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Reimagining Associate Degree Nursing Education: An Insider's View

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REIMAGINING ASSOCIATE DEGREE NURSING EDUCATION: AN INSIDER'S VIEW

A Dissertation

by

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ABSTRACT

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The demographics of nursing students in the Associate Degree Nursing (ADN) program are diverse, hence the need for nurse educators to prepare and handle the challenges faculty face in the ADN program. Although many pieces of literature have addressed different modalities of instructional delivery and teaching methods in nursing education, transition experience of nurse educators, and teaching preparation and readiness, these are not evident in the ADN programs in the Rio Grande Valley (RGV). The teaching preparation of nurse educators and their utilization of instructional methods in the ADN program in the RGV is limited in the literature. This study used a quantitative methodology approach that used a survey with criterion samples of nurse educators to examine the transition experience of educators from clinical settings to the teaching environment, the teaching preparation and readiness to teach, and instructional delivery methods used by nurse educators in the ADN program in the RGV. The study attempted to address the challenges faced by nurse educators in delivering content to nursing students in the prelicensure nursing program and provided recommendations that would assist both novice and veteran nurse educators in providing instructions that meet the learning needs of diverse nursing students in the ADN program.

Keywords: educators, concept-based, curriculum, diverse learners, nursing, prelicensure

DEDICATION

This dissertation is dedicated to my children (Nathan, Walter, Odudu, and Idem) and my husband, Professor Noel Otu, for their love, encouragement, and support. You endured my absence all the times I diverted my attention to focus on my studies and all the nights I tarried during my studies and working on my dissertation. My educational journey would not have been possible without your support. I love you all! I am grateful to God, who empowered and guided me throughout this process. To my husband, I am delighted that you inspired and encouraged me to embark on this journey. Thank you for bringing out the best in me. I would not have asked for more. I appreciate my siblings for their encouragement and support. I express gratitude to my eldest brother, Honorable Marcus Sunday Etokeren, for helping lay the foundation for me. To my parents, Late Elder Sunday Akpan Etokeren and Late Madam Nkoyo Sunday Etokeren, I appreciate your sacrifices, the foundation you laid for me, and for instilling in me the value of hard work and dedication. To God be all the glory, for he is forever faithful.

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CHAPTER I

INTRODUCTION

This study investigated the academic preparation and teaching readiness of nurse educators in the Associate Degree Nursing (ADN) program and the preparation that relates to instruction and delivery of content. The teaching preparation, content delivery, and transition experience of nurse educators from the clinical setting to the academic environment were examined. The study attempted to answer questions about the relationship between teaching preparation and nurse educators' choice of instruction methods. Educators' preparation in the areas of curriculum and instruction and the use of differentiated instruction strategies that include pedagogical, andragogical, and heutagogical methodology in the delivery of content in the ADN programs in the RGV were explored.

Background of the Study

Nursing is a profession that focuses on caring for and nurturing individuals with altered homeostasis and aids in the health promotion of individuals and their families. These duties of caring and nurturing are performed by dedicated people called nurses. This definition is comparable to Craven, Hirnle, and Henshaw (2021) definition, which states that "Nursing is caring, commitment, and dedication to meeting the health needs of all people. Nurses direct care to promote, maintain, and restore health in various settings. They are prepared to identify and to

assist with the healthcare needs" (p. 2). The early history of nursing dates back to about 300 AD, when nursing was first referred to as a profession. Modern nursing emerged in the 1850s when Florence Nightingale attended to soldiers who sustained injuries. In 1860, the first nursing school was opened in London, and Florence Nightingale's role was crucial in changing the nursing profession in the 19th century. Also, educational attainment in nursing was limited in the 18th and 19th centuries (Smith & Cheriyedath, 2019).

How nurses were educated in the United States changed in 1948. This change and the birthing of the ADN program were secondary to a dissertation proposal by Dr. Montang, in which she proposed the creation of a two-year nursing program to produce nurses who would be more technical in practice, so there could be two main elements in the profession which would comprise of professional and technical parts. The two-year program offered at community college would be technical, while the four-year college program would be professional (Harker, 2017, p. 296). The ADN program "model was based on creating technical nurses who were proficient at delivering care" (p. 296), and the cost-effective nature and the shorter duration of the program provided an option that enticed many to join the program (Harker, 2017, p. 296). Nurses have to undergo specialized training to acquire the knowledge and skills needed to care for individuals with simple to complex health situations. The entry-level training can occur in a two-year program offered at a community college for technical skills or a four-year college program for professional skills. The Associate Degree Nursing (ADN) program is a two-year pre-licensure educational program that prepares nursing students for candidacy to take the National Council Licensure Examination for Registered Nurses (NCLEX -RN) after graduation. When successful, the individual becomes eligible to obtain initial licensure by the State Board of Nursing (BON) to practice nursing as a Registered nurse. The ADN program is offered in

community college and the program is essential because it prepares students for entry-level nursing practice. It is worth noting that BON has standards expected of the ADN program, and BON has the authority to terminate any nursing program that fails to meet the required standards. The standards set by BON necessitate educators striving to teach so students can pass NCLEX in the first sitting. To maintain the high expectations set by BON, that nurses who have a minimum of master's degree academic preparation are to teach in the ADN program, and "Individuals pursuing full-time faculty roles should have additional preparation in the art and science of teaching (i.e., pedagogy, curriculum development, student assessment) to better convey their clinical mastery to nursing students" to effectively prepare students for NCLEX and clinical practice post-graduation (American association of college of nursing, 2022). There have been many transformations in nursing practice and nursing education such that in the 21st century, nurses have many academic and practice options. The many options available to nurses today have attracted people from diverse populations to join the nursing profession.

Statement of the Problem

The United States (US) Census Bureau data from 2017 to 2021 shows that the population in the RGV is diverse. As such, the student population in the ADN program is expected to be diverse regarding previous careers, learning styles, culture, and age based on their geographic location. The diversity has raised concerns about whether nurse educators have adequate and efficacious pedagogical, andragogical, and heutagogical strategies to address the learning needs of these diverse students. Not all nurse educators have at least a certificate in nursing education. Nursing education is a specialty in the nursing profession. However, many nurses with advanced degrees who are teaching in the ADN program are nurse practitioners whose educational preparation is to work in a clinical setting. Many of these nurse practitioners and nurses with advanced degrees in other specialties join nursing education to teach at entry-level nursing

programs without getting a certificate in nursing education. This transition from clinical setting to nursing education is what drives this study to investigate whether advanced nurses with advanced degrees who have no teaching preparation in nursing education are prepared to teach in entry-level nursing programs. Some nurse educators are not prepared to instruct diverse students, and teaching preparation is a critical element in nursing education. Some nursing instructors in the ADN program need a background in nursing education, curriculum, and instruction. With insufficient teaching preparation, some nurse educators need help in delivering content that is efficient and adequate to prepare students for NCLEX-RN and the challenges awaiting the students in the clinical settings after graduation and licensure. Booth, Emerson, Hackney & Souter (2016), in the American Association of Colleges of Nursing (AACN), referenced that "In 2006, the AACN acknowledged the need for additional preparation in the science of pedagogy to augment nurse educators' ability to "transmit the science of the profession they practice and teach" (p. 56). Despite the call for nursing educators to prepare in the areas of teaching and instruction, many advanced practice nurses need more pedagogy preparation to enter academic environments.

The Texas Center for Nursing Workforce Studies (TCNWS), in collaboration with the Texas Board of Nursing (TBON), conducted a survey in 2020 on faculty demographics for the 125 pre-licensure professional nursing education programs in Texas. The outcome of the survey indicated that there are 67 ADN programs, and programs have the highest faculty vacancy rates. In 68.0% of the ADN nursing programs, one of the barriers to recruitment was a limitation in finding qualified applicants. The survey report also showed that 91.4% of faculty were female, the median age decreased to 49 years from 54 in 2013, 29.1% were 50 to 61 years, and 20.3% were 62 years or older. The distribution of ethnicity/race did not reflect the Texas population as

61.1% were White/Caucasians, Latino 12.4% and Black/African American 17.3%. The faculty population in the 2020 study was more diverse than the data from 2010. In the area of academic preparation, 75% of RN faculty held master's degrees and 22.1% doctoral degrees. The survey also inquired how many faculty members specialized in nursing education. The survey result showed that 40.7% of full-time faculty and 27.3% of part-time faculty had a specialty in nursing education. However, the report did not specify how many of these faculty members were in the ADN program (Texas Center for Nursing Workforce Studies, 2020). The TCNWS data on the specialty of faculty members in prelicensure nursing programs indicate that the majority of nursing faculty in Texas do not have a specialization in nursing education. Nurse educators have significant roles in nursing education to provide quality and efficient instructions to students. The American Association of Colleges of Nursing (2006, as cited in Booth, Emerson, Hackney, and Souter, 2016) states that nurse educators in the United States who teach in pre-licensure programs are expected to have a degree at a graduate level. Those educators teaching clinical courses should teach the content area in which they have advanced expertise. Teaching nursing students in a heterogeneous community could be challenging, especially when educators are not well-vested in pedagogical knowledge. The Rio Grande Valley is at the southern tip of Texas and comprises four counties. The United States Census Bureau has shown the demographics of a section of the Southern tip of Texas, and the data has the figures stated below.

