis:

Weighted Mean and Standard Deviation. This was used to determine the effect of external factors in learning and perceived academic competence.

Pearson-R Coefficient. This technique was used to determine the relationship between the dependent and independent variables.

Chapter 4

RESULTS AND DISCUSSIONS

This part of the study presents the results and discuss the analysis. This chapter presents, analyzes, and interprets the data of the study which are arranged according to the following topics.

Factors affecting in Learning as to Technological, Environmental, and Social factors

Respondents' Perceived Academic Competence as to Skill, Knowledge, and Attitude

Significant Relationship Between Factors affecting Learning and Their Perceived Academic Competence

Table 1 presents the factors affecting learning as to technological, environmental, and social factors. As shown in the table, the overall weighted mean of the three factors is 2.90, which is interpreted as "High" (H). The Social Factors got the highest average weighted mean of 3.14, which is interpreted as "High" (H). Meanwhile, the technological got a weighted mean of 2.72 and environmental factors got a weighted mean of 2.84 which

are also both interpreted as High. This statistic result shows that these three factors greatly affect students during online based learning, with social factors being the greatest that affects them.

Table 1. Factors Affecting Respondents' Learning as to Technological, Environmental, and Social factors

Variable	WM	StDev	QI
Technological Factors	2.72	1.23	H
Environmental Factors	2.84	1.27	H
Social Factors	3.14	0.98	H
Overall Weighted Mean	2.90	1.16	H

Legend

3.26-4.00 – Very High (VH)

1.26-2.25 – Low (L)

2.26-3.25 – High (H)

1.25-1.00 – Very Low (VL)

The findings implies that the gadget and other devices are very important to their class. The findings may be supported by Asianet Broadband (2019) that when numerous devices are connected to the same internet link, internet bandwidth can be compromised, resulting in slow performance as each device receives a lesser bandwidth share.

The findings also implies that the environment is major important to learning. This is consistent to an article published by Jones (2021) which found that the surroundings can highly influence cognition, and everything present in the learning environment has the

potential to affect the learner's competence, confidence, and understanding positively or negatively.

Further, the social interaction is important to the respondent. This implies the presence of family members is important especially in paying attention to their need. This is supported by Ku et al. (2013), that found that interaction is an important factor for perceived student learning and motivation. Poor interaction between learners and facilitators, and a lack of clarity of the purpose and goals of the learning can impede the learning process. According to the result, respondents are not having trouble with that because it is found out that they collaborate well with classmates in an online group assignment.

Table 2 shows the respondents' perceived academic competence as to skills, knowledge, and attitude. As shown in the table, the overall weighted mean of the three indicators respondents' academic competence is 2.88, which is interpreted as "Good" (G). The attitude got the highest average weighted mean of 3.27, which is interpreted as "Very Good" (VG). Meanwhile, the skills got a weighted mean of 2.92 and knowledge got a weighted mean of 2.87 which are both interpreted as "Good" (G). This statistic result shows that students perceived themselves performing well on online based learning as indicated by their skills and knowledge being rated as good and attitude being rated as very good.

Table 2. Respondents' Perceived Academic Competence

Variable	WM	StDev	QI
Skills	2.92	1.12	G
Knowledge	2.87	1.21	G
Attitude	3.27	0.98	VG

Overall Weighted Mean	2.88	1.10	G
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Legend:

3.26-4.00 – Very Good (VG)

1.26-2.25 – Poor (P)

2.26-3.25 – Good (G)

1.25-1.00 – Very Poor (VP)

According to Van Laar et al. (2019), having up-to-date skills means having digital literacy, digital competence, digital skills, and e-skills. In this sense, individuals with 21st century skills are expected to have high levels of readiness for online learning, and it is stated that those with the required skills benefit more from online learning opportunities (Van Laar et al., 2019). Van Laar et al. (2019) supports the result of this study.

Table 3 presents the significant relationship between factors affecting learning and their perceived academic competence. As shown in the table, the technological factors has a significant relationship with the perceived skills of the respondents ($p = 0.03$). The environmental factors has significant relation to knowledge ($p = 0.04$). Meanwhile, social factors has significant relation to attitude of the respondents ($p = 0.03$).

Significant Relationship Between Factors affecting Learning and Their Perceived Academic Competence

Table 3. Significant Relationship Between Factors Affecting Respondents' Learning and Their Perceived Academic Competence

Variables	Test Statistics		Remarks
	r value	p value	
As to Skills....			
Technological Factors	0.24	0.03*	Significant

Environmental Factors	0.33	0.06	Not Significant
Social Factors	0.27	0.08	Not Significant
As to Knowledge...			
Technological Factors	0.26	0.08	Not Significant
Environmental Factors	0.24	0.04*	Significant
Social Factors	0.19	0.07	Not Significant
As to Attitude...			
Technological Factors	0.26	0.08	Not Significant
Environmental Factors	0.33	0.06	Not Significant
Social Factors	0.24	0.03*	Significant

Legend:

*0.00-0.01** Highly Significant*

*0.02-0.05*Significant*

above 0.05 Not Significant

The finding implies the technology plays an important role in developing clinical skills. This finding is supported by Baczek et al. (2021) that found e-learning is most effective to teach clinical skills, though it should be combined with traditional method alongside with it.