The United States (US) Census Bureau data from 2017 to 2021 shows that the US population had a growth of 2.1% and Texas 4.4%. The population in Cameron County had an increase of 0.4%, Hidalgo County had 3%, Starr County had 3.4%, and Willacy County had a population decrease of 5.5%. Cameron County had an average growth of 0.1% per year; white (non-Hispanic) is 8.5%, a decrease of 0.4% in 2017; Hispanic/Latino 90%, an increase of 0.3%

in 2017; Asian (non-Hispanic) maintained at 0.7%, Black (non-Hispanic) 0.5% and increase of 0.1% in 2017. Age 20 to 34 was 20.3%, an increase of 0.6% in 2017; age 35 to 49 was 17.8%, a decline of 0.3% in 2017. In Hidalgo County, Hispanic/Latino had the most population growth with an increase of 0.4% points to 92.6%, white (non-Hispanic) dropped 0.5% points to 5.7%, Asian (non-Hispanic) maintained 0.9%, Blacks (non-Hispanic) were 0.5% an increase of 0.1% from 2017, there was an increase of 9.6% in ages 50 to 64. In Starr County, there was an average population growth of 0.8% per year. Black (non-Hispanic) had an increase of 0.1% points to 0.2%, white (non-Hispanic) dropped 0.1% points to 3.3%, and Hispanic/Latino maintained a steady population of 96.3%. Asians maintained a steady population of 0.2%, and Blacks (non-Hispanic) maintained 0.2%, an increase of 0.1% in 2017. The age group 5 to 19 had increased by 5.5%. The census report on Willacy County also showed that the County shrank by 1.4% on average. The racial and age disparity with Black (non-Hispanic) increased by 0.3% points to 2.2%, white (non-Hispanic) decreased by 0.4% points to 8.5%, and Asian (non-Hispanic) had a population of 0.7%, an increase of 0.1% from 2017. The Hispanic/Latino population was stable and maintained at 88.1%. Age disparity showed a 0.9%% increase for the age group 35 to 49 and a 5.8% decline in the age group 20 to 34. Asian (non-Hispanic) maintained a steady population in three Counties and showed an increase in one County; Black (non-Hispanic) showed a steady increase in all four Counties. In comparison, white (non-Hispanic) showed a decline in all four Counties but still had a total population that was higher than Asian (non-Hispanic) and Black (non-Hispanic). These four Counties are collectively known as the Rio Grande Valley (RGV); the RGV is growing in population in three of its four Counties. Though the Hispanic population dominates the RGV, it is still a heterogeneous society with people of other races and different ages (USAFACTS, 2021).

Course delivery in the ADN program in the RGV may be challenging due to the diverse student population because teaching is challenging when learners' learning styles are different. The challenges faced in educating a diverse population of learners were recognized by Balakrishnan and Claiborne (2012) when the authors noted that "in an environment where pluralism is a dominant feature," teaching could be challenging (p. 228). During the SARS-CoV-2 (COVID-19) pandemic, course contents were delivered in a variety of ways, such as online, synchronous or asynchronous, hybrid, and face-to-face. The different formats of content delivery made it challenging for educators who have limited experience and no background in the areas of pedagogy, andragogy, heutagogy, educational technology, curriculum, and instructions. Some educators also needed help getting a suitable environment to deliver content online. Holding face-to-face instructions on campus at a time became challenging due to the Covid-19 pandemic. It became even more challenging to deliver content that met the learning styles and needs of learners. Norris (2019) confirmed that "there is much consideration today for the specific and particular learning styles and learning needs of the mature student" (p. 35), and this consideration is absent or limited when educators have no other options. Nurse educators' teaching readiness in the ADN program is a challenge as some nurse educators need more educational preparation for curriculum development, application, content delivery, and teaching strategies. Educators also need more professional development in the content area and a learning community. There is minimal to a lack of high-quality professional development (PD) for nursing instructors, and this negatively impairs their efficacy, as reflected by Liu and Liao (2019), who stated that "the higher the quality of a PD program is, the more significant impact it would have on teachers. Educators' efficacy is "influenced by a variety of demographic, institutional, and cultural factors" (p. 419), which may be the case in the ADN program. The ADN program needs to improve in

professional development on content and pedagogies. Nurse educators are very committed to their call to teach, and they work very hard to breach the barriers they encounter and to narrow the gap and the learning curve they face due to limited pedagogical and curriculum preparation or readiness. Teaching diverse students exaggerates the frustration nurse educators experience in an academic atmosphere in which they need to be better-vested.

As the population of the United States and Texas is growing and diverse, so is the population of the RGV and the nursing students within the locality regarding previous careers, learning styles, culture, ethnicity, and age. Norris (2019) revealed that there is "an increase in mature Americans seeking a second or even third career choice." Many nursing students in the RGV fall into this category of learners (p. 35). Some ADN programs in the RGV were recently terminated by the Board of Nurse Examiners (BON). Inadequate preparation in nursing curriculum and instructions predisposes nurse educators to experience challenges in delivering content that is effective in preparing students for NCLEX-RN and the foreseen challenges in the clinical settings after their initial licensure.

Considering the issues of nursing students' learning and preparation for NCLEX-RN, this calls for further examination of the educators' preparation in the aspect of teaching strategies that include pedagogy, andragogy and heutagogy, curriculum, course delivery, and teaching preparation. The nursing curriculum is content-saturated, meaning that the course contents students are expected to learn during their two-year duration of study are overwhelmingly myriad. Murray, Laurent, and Gontarz (2015) confirm that healthcare authorities declared that there is "content saturation" in the pre-licensure nursing curriculum (p.169). Content saturation makes it difficult for students to learn within the two years of their educational program. Many ADN programs are adopting concept-based curricula with high rigor. Notwithstanding the rigor

of nursing programs and the adoption of concept-based curricula, "the fact that many nursing programs have implemented concept-based curricula in recent years, literature findings describing the evaluation of student learning associated with concept-based curricula have been limited," and faculty's readiness and competence in employing the curriculum is not evident (Elliott, 2017, p. 12).

Purpose of the Research Study

The purpose of this study was to examine the teaching preparation of nursing faculty in the ADN program and its association with instruction and content delivery. Instruction strategies and the relationship between faculty teaching preparation and choice of content delivery strategies were examined. Nurse educators' choice of instruction strategies and the use of technology in the classroom were also examined. The perception of faculty about the support they get from nursing education administrators and the level of challenge they experience as they transition from the clinical setting to an academic classroom were identified. This study attempted to identify, determine, and recommend learning theories and instructional strategies for nurse educators in the ADN program. Also, recommendations were made for nursing education administrators to consider while supporting nurse educators in performing their teaching duties.

Importance of the study

The importance of quality nursing education must be emphasized. The relevance of quality education is reflected in the "American Association of Colleges of Nursing (AACN), which is the national voice for academic nursing, believes that education has a significant impact on the knowledge and competencies of the nurse clinician, as it does for all healthcare providers" (Rosseter, 2019, p. 5). The nursing profession is dynamic, and the expectation is that today's

nurses should be vested in complex knowledge and clinical skills that would provide life-sustaining and lifesaving services (AACN, 2022).

Nurse educators have significant roles in nursing education to provide quality and efficient instructions to students. Since this study provides information about the teaching preparation of faculty in the ADN program, the information is helpful for nursing education administrators to consider when recruiting nursing faculty, considering professional development that may be necessary for faculty already employed, and also the necessity of probationary period and mentorship for newly hired faculty who transition from the clinical settings to the academic environment. This study is also relevant as it adds to areas nurse educators should consider when planning nursing curricula.

Fawaz, Hamdan-Mansour, and Tassi (2018) discussed curriculum and noted that frequently modifying the nursing curriculum is essential to bring learners up to par with the fast pace of professional practice. The goal of nursing programs is "to prepare nurses who are able to deliver safe and high-quality care and would be able to adapt to the evolving environments of practice" (Fawaz et al., 2018, p. 106). Benner et al. (2010, as cited in Harker, 2017) states that "If nursing is to evolve to meet the demands of maintaining well-ness for whole populations of patients, we need to see the value for our students in creating more intentional use of transformational experiences" (p. 296). In addition to the concept-based curriculum utilized by most ADN programs, additional pedagogy that would encourage transformational experiences is needed.

There are four ADN programs in the RGV; two of these programs were terminated recently due to not meeting the NCLEX pass rate expectations by the Texas Board of Nursing (TBON), and these two programs reopened again after a series of processes to obtain permission

from the TBON. The termination and reopening of the two nursing programs indicate that "The gap between education and the approach of practice for the 21st century has been rapidly widening" (Fawaz et al., 2018, p. 107). Aside from the recent termination and reopening of the said ADN programs, the Texas Board of Nursing (TBON) first-time candidates for NCLEX-RN test takers pass rate preliminary report for January 1, 2022, to December 31, 2022, revealed that out of the four ADN programs in the RGV, only one of the programs was able to meet the 80% NCLEX-RN pass rate expected by TBON. Nursing educators are challenged to help students meet the expectations set by TBON. Therefore, this study is significant because it aims to submit evidence-based data that would confirm that "Quality education relies largely on well-trained and competent faculty members" (Fawaz et al., 2018, p. 106). Information provided by this study would be helpful for ADN programs to consider when hiring and training new and inexperienced faculty who are transitioning from a clinical setting to an academic environment.

Research Questions

This study examined the teaching preparation of nurse educators, content delivery, and teaching strategies, and attempted to answer questions about the teaching preparation and readiness of the nurse educators, differentiated instruction strategies that included pedagogical, andragogical, and heutagogical practices utilized by nurse educators in the ADN program. The research questions this study attempted to address include:

1. What are the relationships between the teaching preparation of nurse educators and the choice of instruction methods in the ADN program?
2. What are the relationships between nurse educators' academic background and the use of different teaching methods in the ADN program?
3. How is the transition of nurse educators from the clinical setting to the academic environment?

To address the research questions, a quantitative method with a survey design approach was used in the study, and the paradigm selection would inform and justify the chosen study methodology.

Conceptual Framework

Many scholars and schools of thought have developed, addressed, and used various teaching and learning frameworks. Boyer's principles of scholarship is an acceptable model, and its principle has four main components, which include "The scholarship of discovery; the scholarship of integration; the scholarship of application; and the scholarship of teaching" (Booth, Emerson, Hackney, & Souter, 2016, p. 55). These principles are interconnected. Many higher institutions have adopted these principles to "promote excellence in teaching and learning" and also connect research and teaching, as well as theory and practice (Booth et al., 2016, p. 55). Boyer's principles of scholarship are used in this study. This study illustrates the impact and effectiveness of faculty-student relationships, joint and active learning, effective and prompt feedback, application of time management skills, high standard expectations setting, and regards for student diversity to nursing student learning outcome (Booth et al., 2016). Boyer's principles of scholarship are most relevant when establishing the relationship between nurse educators' use of effective pedagogies and student learning outcomes.

When nurse educators attain the expected teaching preparation, they will discover and acquire knowledge of teaching strategies. These strategies would be integrated into their classroom teaching, and the knowledge will be applied in delivering effective teaching. Educators need to seek knowledge, discover how best to present the concept they have learned and transmit the knowledge to learners by integrating best practices of effective teaching and classroom management. The principles of the scholarship model designed for this study include the four areas identified in Boyer's principles of scholarship. The subsection of the scholarship

of discovery includes research studies, scholarly discourse, professional development, and certification. The scholarship of discovery implies that nurse educators should be involved in research studies, especially in the area of nursing education, engage in scholarly discussion about nursing education, provide and attend professional development opportunities, get certification in nursing education, and seek knowledge in curriculum and instructions. In the section on scholarship integration, this entails curriculum inquiry, learners' success, and diverse learners. The scholarship of integration could be interpreted to mean that educators should seek knowledge in the curriculum and integrate the knowledge in teaching diverse learners, as the integration of the curriculum knowledge will add to learners' success. The area of the scholarship application is when educators apply instructional strategies learned in the discovery and curriculum inquiry of the integration phase in the classroom.

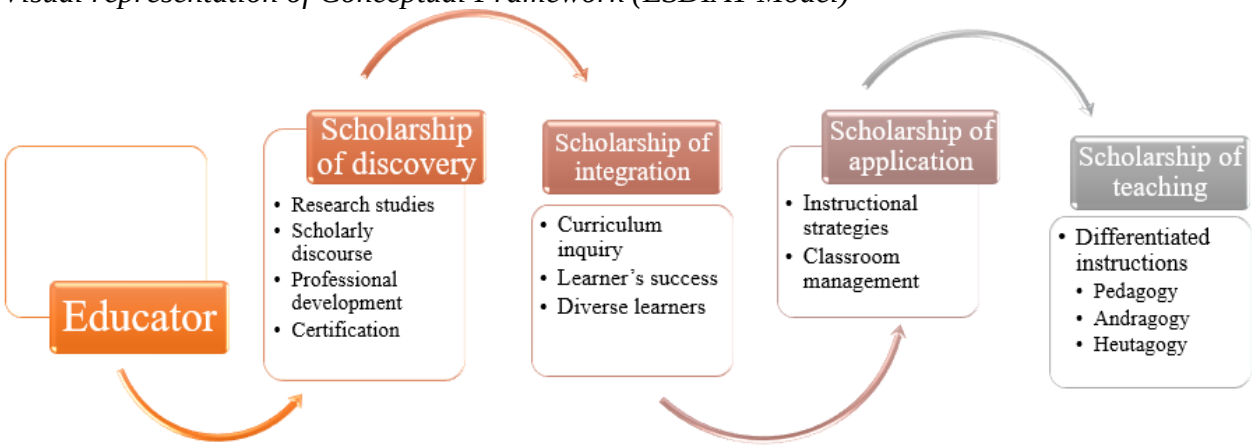
In contrast, the scholarship of teaching section of the model is the actual utilization of all the knowledge acquired in the previous three phases of the model. The scholarship of teaching entails making a good choice of differentiated instruction strategies, pedagogical, andragogical, and heutagogical approaches in disseminating and sharing knowledge with learners. The application of Boyer's principles of scholarship and the principles of scholarship model illustrated in this study is well-suitable for this study as it addresses the four domains or areas nurse educators need to be acquainted with to deliver adequate instructions that would result in excellent learning experience and optimal learning outcome.

Since nursing is a rigorous program, and the success of the program is based solely on measuring the first-time test takers' NCLEX pass rate, adequate instructions through utilizing the principles of scholarship theory and model are essential. Classroom instruction is different from nursing skills; just as nursing students acquire nursing skills during their nursing school

education, nurse educators also have to acquire teaching skills by seeking knowledge in nursing education specialization, among others, since being the best clinical nurse with extensive clinical knowledge is not synonymous to being an effective and efficient teacher in an academic environment. At the entry-level, nursing education is at the college level, and teaching, not scholarship, is paramount. Students need to have an excellent foundation to achieve success at NCLEX at the first sitting. The demand for the 80% NCLEX pass rate set by BON calls for educators who are well-rounded in the areas of scholarship discovery, scholarship integration, scholarship of application, and scholarship of teaching (ESDIAT), as depicted in the principles of scholarship model. As we expect students to succeed with at least 80% first-time testing on NCLEX and for our future generation of nurses to become excellent in practice, "Today's nursing faculty need to be the best in teaching the profession of nursing to the future generation of nurses" Bartels (2007, as cited in Booth et al., 2016). Hence, there is a need to utilize Boyer's principles of scholarship model in preparing nurse educators for teaching and curriculum design. The visual representation of the conceptual framework of the Principles of Scholarship Model (ESDIAT Model) is presented in Figure 1.

Figure 1

Visual representation of Conceptual Framework (ESDIAT Model)



Definition of Terms and Acronyms

For this study, and clearer understanding, the terms listed below are defined as follows:

andragogy: is when the learner is "self-directed" in learning (Kaushal, Singh, Magoon, Kashav, 2022).

autobiography: A "professional narratives" Moreira (2016), it is a pedagogical strategy used as a hidden curriculum whereby educators share with learners their own professional and life experiences to relate with learners in real-time to help learners conceptualize reality through the experiences of their educators.

concept-based: These are important and main ideas taken from contents that students are expected to learn and master.

currere: A Latin word developed by "William Pinar", it is "a process of self-reflection in which the individual becomes the subject of study", it is the "study of educational experience" (Suarez, 2019, p. 137).

curriculum: These are subject matters, contents, and ways of presenting educational materials in a program in an institution of learning. It provides a road map for educators and students on contents, sequence, and pedagogies. It sets the tone for the uniqueness of a program and determines expectations for a student's completion of a course of study to graduate from an educational institution.

diverse learners: Learners from varying demographics, with different experiences in works of life.

educators: Are people who have specialized training, education, and knowledge to teach and inspire people to learn.

ESDIAT: Educators who are well-rounded in the areas of Scholarship Discovery, scholarship Integration, scholarship of Application, and scholarship of Teaching.

faculty: Individuals in higher education who take up teaching roles

NCLEX: National Council Licensure Examination

heutagogy: is "self-determined learning where the individual student's interests and motivations create a focus area for new learning that is (at that point in time) independent of the educator" (Jones, Penaluna, & Penaluna, 2019).

nursing: A caring, and health promotion profession, which includes nurturing individuals and families with altered homeostasis; the duties are performed by a dedicated, specialized, skilled, and licensed group of people called nurses.

pedagogy: a form of learning whereby the learner is "dependent" on the educator for learning (Kaushal et al., 2022)

prelicensure: A period of preparation towards getting eligibility to sit for a licensing examination to obtain a license to practice one's profession. It is a period before obtaining licensure.

RN: Registered Nurse

Summary

This survey-designed, quantitative study used Boyer's principles of scholarship as a theoretical framework to guide the investigation of the teaching preparation, use of differentiated instructional strategies, and transition experiences from the clinical settings to an academic setting of nurse educators in the ADN program. Nursing encompasses the act of caring for individuals and promoting the health of a community. Nurses are trained and educated individuals who provide for the healthcare needs of people with imbalanced homeostasis. These nurses have to go through specialized training, and they are taught by nurses who are equipped with nursing knowledge and skills. Nursing education has undergone a series of changes and

advancements since nursing was first recognized as a profession. The ADN program prepares students to take the NCLEX-RN, and successful candidates obtain initial licensure to practice nursing. The BON sets standards and expectations for nurse educators and nursing programs. Teaching in pre-licensure programs is challenging, and educators face the challenge of disseminating clinical and academic knowledge to nursing students who are not only adult learners but diverse in demographics and experiences. The RGV is a heterogeneous society, according to the 2021 United States census report, and this diversity increases the challenges nurse educators face. The teaching preparation of nurse educators in the RGV was investigated, as well as the use of technology and differentiated instruction in the classroom. This study was necessary because of the significant role nursing educators play in building the next generation of nurses to be competent and confident practitioners in the complex and innovative healthcare system. Questions about the teaching preparation of nurse educators, findings about the relationships between teaching preparation, use of differentiated instruction, and transition from the clinical setting to the academic environment are included in Chapter 1. A theoretical framework was used to guide this study, and Boyer's principles of scholarship was the theoretical framework that was used to inform the teaching preparation of nurse educators.