The finding on the relationship between environment and knowledge implies that cognition functions well despite without hands-on experience. This finding contradicts to

the American Association of Colleges of Nursing (2020). It found that hands-on job experience prepares nursing students for a diverse patient-care environment in a variety of settings. This is due to the broad field of nursing as a whole – there are many specialties, care settings, positions, and more – and no two days are alike.

On the relation between social factor and attitude, the finding implies that social interaction is necessary to aid learning. It implies constant communication that include family members, classmates, and friends. This finding is supported by Zhu et al. (2020). It asserted that the participants' attitudes toward online learning were generally positive. Similarly, Dong et al. (2020) has also similar finding.

Chapter 5

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary of the problem, methods, findings, conclusions, and recommendations in the study.

Summary

This section shows the summary of the findings of the study. The present study was conducted to determine the factors affecting learning and perceived academic competence of nursing students enrolled in online based learning. The following were the specific aims of the study: (1) Identify the respondents' factors affecting in learning as to technological, environmental, and social factors; (2) Determine the respondents' perceived academic competence based on their skills, knowledge, and attitude; (3) Explore the significant relationship between respondents' factors affecting learning and their perceived academic competence.

Subsequently, the study was conducted in Misamis University, department of the College of Nursing, Midwifery and Radiologic technology. The researcher utilized a descriptive-correlational, a quantitative type of research design to determine the factors affecting learning and perceived academic performance of nursing students enrolled in online based learning in Misamis University. A researcher-made questionnaire was used to gather data. There were 254 respondents. The identified respondents were bonafide nursing students enrolled during the first semester of school year 2021-2022. In the selection of participants, the researcher assured the respondents that their information would be kept confidential.

Findings

The collected data and results were examined, and the following findings were reached:

1. The respondents' factors affecting in learning as to technological, environmental, and social factors were perceived as high and positively affects academic performance.
2. The respondents' perceived academic competence based on their skills, knowledge, and attitude was found out to be good.
3. There is a significant relationship between respondents' factors affecting learning and perceived academic competence.

Conclusions

Based on the findings, the study draws various conclusions. The factors affecting learning which are the technological factors, environmental factors, and social factors were all perceived as high. The respondents' academic performance as to knowledge and skills were perceived as good and attitude were perceived as very good. There is a significant

relationship between factors affecting learning and respondent's perceived academic performance.

Technological, environmental, and social factors are considered factors that influence perceived academic performance of nursing students in Misamis University. Therefore, the factors affecting learning correlates to the perceived academic performance.

Recommendations

Based on the findings and conclusions the following recommendation are offered:

1. The students would consider upgrading the technology use for it affect them in developing clinical skills. The Misamis University may help in enhancing technology use. The students shall be given with conducive environment during online class for it affect their study. Meanwhile, interaction by communication shall be promoted.
2. The College of Nursing shall facilitate the use of technology. The university may explore more advanced ICT application. The CNMRT faculty shall provide activities that promote active interaction among the nursing students for it promotes learning.
3. The future researcher may further investigate the factors affecting learning and the perceived competency in terms of demographic profile. This study may show which part of the profile, e.g., sex, age, status, that relates to the factors that affected the respondent's learning and competence.

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Appendices

LETTER OF REQUEST

December 10, 2021

SAMMY B. TAGHOY, PhD

Dean of College of Nursing, Midwifery and Radiologic Technology
Misamis University, Ozamiz City
Philippines 7200

Dear Dr. Taghoy,

Greetings of Peace!

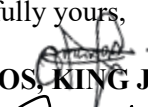
The researchers, fourth year students of Misamis University, will be conducting a research study entitled **“FACTORS AFFECTING LEARNING AND PERCEIVED ACADEMIC COMPETENCE OF NURSING STUDENTS ENROLLED IN ONLINE BASED LEARNING”**.

This study aims to gather an in-depth understanding of the factors affecting learning and perceived academic competence of nursing students enrolled in online based learning, and to draw valuable recommendation to individuals from the said situation.

Furthermore, the researchers graciously like to ask approval from your good office to conduct the said study. The study will be conducted in Ozamiz City from November to December 2021.

Hoping for your favorable approval. Thank you!

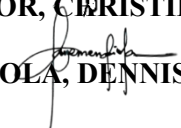
Respectfully yours,


OMAMOS, KING JOSHUA F.