CHAPTER II

REVIEW OF LITERATURE

Struggles of Novice Nurse Educators

Many literatures have discussed the complexity of nursing education and the challenges of transferring clinical experience to the classroom. When nurses have less than two years of teaching experience in an academic environment, they are termed novice nurse educators (National League for Nursing, 2022). Nurse educators are nurses who combine both professional expertise and the duties of sharing knowledge with learners in an academic environment. Booth et al. (2016) shared that "Nursing education encompasses both the profession of nursing and the profession of education. Academic nurse educators must be prepared to serve as educators and researchers, and have experience in a clinical specialty area" (p.54). The American Association of Colleges of Nursing (AACN) overwhelmingly expressed the significance of nursing education, the influence of nurse educators on student learning, and the implications for the next generation of nurses and the healthcare industry (Rosseter, 2019). Since nursing became recognized as a profession, the profession of nursing has gone through many changes and continues to grow. The complexity of today's healthcare industry demands nurses to be more knowledgeable and have skill sets that meet current healthcare demands (AACN, 2022). This complexity means that nurse educators whose primary duties are to teach future nurses equally have to be well vested not only with clinical knowledge but also pedagogical knowledge to instruct learners to succeed in NCLEX- RN and practice after licensure. Brown and Sorrell

(2017) used Benner's Novice to Expert Framework to guide a qualitative study. They discussed the struggles and challenges that first-time nurse faculty experience when they transition to academic roles. The above authors mentioned that some of the challenges novice educators face include "learning and implementing different pedagogical styles, managing heavy workloads, balancing academia responsibilities, and essentially surviving in academia" (Brown & Sorrell, 2017, pp. 207 - 208). According to the above authors, there is issue of nursing faculty shortage and the pressing need for nurse educators to occupy vacant positions which may lead to a decrease in NCLEX scores as educators face ultimate workloads that negatively impact educators' ability to look into the needs of students and assist them; the authors referenced Spencer (2013, as cited in Brown et al., 2017) that even though applicants to fulfill nurse educators positions are qualified due to extensive clinical experiences, to expect these practitioners to transfer their clinical expertise into the academic role and become experts in academia is unrealistic (p. 207). For educators to play academic roles in academic settings calls for the need for nurse educators to get additional education in curriculum and instruction. The above authors' study aligns with AACN's calls for pedagogical preparation for nurse educators teaching in academia, especially those teaching didactic courses.

Nurse Educators' Preparation

The act and science of teaching involves not only content knowledge but also the acquisition of effective and efficient pedagogy and andragogy. According to Kreber & Cranton (2000, as cited in Bullin, 2018), "Pedagogical knowledge includes the skill to present discipline-specific content in a way that facilitates understanding and the ability to facilitate critical thinking and self-directed learning", and nurse educators should be formally educated in andragogical and pedagogical theories as that would form the base for instructions (p. 12). Bullin (2018)

conducted an integrative literature review and discussed academic nurse qualification to be a doctoral degree, which could be a Ph.D. or its equivalent, and “80%” of doctoral degree holders accept teaching positions in higher education. Despite the demand for higher degrees, Ph.D. holders still need to prepare to meet teaching demands as they need more preparation in the areas of teaching and learning. The focus is more on knowledge discovery than knowledge dissemination, and the graduates have high content knowledge without andragogical knowledge. Bullin (2018) further argues that “PhD is generally research-focused with no formal, organized pedagogical courses or experiences for doctoral students”, and the author wonders how nurse academicians can perform their expected role of teaching effectively when their educational preparation does not include the components that would prepare them to teach (p. 15). Academic nurse educators have high knowledge in content areas but limited ability in the field of teaching and learning. Teaching preparation for nurses has unquestionably diminished since “1976” when “24%” of graduates in master’s degree nursing programs specialty was in teaching and learning as compared to 5.3% in 2004 (p. 2). Focus shifted from nursing education to advanced clinical nurse practitioner programs offering Doctor of Nursing Practice (DNP) and accepting faculty positions without preparation for the position, even though it “is well documented that programs leading to the Masters or doctoral degree in Nursing do not prepare those nurses for many of the roles and responsibilities associated with” academia (p. 2). Glanville (2004, as cited in Bullin, 2018) indicated that “Teachers of nursing education require both in-depth, discipline-specific and pedagogical knowledge to effectively meet the anticipated complexities of professional nursing practice” (p. 1). The author also expressed that pedagogical knowledge is knowing the fundamentals of effective teaching and learning, and this is critical in acquiring the knowledge to teach, which is manifested in educators’ ability to present content in a manner that facilitates

comprehension and upper-level learning. Effective and efficient teaching ability is even more important in nursing education, considering the demanding and overwhelming content in prelicensure nursing education. The study concluded that the preparation of academic nurse educators jeopardizes the intent and ability to meet expected teaching responsibilities. Professional development that is specialty-specific can add to nursing educators' knowledge.

Professional Development Augments Teaching Preparation

So, to enhance nurse educators' teaching preparation, professional development is beneficial to nurse educators, especially when it is content area and teaching modality specific. McAllister and Flynn (2016) conducted research using questionnaires to show the complexity of nurse educators' role in the areas of the science of teaching and practice and self-efficacy. Participants were nurses from many areas of practice, including those in leadership positions and two hundred and sixty-six nurse educators in universities and health care settings. A "Capabilities of the Nurse Educator (CONE) questionnaire" (McAllister et al., 2016, p. 125) was used to assess the complexity of the role of nurse educators. Ability to teach, areas needed for professional development, and evaluation of professional development interventions were among the areas included in the questionnaire. The author concluded that CONE was a reliable tool for nurse educators to use in identifying the professional development needs of the participants. Using a unique instrument such as CONE confirms the need for continual professional development for nurse educators due to the complexity of their role. Nurse educators are heterogeneous, from different areas of practice, but with the common goal of educating nurses and nurses to be. For nurse educators to accomplish this goal, a complex set of skills is needed because "Excellence in nursing education not only involves competent teaching but also requires vision, curiosity, and commitment to research for continual improvement" (McAllister et al., 2016, p. 122). Nurses with advanced degrees in areas other than nursing education and even

those with nursing education specialty need a smooth transition to academic roles since nursing education is complex and different from clinical practice.

Smith, Kean, Vauhkonen, Elonen, Silva, Pajari, Cassar, Martín-Delgado, Zrubcova, and Salminen (2023) conducted a study using literature review and a systematic search design to describe research in nurse educator's continuing education and professional development needs of nursing educators. The researchers used qualitative, quantitative, and mixed methods data sources. Among the questions asked were inquiries on what research has been done in the area of continuing nursing educators' professional development and what nursing educators reported to be their needed continuing education and professional development requirements. The result of the above study revealed that minimal (n = 13) academic publications about nurse educators' professional development exist but identified that the professional development needs of nursing educators varied. The study findings showed that nurse educators played multiple roles with peculiar personal and institutional demands. The authors concluded that the professional development needs of nurse educators were different but similar and related in goals; the study wondered how those professional development needs could be addressed. Drudge et al. (2019, as cited in Smith et al., 2023) defined continuing professional development "as a self directed post-graduate learning process where professionals reflect on their competence, identify learning opportunities, and develop their required competencies" (p. 1). According to Smith et al. (2023), professional development is part and parcel of nursing educators' competence. Since nursing education is continuously evolving, nursing educators have a need for learning opportunities, which should not only satisfy requirements by credentialing bodies but also promote internal motivation and need for professional development. Workshops in teaching and learning need to be part of nursing educators' professional development, as this would add to nursing educators'

retention and achievement of maximum quality and efficient education systems and viable nursing educators' workforce (Smith et al., 2023, p. 2). Nursing education is broad in expectations, hence the need for nursing educators to have "in-depth substance knowledge in …… pedagogical understandings of how to approach these multiple modes of education" (Smith et al., 2023, p. 6). The discussions on professional development confirm the need for nursing educators to not depend solely on clinical experiences as they journey to the academic environment but to seek additional and continual knowledge in teaching and learning, pedagogy, and andragogy to be able to communicate content knowledge to their diverse learners effectively. As nursing educators seek pedagogical knowledge, mentoring new educators by veteran educators is advantageous as it helps new educators transition smoothly into the academic environment.

Nurse Educators' Mentorship Enhances Teaching Effectiveness

Mentorship is a form of professional socialization in which, through modeling, a learner acquires knowledge from a model. Modeling is a form of observational learning supported by the social constructivist theory. In this study, the learner is the novice educator, while the model is the veteran nursing educator. As the veteran educator teaches, the novice educator learns and acquires teaching skills through observation, just as the common saying "Monkey see, monkey do." Social constructivist theory is supported by many studies, such as Buhler's hypothesis. Vygotsky (1978) mentioned Buhler's hypothesis regarding the interrelatedness of practical intelligence and speech in children, which showed the link between speech and practical thinking in the process of development. The above author used Shapiro and Gerke's analysis of how practical thinking develops using the experiment model of Kohler's problem-solving research with chimpanzees. Kohler's studies revealed that practical thinking in children is like that of adults in some ways, and emphasis was placed on the role of social environment in how humans

develop. A novice nursing educator can develop into an expert educator if an adequate mentoring opportunity is provided. With practical mentoring opportunities, the novice educator would imitate his or her mentor and acquire practical teaching skills. According to Kohler, imitation was helpful in learning from adults, and social experience plays a positive role in acquiring skills that involve muscular movement (Vygotsky, 1978, pp. 21-22). Just as the above-narrated hypothesis of Buhler, novice educators can learn teaching skills through the social environment by imitating veteran educators' teaching skills. The Bobo doll experiment is another experiment that supports mentorship as an acceptable learning approach. The Bobo doll experiment is a study that shows observational learning. In the study, two experimental groups were involved. One group observed a model exhibiting aggressive behavior towards a Bobo doll, while the other group was not exposed to observing the aggressive behavior. The children who witnessed an adult model exhibiting aggressive behavior or watched the film of an adult model showing aggressive behavior towards a Bobo doll were likely to imitate the aggressive behavior, unlike those children who were not exposed to aggressive behavior. Bandura and his colleagues conducted the original Bobo doll experiment, and the study shows that people can learn behavior by observation and imitation even when there is no reward or punishment (Lansford, 2020). Novice educators can learn from mentors through mentorship even if there is no financial compensation for the mentoring program. The naturalistic observation experiment by Baumrind (1968) is another example of modeling. This experiment examined the influence of parents on their children's social responsibility and individuality. There were eight constructs in the experiment, and the researcher rated observation data of each parent's behavior on scales that approximated children's scales. Self-reported parental attitudes were also collected. The parents and their children were observed, and the experiment concluded that children learn by mimicking

or imitating their parents' behavior. These experiments support the influence of observation and imitation on learners, affirming that novice nursing educators can learn from expert educators through the process of mentorship by observing and mimicking.

Smith et al. (2023) revealed, "Mentoring, as a form of continuous learning, has shown to be beneficial for job satisfaction, for both mentors and mentees" (p. 2). Moving from one's comfort zone to perform a new role in a new environment is challenging, hence the call for effective mentoring in nursing education. Among the many advantages of mentoring, Matthew-Maich et al. (2007, as cited in Smith et al., 2023) indicated that "Mentoring can promote self-determination and autonomy in nurse educators and address the demands of this environment. Nurse educators, especially new nurse educators, do better when they are supported to become 'certain amid uncertainty" (p. 7). With mentorship, the transition from clinical to academic environment becomes smoother, and the novice nursing educator learns the new roles from an experienced educator. The concept of observational learning plays a role in mentorship as the mentee observes and emulates the mentor and eventually applies the learned skills in teaching diverse nursing students.

Diverse Learners' Population

Due to pluralism in the nursing student population, nurse educators are faced with the challenges of providing effective instructions to ensure that adequate learning occurs. These challenges are possible because educators are aware that many learners learn differently and in various ways, hence the need for individualized teaching and learning methodology. As nurse educators prepare to teach diverse learners, they must recognize and acknowledge the "bias present in oneself, other educators, students, and the curriculum" (Sommers & Bonnel, 2020, p. 131). Consumers of nursing education are a diverse population of learners who may be minorities, students with previous careers and work experiences, adults at different age gaps,

students with and without family responsibilities, and international students with language barriers that may be attributed to their cultural background. Also, “One way to move nursing education toward valuing diversity and cultural humility is through culturally relevant teaching in settings that promote authentic education” (Day & Beard, 2019, p. 278). Foronda (2020) conducted a study that was developed based on a qualitative study that investigated the experiences of American nursing students who were studying overseas in a low-income country. Participants in the study shared thoughts of constantly comparing, emotional journeys, and learning. The participants described cultural beliefs, health practices, poverty, phobia, frustration, surprises, and sympathy that they experienced. The journey of these students led “to the outcome of learning.” However, the expected outcome, as the students who participated in the study reported, was not achieving the highest level of learning that was transformative. Instead, their experience was a barrier to the expected transformation, and this included “egocentrism/emotional disconnect, perceived powerlessness/being overwhelmed, and a vacation mind-set” (p.7). It was from the study that the researcher got the inspiration to create a theory to guide people on ways to approach diversity. This theory is the “cultural humility theory.” Tervalon and Murray-Garcia (1998, as cited in Foronda, 2020) invented the term “cultural humility and expressed that “Cultural humility incorporates a lifelong commitment to self-evaluation and self-critique, to redressing the power imbalances” in the administrators, educators, and students “dynamic, and to developing mutually beneficial and non-paternalistic …. partnerships” (p. 8). According to Foronda (2020), cultural humility involves focusing on another individual rather than on oneself, and in a write up in a multicultural instruction to physicians, educators were encouraged to “shift away from the goal of achieving cultural competence to that of cultural humility” to eliminate or narrow the “power imbalance” between

learners and educators (p. 8), and also for educators to have a flexible mindset. Cultural humility is relevant in education, especially when the learners' population is diverse, as seen in nursing education. Educators need to see learners as the nucleus of the learning experience and be flexible to accommodate any cultural differences that might inhibit learning.

For effective teaching to occur, educators need to identify and understand the diversity of students and modify their teaching strategies to encourage participation for effective learning since verbal communication is vital for social interaction during class activities. Sharaievska and Mirehie (2019) discussed the challenges that international students face in North American universities. The authors shared their experiences and stated that international students face many challenges and experience barriers in areas of culture, language, social life, and institutional structure. The authors approached their research using the theoretical foundation of social constructionism and the methodological approach of collective memory work. They recommended that "obtaining the highest possible level of English proficiency while still in their home country could significantly eliminate some stress of learning language" (p. 129). The authors' findings supported the fact that language can be a barrier to learning.

Zhai and Johnson, and Sandhu (2002 and 2007, as cited in Sharaievska & Mirehie 2019) argued that "international students face significant challenges adjusting to the U.S. educational system while dealing with cultural differences and language barriers" (p. 120). Language plays a vital role in learning. Ironside (2015), in her article on "Narrative Pedagogy," mentioned how one's thinking is shaped by language; educators must appreciate the language challenges diverse learners may have. Active learning needs to be advocated using collaboration since "Collaborative learning is thought to influence intellectual growth by requiring students to assume individual responsibility though interdependent work with others in achieving shared

educational goals" (Loes, Culver & Trolian, 2018, p. 936). Davis (2019) discussed the viewpoints of village-style learning (VSL) described by Hooks (2003), which “involves the practice of learning that creates a community environment which promotes modes of understanding, critical examining, and learning from concrete experiences” (p. 30). Nurse educators need to teach considering individual students’ zones of proximal development. According to Balakrishnan et al. (2012), in a study exploring the concept of ZPD to support moral education classroom reform, one of the assumptions of Zone of proximal development (ZPD) by Vygotsky is that “forms of higher mental functioning have their origins in social relations” and “Vygotsky stressed that students play an active role in their own development in the process of internalization” (pp. 232 - 233), this cognitive domain of learning is an aspect nurse educators need to consider, primarily as they teach adult learners.

Nursing Students as Adult Learners

Nursing students are adult learners, learning styles vary, and learners have diverse experiences. Educators have to adapt to using different pedagogy that addresses the learning needs of the population they serve. Ironside (2015) expressed that instead of educators maintaining a different and disengaged position and providing class activities where they give directives or feedback to the learners’ work, educators need to enable narrative pedagogy as an aspect of learners’ learning experience because in narrative pedagogy, “teachers commonly do the learning activities they assign to students and provide students copies of their work as a call to thinking,” meaning that “teachers co-create with students matter as much as what they teach (p. 85). Narrative pedagogy would create a more interactive learning experience that brings both learners and educators to the learning sphere.

Another critical factor is the use of technology in the delivery of content, and this is an area nurse educators need to master. Nurse educators need to be super users of technology so

they can be effective in teaching diverse learners who may be technology savvy. Bower (2019) described technology as a medium that people use to transmit information and through technology, people are connected, and many technologies are available to help teachers design instructions and use technology effectively, “technology is the means by which information is conveyed and people are linked together” (p. 1036), and “There are many technology-enhanced learning design frameworks that have been created to help teachers effectively deploy technologies in educational settings” --- and “educators design tasks in a way that helps students achieve the learning outcomes that will be assessed” (p.1039). Also, “Networked learning makes more interactive and productive learning possible by enabling learners to contribute and share their ideas online” (Bower, 2019, p. 1041). Trends in nursing education indicate the need to use educational technology to meet students’ learning needs. Technology has become one of the competencies nursing educators need to meet, according to Nokelainen et al. (2019, as cited in Smith et al., 2023), “Novel technologies and digital competence are viewed as vital in today’s role of nurse educators, therefore, this fits in this theme and with professional competencies” (p.7). So, to limit the generation gap between nursing students and educators, the use of educational technology in the classroom should no longer be an option but a necessity to break a learning curve that might be caused by absolute traditional teaching pedagogy.

Overwhelming Nursing Curriculum and Teaching Methods

According to Norris (2019), the nursing education curriculum is overwhelming, “content saturated seems to appear more in nursing curriculum literature than other areas,” and the “notion that there is “too much content” to realistically prepare practitioners is not peculiar to nursing, but is a common concern in many of the service professions” (p. 38). The question raised is, since the content is overwhelming and saturated, how do other service professions succeed in handling the situation? Nurse educators need to be comfortable using differentiated

instruction strategies and concept-based pedagogy. Fletcher, Hicks, Johnson, Laverentz, Phillips, Pierce, Wilhoite, and Gay (2019) described that a Concept-based curriculum is when content is built around concepts. Concepts are when principles are categorized in and organized in orderly and systematic ways; "Conceptual learning is a process in which learners organize concept-relevant knowledge, skills, and attitudes to form logical cognitive connections resulting in assimilation, storage, retrieval, and transfer of concepts to applicable situations, familiar and unfamiliar" (p. 9). Learners will learn in a conceptual way when they have been taught in a concept-based rich curriculum, "outcome that one would expect from a learner who has been exposed to a curriculum that uses a conceptual approach to teaching. Conceptual learning is the process that happens within the individual who interacts with the concepts" (Fletcher et al., 2019, p. 10). Instructing with differentiated instructional modalities would dissect saturated content such that learners can assimilate better in the short time frame that they have to fulfill their learning goals and achieve the ADN program outcome.

Hendricks and Wangerin (2017), in a qualitative study, discussed that the nursing curriculum is content-loaded, and a concept-based curriculum (CBC) would alleviate the burden of a content-saturated curriculum. In a concept-based curriculum, contents are arranged in domains and exemplars. Through studying the exemplars, students achieve a deeper understanding, the knowledge that they apply to complex situations in the clinical setting. The purpose of the study was to make clear barriers to concept-based curriculum and also provide ways for faculty to overcome the barriers. Misconceptions and myths about CBC were discussed. The study by Hendricks and Wangerin (2017) narrated the benefits of CBC and suggested ways curriculum should be changed and approaches to overcome the barriers to implementing and utilizing CBC. Hendricks and Wangerin (2017) stated that CBC provides new ways for nursing

students to organize and implement their knowledge. Also, nurse educators may need more educational preparation in curriculum development, and they primarily were taught lectures, making the pedagogy of reduced lectures and maximizing active learning strategies a challenge. Also noted as a reason faculty get discouraged in utilizing CBC is concerns about poor student course evaluation in institutions that value and use student evaluation when considering faculty promotion. Since students may rebel when asked to take responsibility for their learning when minimal lecture is provided. Faculty fear their role may not be recognized, and their contribution to student learning and success is insufficient when lecturing is reduced. According to the authors, activities that help students learn include concept mapping, compare and contrast, and task analysis. Students are effective learners when they can organize what is learned. The importance of active learning was stressed; a combination of active learning and an organized framework improved students' thinking and the application of acquired knowledge when faced with complex nursing circumstances. The study urged nursing education administrators to step in, provide needed resources, encourage educators, provide feedback, and commend those utilizing CBC to help eliminate barriers to CBC. Team teaching, mentoring, and gradual introduction of CBC were recommended. This study is relevant to nurse educators in the prelicensure ADN program because it provides information on teaching pedagogy nursing faculty can utilize to be effective educators. CBC will be an effective teaching methodology that will enhance learning in a diverse adult learners population.