CAMION, ANGEL JANE S.

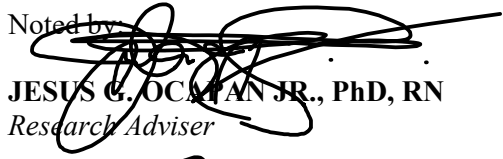

BONSOCAN, ASTER JEAN


BOLIGOR, CHRISTIE MARIE

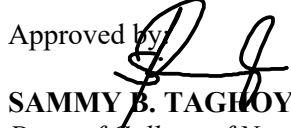

MENDIOLA, DENNISE FAYE Q.

Researchers

Noted by


JESUS G. OCAMAN JR., PhD, RN
Research Adviser

Approved by


SAMMY B. TAGHOY, PhD, RN
Dean of College of Nursing, Midwifery and Radiologic Technology



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CERTIFIED: ISO 9001:2015 Quality Management System – DNV-GL, Pty Ltd.
ACCREDITED: Philippine Association of Colleges and Universities Commission On Accreditation (PACUCOA)

Letter to the Participants

Dear Participants,

The 4th year nursing students will be conducting a research study entitle “FACTORS AFFECTING LEARNING AND PERCEIVED ACADEMIC COMPETENCE OF NURSING STUDENTS ENROLLED IN ONLINE BASED LEARNING” in partial fulfilment of the Bachelor Science in Nursing.

The researchers would like to ask you consent for participation in the said research study. The researcher will provide essential information, procedure, and consideration throughout the study period. Research surveying will be done.

Moreover, all the data gathered from the conduct of study will be kept confidential and results of the study will be disclosed to you after interpretation and identifying themes. The research also gives you the right to withdraw from the study with any reason that you will feel uncomfortable.

Sa among partisipante,

Ang 3rd year nursing student maghimu ug research study na gingalan ug “FACTORS AFFECTING LEARNING AND PERCEIVED ACADEMIC COMPETENCE OF NURSING STUDENTS ENROLLED IN ONLINE BASED LEARNING OF MISAMIS UNIVERSITY” para sa among requirements sa among kurso

Kami, nagahangyo sa imung pagtugot na ikaw usa ka partisipante sa among research study. Kami usab magahatag og mga impormasyon, pamaagi, ug konsiderasyon taman sa mahuman ang among research study. Ang pag-survey pagahimuon.

Dungag pa, ang tanang mga datus ug mga resulta na among makuha gikan sa imuha kay among ipalibing pribado. Ikaw sa imong kaugalingun naay katungud nga mubalibad ug mo-undang samtang kami nagahimu sa among research study.

INFORMED CONSENT

Ako si _____ naga edad ug _____, Nagpuyo sa _____, Ozamiz City nagatugot nga muapil sa gihimu nga study nga ginganlan ug “FACTORS AFFECTING LEARNING AND PERCEIVED ACADEMIC COMPETENCE OF NURSING STUDENTS ENROLLED IN ONLINE BASED LEARNING OF MISAMIS UNIVERSITY”. Ako na hatagan ug impormasyon na kining detalye nga ilang makuha siguradong pribado ug fidential ug kini pagahimuon sa mga researchers sa Misamis University.

SIGNATURE OVER PRINTED NAME

**QUESTIONNAIRE
ON
FACTORS AFFECTING LEARNING AND PERCEIVED ACADEMIC
COMPETENCE OF NURSING STUDENTS ENROLLED IN
ONLINE BASED LEARNING**

I. FACTORS AFFECTING LEARNING

Direction: The statements below describe the Factors Affecting Learning. Rate each item according to its frequency. Check the box that that corresponds on your answer.

4 – Always 3 – Often
2 – Sometimes 1 – Never

A. Technological

	1	2	3	4
1. Availability of internet connection.				
2. Gadget is functioning smoothly.				
3. High speed internet connection.				
4. Cannot be easily distracted with other things in my gadget. <i>(Such as, opening YouTube, Facebook while the teacher is discussing.)</i>				
5. Prepared from possible power interruptions.				

B. Environmental

	1	2	3	4
1. Prefer online learning more than face to face in with classmates or professors.				
2. Prefer to be alone in a room when practicing a new procedure.				
3. Have a quiet place during discussions.				
4. Comfortable environment during discussions.				
5. Is not easily disturbed by any environmental distractions. <i>(such as noise, light, house chores)</i>				

C. Social

	1	2	3	4
1. Interact with professors and classmates through synchronous tools (like videoconferencing, audio channels, and online chat rooms) whenever queries and clarifications have to be made.				
2. Interact with professors and classmates through asynchronous tools (like emails and discussion boards) whenever queries and clarifications has to be made.				
3. Collaborates well with classmates in an online group assignment.				
4. Prefers to study with peers.				