Jaafarpour, Aazami, and Mozafari (2016) used a quasi-experimental study to evaluate concept mapping (CM) as a teaching pedagogy in the academic accomplishment of student nurses. Participants were nursing students; the study used a crossover design with two groups and a total participant of 64. Group one participants were told to develop concept maps on course

content for eight weeks after they were given two two-hour lectures on how to construct concept maps; the second group of participants did not do concept maps, but both groups had lectures for eight weeks. Both groups of participants were evaluated with a traditional multiple-choice quiz on the lecture content at the end of eight weeks. At the expiration of the eight weeks, the teaching pedagogy was switched among both groups of participants, and new content was taught for eight weeks as was previously done. The group who did not initially create any concept maps were given lectures for two hours on how to create concept maps. After the second eight weeks, another multiple-choice cumulative quiz was given to both groups. The study found that there was an increase in the mean score of both cumulative tests in participants who used a concept map compared to those who only took the quizzes after having lectures. Participants who were engaged in concept maps scored higher compared to the group not using concept maps. After the intervention was done for eight weeks, there was a progressive mean score increase in concept map development. According to the study by Jaafarpour et al. (2016), participants stated that constructing a concept map was more time-consuming, and "students' attitudes toward concept mapping showed that they were not satisfied with the time needed to be devoted for constructing maps" (p.132). Despite students' dissatisfaction with the use of CM due to timing, students need to be taught and encouraged to learn and use CM because "with respect to the major benefit of CM in improving teamwork, critique skills, and deep learning, it is essential to adequately train and encourage students on using concept map as a learning strategy" (p. 132), because concept mapping has beneficial effects on students' academic accomplishment, it improves teamwork, critical thinking, and higher level learning (Jaafarpour et al., 2016); hence, concept mapping should be encouraged despite the time constraint since its benefits outweigh its disadvantages of time consumption. Nurse educators need to use the concept model in educating nursing students

in associate degree nursing programs. They need to help students understand its importance and its long-term benefits in information retrieval.

In research conducted by Patterson, Crager, Farmer, Epps, and Schuessler (2016), the study set to change their curriculum from a biomedical-based model to a concept-based curriculum because the latter was content-saturated. The "concept-based curriculum was introduced as a curricular model that alleviates content saturation and prepares nurse graduates for the constantly evolving complex, and outcome driven health care systems of the future" Patterson et al. (2016), and "Concept-based teaching is a student-centered approach to teaching and learning that promotes critical thinking and facilitates student understanding of concepts instead of memorizing content" (Patterson et al., 2016, p. 467). The study unfolded a concept-based curriculum, which included a novel model for curriculum assessment developed a year after the new concept-based curriculum was implemented. The method used was the development of a conceptual grid to guide the evaluation of the new curriculum. According to the study by Patterson et al. (2016), nurse educators usually feel pressured to use additional content to augment the already saturated content-based curricula, and this practice makes it more difficult for learners to experience significant learning. Healthcare leaders and nurse educators are crying out for modification in how nursing students are educated, "leaders in health care and nursing education are calling for a change in how nurses are educated" (Patterson et al., 2016, p. 467). Three undergraduate nursing faculty members conducted a workshop for all faculty members on the development of concept-based curricula. The study noted that teaching utilizing the medical model was still going on simply because concepts and exemplars were not understood by faculty. In implementing concept-based curricula, concepts that relate orderly to emphasize learning and complex concepts are interwoven and connected throughout the

curriculum. Nurse educators need to make conscious efforts to learn and understand concepts and exemplars so they can effectively teach and impact that knowledge in their learners.

In Patterson et al.'s (2016) study, a conceptual grid was developed that aligned the course sequence they were taught in the academic levels of the program. All faculty were involved, and they polished it for many weeks. The arrangement of the concepts within the levels helped students comprehend and apply the concepts. The study also expressed that it was crucial to develop means for faculty to understand the application of concepts in the concept based-curriculum, "developing a strategy that faculty could use to understand how the concepts in a concept-based curriculum build on one another was critical" (Patterson et al., 2016, p. 470). The authors concluded that faculty were getting more comfortable with using a concept-based curriculum. There was no significant change in NCLEX pass rate when compared with previous results, but students' critical thinking skills and judgment in clinical settings increased exponentially "student scores related to critical thinking skills have trended upward since implementation of the concept-based curriculum ---- student performance in clinical settings, suggest that students are exhibiting better critical thinking skills at the bedside" (p. 470). Concerns of faculty "related to implementing this new concept-based curriculum was the potential for a decrease in NCLEX-RN pass rates" (p. 470). Nurse educators need to learn, stay engaged, own the curriculum, and apply concept-based pedagogy due to its positive effects on students' clinical judgment.

The qualitative study by Hensel (2017) evaluated the outcome of a concept-based curriculum in prelicensure nursing programs using Q methodology. Types of patients believed would be cared for by students from the traditional and concept-based curriculum during the early period of their nursing career were explored. The study evaluated the impact of curricular

change on program outcomes in producing efficient nurses who would be able to work in a diverse healthcare atmosphere. Nurses working in hospitals have declined since 2008, and there is a high demand for nurses, which warrants the need for nurse educators to produce graduates who would provide high-quality, safe, patient-centered care. Concept-based curricula are specially designed to transform nursing and be learner-centered so students can comprehend broader principles to apply in different situations. Some nurse educators have mentioned the absence of adverse program outcomes as an index of concept-based curriculum success. The author pointed out that the benefit of a concept-based curriculum was the reduction in the necessity to reeducate content in lifespan-specific courses. A purposive sample of two sets of students was used; the first sample was 34 students from the health alteration curriculum, and the second sample was 34 students from the concept-based curriculum. Findings from both groups were compared, and PQ-Method was used to analyze the data. Findings showed that participants from the health alterations curriculum perceived themselves as caring for a limited range of patients, unlike the participants from the concept-based curriculum. The study concluded that students in concept-based curriculum felt more equipped to work in diverse healthcare settings, and careful changes in the clinical education settings may influence the choice of a more diverse clinical setting, which would foster a uniform workforce. More research is needed to know the role of course design and sequencing in practice choice. The study conducted by Hensel (2017) is relevant because it discussed a concept-based curriculum. Nurse educators need to understand the pros of the curriculum so they can effectively apply it with diverse learners.

Learning Approach and Educational Context

A correlational research study conducted by Gustin, Abbiati, Bonvin, Gerbase, and Baroffio (2018) investigated the relationship between how students perceive their educational context and their approach to learning. Different educational contexts that differed by teaching

pedagogy used included the lecture or problem-based learning and traditional or integrated curriculum; these created three varying educational contexts to examine how students perceive their learning approach and educational context. The population used in the study was medical students. Sample distributions were 295 students in traditional lecture-based, 612 students in integrated lecture-based, and 487 in integrated problem-based learning curricula. A survey questionnaire was sent to participants online and in person. Questions included in the survey were students' perception of their learning atmosphere, social self-perception, academic self-perception, and perception of teachers and learning. The data was analyzed using the Cronbach alpha. The outcome of the study showed that there was a relationship between students' learning approach and their perception of educational context.

Students' educational context perception did vary; it was better with a problem-based learning curriculum, seconded by a lecture-based integrated curriculum, and lastly, by a lecture-based traditional curriculum. Problem-based integrated and lecture-based integrated curricula had the same deeper and fewer surface approaches. There was a deeper-than-surface learning approach in the traditional lecture-based curriculum. The relationships between the variables were low to moderate. The research findings further revealed the perception of good learning and academic self-perception in deep learning approaches. There was a diminished perception of good learning and marginal social self-perception in the surface learning strategy. The study concluded that an integrated lecture-based curriculum was equally beneficial in fostering a deep learning approach in students. It was significant to integrate the curriculum before deciding on a teaching format. This study about teaching pedagogy, learning approach, and curriculum is relevant to nursing education. Nurse educators need to understand and own their curriculum to aid them in choosing teaching methods. When nurse educators know and become familiar with

their adopted curriculum, they will be able to choose a suitable teaching pedagogy to teach effectively in a manner that suits their learners' needs.

In Hsu, Pan, and Hsieh (2016) study, the research background was that nurses who work in the neuroscience specialty needed to be sufficiently prepared. The researchers felt that efficient pedagogy in neurology education was relevant to encourage learners to get basic proficiency in caring for clients with neurological issues. The researchers used a two-group pretest and post-test experimental study design to show that there would be remarkable variability in students' competency, cognitive load, and learning satisfaction with outcome-based course designs that use concept mapping. Participants were randomly selected and placed in two to four clusters in experimental and control groups. It was a purposive sample of 213 sophomore college nursing students. Data collected were basic information, learning experience, and competency prior to intervention for both groups, and concept map score was collected after the intervention, and towards the end of the intervention, nursing competency data were collected. The data analysis used a two-tailed independent *t*-test. The study revealed that the use of concept maps, in addition to clinical cases, enhances learning outcomes by diminishing neuro-phobia in nursing students. Outcome-based education with the use of concept maps improved the abilities, assessment, and intervention strategies of nursing students, and with consequent patient outcome improvement. The study by Hsu et al. (2016) concluded that outcome-based methods that utilized concept map theory were more effective than concurrently didactic, objective-based methods in decreasing cognitive load and higher learning satisfaction. The above authors also pointed out that it is challenging to prepare nursing students to face heavy, content-loaded curricula and testing outcome circumstances. Hsu et al. (2016) addressed teaching pedagogy and nursing students and also acknowledged that the nursing curriculum is content-loaded. The

knowledge that the nursing curriculum is content-loaded and the awareness of the benefits of concept mapping and concept-based curriculum should motivate nurse educators to abandon the least valuable curriculum for a beneficial curriculum for the good of their diverse learners.