5. Understands the concept better when explained by a classmate or a professor one-on-one.				
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II. PERCEIVED ACADEMIC COMPETENCE

Direction: The statements below describe the Perceived Academic Competence. Rate each item according to your agreement. Check the box that corresponds on your answer.

4 – Strongly Agree

3 – Agree

2 – Disagree

1 – Strongly Disagree

A. Skills

	1	2	3	4
1. I practiced a lot and improved my skills during online learning.				
2. I can confidently perform any procedure in front of my professors.				
3. I am confident in handling a patient.				
4. I am confident to share my skills to my classmates.				
5. I am ready to apply my skills.				

B. Knowledge

	1	2	3	4
1. I study a lot and improved my knowledge during online learning.				
2. I am ready to apply my knowledge on actual scenario.				
3. I am confident in sharing my knowledge.				
4. I can confidently explain a certain topic during class.				

C. Attitude

	1	2	3	4
1. I get motivated in online learning.				
2. I am optimistic even when some parts of the lessons are hard to understand.				
3. I always affirm myself that it is ok to start slowly in learning a new lesson.				
4. I avoid people who makes me pessimistic about this online learning situation.				
5. I encourage my classmates whenever they have difficulties in dealing with school works.				
6. I am patient in learning new lessons.				

CURRICULUM VITAE

Personal Background

Name: Christie Marie P. Boligor
Address: P-3 Ditulan, Dumingag Zamboanga Del Sur
7028, Philippines
Date of Birth: December 18, 1998
Father's Name: Renie B. Boligor
Mother's Name: Vicky P. Boligor
Sex: Female
Civil Status: Single
Age: 22 years old



Educational Attainment

College: Misamis University
H.T. Feliciano St. Ozamiz City
Philippines
Secondary: Holy Cross High School
Kolambugan Lanao Del Norte
Philippines
March 2018
Elementary: Ditulan Elementary School
Ditulan, Dumingag Zamboanga Del Sur
Philippines
March 2012

CURRICULUM VITAE

Personal Background

Name: Aster Jean O. Bonsocan

Address: P2 Lala Proper Lala Lanao del Norte,
Philippines

Date of Birth: August 09, 1999

Father's Name: Fernando E. Bonsocan

Mother's Name: Gemma O. Bonsocan

Sex: Female

Civil Status: Single

Age: 22 years old



Educational Attainment

College: Misamis University
H.T. Feliciano St. Ozamiz City
Philippines

Secondary: Christ the King College de Maranding
Maranding, Lala, Lanao del Norte
Philippines
March 2018

Elementary: Lala Proper Elementary School
Lala Proper Lala Lanao del Norte
Philippines
March 2012

CURRICULUM VITAE



Personal Background

Name: Angel Jane S. Camion

Address: P-5, Circumferential Road, Aguada,
Ozamiz City, Misamis Occidental 7200, Philippines

Date of Birth: September 18, 2000

Father's Name: Angelito O. Camion

Mother's Name: Jinky S. Camion

Sex: Female

Civil Status: Single

Age: 20 years old

Educational Attainment

College: Misamis University
H.T. Feliciano St. Ozamiz City
Philippines

Secondary: Misamis University
H.T. Feliciano St. Ozamiz City
Philippines
March 2018

Elementary: Goin Elementary School
Goin, Liloy, Zamboanga del Norte
Philippines
March 2012

CURRICULUM VITAE

Personal Background

Name: Dennise Faye Q. Mendiola

Address: P-Nangka, Banale, Pagadian City,
Zamboanga del Sur, Mindanao, Philippines

Date of Birth: August 27, 2000

Father's Name: Dennis B. Mendiola

Mother's Name: Marife Q. Mendiola

Sex: Female

Civil Status: Single

Age: 21 years old



Educational Attainment

College: Misamis University
H.T. Feliciano St. Ozamiz City
Philippines

Secondary: Zamboanga del Sur National High School
Pagadian City, Zamboanga del Sur
Philippines
March 2018

Elementary: San Pedro Central Elementary School
Pagadian City, Zamboanga del Sur
Philippines
March 2012

CURRICULUM VITAE

Personal Background

Name: King Joshua F. Omamos

Address: P-Cantilan, Datagan, Pagadian City,
Zamboanga del Sur, Mindanao, Philippines

Date of Birth: February 14, 2000

Father's Name: Cristopher M. Omamos

Mother's Name: Arlinda F. Omamos

Sex: Male

Civil Status: Single

Age: 22 years old



Educational Attainment

College: Misamis University
H.T. Feliciano St. Ozamiz City
Philippines

Secondary: Pagadian City Science High School
Tuburan, Pagadian City
Philippines
March 2018

Elementary: Pagadian City Pilot School
San Jose Heights, Pagadian City
Philippines
March 2012