Pedagogy, Andragogy, and Heutagogy Strategies

Pedagogy is a form of learning whereby the learner is "dependent" on the educator for learning, andragogy is when the learner is "self-directed." At the same time, heutagogy is a "self-determined" form of learning that motivates learners to go beyond "problem-solving" by being proactive (Kaushal, Singh, Magoon, Kashav, 2022, p. 497). According to Zhao, He, Deng, Zhu, Su, and Zhang (2020), lecture is a popular traditional method of teaching needed to transmit core knowledge and concepts to learners, and research has shown that it is ineffective when critical reasoning skills are necessary in professional courses and higher education is required (p. 2). Knowles (1968, as cited in Kaushal, 2022) shared that Alexander Kapp, a German teacher, developed the term "andragogy" with the prediction of an adult as a self-directed learner with intrinsic motivation to learn. In 2000, Stewart Hase and Chris Kenyon introduced the theory of heutagogy, which is "self-determined learning". They described it as the extension of andragogy that requires "double-loop learning, -- capability development, learner-determined, learner-managed approach, non-linear design, and getting students to understand how they learn" (Agonács & Matos, 2019, p. 224).

Bansal, Jain, Sharma, Sharma, Jain, and Madaan (2020) conducted a comparative experimental questionnaire-based study on second-year medical students to examine the effectiveness of pedagogy, andragogy, and heutagogy. The students were taught about anticancer drugs using the above three teaching methods, after which the researchers collected and evaluated the student's opinions about the three teaching strategies. The findings revealed that andragogy and heutagogy were more effective than pedagogy. The study concluded that

pedagogy only draws learners' consciousness to the knowledge and skills learners require, andragogy enhances learners' competence in trained skills. In contrast, heutagogy enhanced learners' capability in all conditions through the use of "creative, cognitive, communicative, collaborative and digital skills" (Bansal et al., 2020, p. 6). According to the study's conclusion, andragogy and heutagogy are the most effective teaching strategies that can produce competent professionals.

Andragogical strategies can facilitate learning in nursing schools when learners are at a high level in the nursing program. Curtis, Ryan, Roy, Simes, Lapkin, O'Neill, and Faithfull-Byrne (2016) conducted a study using nursing students as participants. The study evaluated students' peer-to-peer facilitated experiences in a mid-level fidelity simulation. Subjects were nursing students in the second and third year (N=637) who completed a 16-item 6-point Likert scale questionnaire post-simulation. Participants recorded high self-confidence in nursing skills (M = 4.14, SD = 0.92). A tremendous satisfaction level was received in the process of the peer-to-peer-led simulation (M = 4.42, SD = 0.93). The peer-to-peer teaching strategy is efficient in actively engaging learners, with great potential for broad application of the knowledge. Barriers to facilitating the populous cohort to learn actively can be overcome by using peer-to-peer teaching. The study by Curtis et al. (2016) is essential in nursing education, and nurse educators could adopt this strategy in their didactic classes, not only in simulation, as this is effective in adult learning.

Generational Difference and Pedagogy Concerns

Earle and Myrick (2009) investigated generational diversity in nursing education. They referenced Walker et al. (2006) study findings that though Generation X and Y are technology savvy, both indicated a preference for face-to-face traditional educational practices. The preparation of faculty in Generation X and Baby Boomers regarding their knowledge of

intergenerational diversity and its significance in areas of pedagogical implementation needs to be revised in the existing literature. Universal nursing shortage calls for the need for nursing curriculum changes that would consider intergenerational differences between learners and faculty with consideration to the unique and diverse learning styles of learners. There is a need for nursing faculty to adopt pedagogy that favors the preference of the population they teach. Nurse educators must be prepared and committed to making innovative revisions of pedagogy. Traditional dialectical small discussion groups in the classroom, preceptorship models for clinical experience, human-patient simulators in skills classes, and student-centered engaging activities are among the teaching-learning pedagogy recommended. Nursing faculty need to be aware and knowledgeable about generational disparity and discourse to mitigate between preceptors and nursing students as they gain clinical experience through preceptorship. Earle et al. (2009) concluded that traditional pedagogy could be more effective in learners in the Millennial generation. Change is imperative in nursing education pedagogy to suit the learning needs of intergenerational diversity of learners to get and sustain Generation X and Y in the nursing profession in this era of global nursing shortage.

Williams (2019) reviewed literature from 2015 to examine the educational needs of Generation Z (Gen Z), forecast how Gen Z will be remarkably different from previous generations, and called on nurse educators to be aware and prepared to handle the teaching and learning needs of this generation. Gen Z, according to Williams (2019), are people born after 1990, with a population of 72.8 million worldwide and 25% of the United States population. It is predicted that Gen Z will alter education, but nursing will not be excluded. At the moment, the number of Gen Zers that will be in nursing schools is still being determined as studies about career choices are still unfolding. The researcher further argued that 72% of Gen Z in college

believe in their ability to design their course of study, and Gen Z are portrayed to be technology savvy and constantly adaptable to changes in technology. Preferences for communication include texting, Twitter, and Snapchat. Compared to many nursing faculty, this technology ability is limited due to generational differences as many nursing faculty are Baby Boomers. The generational gap in technology and academic needs is concerning to 92% of Gen Zers as their expectations for their education are technology rather than books, independent learning followed by collaborative learning through group discussion, and team dynamics. Williams (2019) study also reports that Gen Zers read over 30 minutes per day with a greater preference for storytelling than book reading. The implications of this generational difference between Gen Z and nursing faculty call for nursing education reform, especially in areas of technology, pedagogy, and andragogy. Nursing education administrators should provide technology resources to faculty as well as professional development to be well-equipped to meet the teaching and learning needs of Gen Z. Nursing educators need to adapt, embrace, and have a passion for storytelling for student engagement. The American Association of Colleges of Nursing (AACN), the voice of academic nursing, included informatics and technology as core competencies for professional nursing education as essential for nursing education in the 21st century. It stated the importance of technology as a means to improve care delivery in an efficient, high-quality manner that fits professional standards. Technology also is used to support critical thinking that impacts patient outcomes positively. As part of the new model for nursing education, AACN urged nursing education to adapt to future changes occurring in nursing education (AACN, 2021). Technology is essential in nursing education and nursing clinical practice. The use of educational technology applications serves adult learners well due to the numerous advantages it has in educating diverse adult learners.

Hidden Curriculum in Nursing Education

The generational gap in Gen X, Y, Z, and nursing faculty, who are mostly Baby Boomers, invites consideration for currere, a hidden curriculum in nursing education, as Williams (2019) reports that Gen Z "prefer storytelling to reading a book --, teachers should embrace technology and be passionate to share stories to keep students engaged" (pp. 59 – 60). Currere is a method used to describe a curriculum that links academia and life experiences. The Latin word "currere" was developed by "William Pinar," according to Suarez (2019), it is "a process of self-reflection in which the individual becomes the subject of study," and to describe currere, "Pinar defines it as the study of the educational experience" Pinar (1975, as cited in Suarez, 2019, p. 137). Pinar (2011) mentioned four implications of "currere," which included "the regressive, the progressive, the analytical and the synthetical" (p. 35). The educational and life experiences concerned are that of both students and educators, and these experiences can influence and impact both parties' perceptions and learning. While there are four implications of currere, the aspects of currere considered and focused on in this study are the regressive and progressive phases in order to explore nurse educators' experience of autobiography and also expose autobiography as a hidden curriculum in nursing education. According to Pinar (2011), in the regressive phase, someone "conceived of ones apparently past lived or existential experience as data source" (p 36). The individual revisits the past, magnifies it, and updates one's memory. Whereas, in the progressive phase, one imagines and project into the future, "the future inhabits the present. Meditatively, the student of currere imagines possible futures" (p. 36). Currere:

> reconceptualized curriculum from course objectives to a complicated conversation with oneself, --- Curriculum theory asks you, as a prospective or practicing teacher, to consider your position as engaged with yourself and your students and colleagues in the construction of a public sphere, a public sphere, not yet born, a future that cannot be

> discerned in, or even thought from the present. So, conceived, the classroom becomes simultaneously a civic square and a room of one's own. (Pinar, 2011, pp. 37-38)

The two phases of currere, "the regressive" and "the progressive," are differentiated and categorized based on the role played. Educators practice regressive moments by reflecting on their learning and life experiences and using these experiences in teaching, understanding, and appreciating students' reactions and challenges. While students learn from an educator's autobiography, they practice the progressive moments by thinking about the uncertain future. Students experience the "progressive step" of "currere" as they look "toward what is yet the case, what is not yet present" if they will ever succeed in nursing school (Pinar, 2011, p. 36). Students also get to the "analytical stage" as they analyze "both past and present" (Pinar, 2011, p. 36), as they listen to an educator's autobiography and simultaneously face their studies. While a "practicing" educator implements the hidden curriculum of Pinar currere autobiography, looks at past experiences and plans on how to explore those experiences and knowledge using the "method of currere reconceptualized curriculum from course objectives to complicated conversation with" the educator "as a private intellectual" (Pinar, 2011, p. 36), to help students succeed. Students, after listening to the educator's testimonio and autobiography, wonder, "How is the future present in the past, the past in the future, and the present in both?" (Pinar and Grumet (1976, as cited in Pinar, 2011, p. 36). Curriculum theory expects a practicing educator to engage herself. The students in a civic place classroom, which becomes the educator's private room, build a "public sphere not yet born, a future that cannot be discerned in or even thought from, the present" and utilize the "moment of synthesis" (Pinar, 2011, p. 37) to assist the students comprehend voluminous nursing content to accomplish their academic goals. With currere, Nursing students from all generations can benefit from an engaging curriculum.

Autoethnographic narrative with currere is a self-reflection exercise that helps educators disgorge their biases and discern the world, which results in an empathetic teacher (Suarez, 2019, p. 138). According to Pinar, we "cannot understand teachers and teaching--- until we learn to study ourselves and learn from ourselves, or become students of ourselves" Pinar (1975, as cited in Suarez, 2019, p. 138).

Autobiography Breaks Students and Faculty Generational Gap

Autobiography by teachers was mentioned by Moreira (2016) as "professional narratives," "narrative inquiry --- the study of personal experience and of teacher thinking" Clandinin & Connelly (1994, as cited in Moreira, 2016, p. 666), and teachers can connect their stories without leaving the classroom. Teaching is critical and is inculcated in "micro-realities of teachers' daily lives as their decisions affect the daily lives and the future of their students" (p. 665). Lindsay (2011) expressed how "curriculum-building is inclusive of a teacher's autobiography" (p. 237). By narrating her experience with her dad in hospital and home, she linked her experience to the "caring curriculum for nursing education, -- and perspectives on the relationship between students and teachers as co-learners – and the importance of inquiry into lived experience shapes our philosophy and the curriculum" (pp. 237-238).

According to Lindsay (2011) "there are multiple ways of knowing; the knower and the known are intimately connected; experience is a source of the construction of identity and knowledge (p. 238). The application of "narrative inquiry" helps "curriculum building," according to (Lindsay, 2011, P. 238), who concluded by stating that she found herself "recommitted to the values of human science in" her "teaching-learning praxis" (Lindsay, 2011, p. 243). The use of autobiography is shown to help nursing students understand the content better, as educators use live experiences to help students conceptualize content in real-time. The

application of autobiography theory in the ADN program curriculum will ease the burden of learning in pre-licensure nursing programs.

According to (Pinar, 2011), “autobiography is the pedagogical political practice for the 21st century” (p. 36), and many educators have used autobiography as a hidden curriculum in classes in the prelicensure nursing programs.

Scholarly Significance of Currere and Autobiography

Autobiography, when practiced in an ADN program, would be an essential hidden curriculum that could improve student learning experiences and success. Autobiography is significant, as evidenced by Eastman and Maguire's (2016) research on the use of “critical autobiography” by professionals in other fields who are doctoral students to improve writing by “putting the self at the centre of the writing” and also using “autobiographical perspective as the nerve centre of their research” (pp. 375-358). Eastman and Maguire (2016) study showed that critical autobiography improves writing confidence and criticality.

Through the use of “Currere as “a process of self-reflection in which the individual becomes the subject of study,” the “study of the educational experience” (Suarez, 2019, p. 138) makes available means that “students of curriculum –study the relations between academic knowledge and life history in the interest of self-understanding” Pinar (2012 as cited in Suarez, 2019, p. 138).

Part of the Bachelor of Science in Nursing:

> curriculum is the development of students’ capacity to think and act as a nurse in order to understand healthcare situations and in order to choose nursing actions. -- we focus on the personhood of the student-nurse and we expect a primary concern for the students to be the personhood of the patient. (Linsay, Kell, Ouellette & Westall, 2010, p. 274)

Linsay et al. (2010) discussed the importance of reflective thinking and writing in nursing curriculum and stated that "We need integration of personal transformation in nursing curriculum ---The study of the universe out there is also seeing patterns in here" Newman (2008, as cited in Linsay et al., 2010, p. 243), which could be translated that autobiography be embraced in nursing curriculum since students could learn from educators autobiography in class what they are likely to experience in their academic journey and subsequently, nursing practice in the community. Currere makes reflective thinking possible; students use the past and present to imagine the future.

Exploring the use of currere and autobiography in education has helped practicing educators conceptualize the importance of reflection better and also made it more meaningful for educators to implement autobiography as a hidden curriculum in classes in the ADN program. Due to the generational gap between nursing students and nursing faculty, autobiography is a teaching and learning praxis to consider since the application of autobiography theory in the ADN program curriculum will likely ease the burden of learning in pre-licensure nursing programs. Literature has discussed the teaching preparation of nursing educators, the diversity of nursing students, challenges faced by educators, mentorship and support systems of educators, and the different teaching methodologies educators adopt to address the learning needs of nursing students. This study used a quantitative approach to investigate the teaching preparation of nursing educators. It recommended the ways educators can approach teaching to eliminate educator burnout, reduce educators' attrition rate in the face of nurse educator shortage, and improve the NCLEX-RN pass rate in the ADN programs.

Summary

This chapter discusses the struggles of novice nurse education when the transfer from clinical settings to academic environments. The literature reviewed included topics on academic expectations and teaching preparation of nurse educators, ADN nursing curriculum, diverse learners, use of technology, mentorship, professional development, and faculty support systems. The complexity of nursing educators' role in the academic environment was discussed. The AACN sets high expectations for nursing educators and calls for preparation in pedagogy and curriculum. Preparing to teach not only in areas of content but also in curriculum and pedagogy for effective and efficient teaching is part of nurse educators' call. There is a decline in advanced practice nurses with nursing education specialty, and a Ph.D. does not specifically prepare students for teaching but for research study. Professional development is a helpful adjunct in preparing educators for teaching. Mentorship is shown to enhance teaching effectiveness as it provides opportunities for observational learning and modeling. The existence of diversity in nursing schools adds to the challenges of teaching adult learners. Educators need to understand and appreciate diversity, embrace cultural humility, and teach using a methodology that meets individual students' learning needs. Nursing students are adult learners, and active learning, educational technology, and the use of narrative pedagogy create rooms of interactive learning experience. The nursing curriculum is overwhelming, and the content is saturated. Hence, it would be practical to use differentiated instructions. Learning approach and educational context can influence learning and teaching; the use of concept mapping is effective when teaching complex concepts. Andragogical strategies facilitate learning, and peer-to-peer evaluation is practical when applied to adult learning. There is a generational gap between nursing educators and nursing students, and the educational needs of students, students' learning preferences, and

how educators are taught in nursing school are different. Using autobiography, a hidden curriculum as pedagogy narrows the students and faculty's generational gap.

CHAPTER III

METHOD AND RESEARCH PROCEDURES

Study Design

This study used a quantitative methodology that used a survey design to examine the teaching preparation of nurse educators in the ADN program in the southern tip of Texas, in the United States of America. The principal investigator developed a twenty-two-question questionnaire and sent a virtual survey to the criterion sample to investigate the relationships between nurse educator's teaching preparation and choice of teaching methods. Data collection was from February 2023 to April 2023. The philosophical assumption of positivism was employed to support the choice of methodology used in the study.

Paradigm Discussion and Selection

A quantitative method research approach that used a survey instrument and the philosophical assumption of positivism was used in this study. Positivism, also known as "empiricism," was first invented by a French philosopher named Auguste Comte in the nineteenth century (Benton & Craib, 2011, p. 22). Positivism is based on the concept that social events or occurrences should only be believable if they have concrete, observable evidence. Abstract phenomena should not be relied on since they have no observable trait, and abstract beliefs, emotions, and thoughts are unacceptable. Positivists do not believe in a theological concept, which is believing in the existence of spirits, since this sort of belief is without physical evidence. Positivists believe in modern science because science deals with evidence and data.

Positivism is a theory of knowledge used in empirical studies that believes in objective data and scientific methods, and it believes that "Seeing is believing." Scientists use this theory to substantiate their facts and research findings (Benton & Craib, 2011, p. 4). Nursing is a caring, hands-on profession, and its practice is evidence-based. This study is on Nursing education, which is an area in nursing science that prepares learners to qualify for the National Council Licensure Examination (NCLEX) upon graduation from nursing school, and after successfully passing the NCLEX, obtain initial licensure to practice professional nursing in the United States. It is meaningful to employ positivism as a research paradigm to guide this study since its philosophical belief is based on evidence and observable results. The Board of Nurse Examiners required pre-licensure nursing programs to have a minimum of 80% first-time NCLEX test takers' pass rate to be in good standing. When nurse educators perform their roles well, the NCLEX outcome will be evident since educators' roles are vital in contributing to students' success.

Positivist advocates the "use of the natural sciences as the model for work in social sciences" (Benton & Craib, 2011, p. 23), and positivity assumption believes that social scientists in academia may gain more authority and representation in higher education if they present their opinion and pervasive assertion "about reliability, objectivity, and usefulness of the knowledge they have to offer" with scientific evidence and data (Benton & Craib, 2011, p. 23). Positivism beliefs in physical evidence and data were the reasons this paradigm was chosen to guide this quantitative research study. Data would be collected and analyzed to come up with results that would be evidenced based on the data collected from participants in the study. This study investigated the teaching and transition experiences of participants. Dewey's framework was considered when looking into experiences.

Dewey's framework is based on experiential learning through repetition and the process of "trial and error," which Dewey calls "habits," and it also involves inquiry into discerning the correlation between actions and consequences (Kaushik & Walsh, 2019, p. 5). Nurse educators' clinical experiences and any gap between this experience and the delivery of instruction were examined. An inexperienced nurse educator may be operating on Dewey's concept of "trial and error," which may lead to inefficient instructional strategies and instruction delivery. Using positivism to guide this study would create the possibility of collecting and analyzing data obtained through a survey from the chosen population, and the quantitative data obtained through a survey in this study would address the research problems with the intent to create a deeper understanding of the problems in nursing education, and recommend possible ways to address the problems. The issue of nurse educators' teaching strategies and the influence or the relationships between nurse educators' preparation and any gap in delivering instruction would be better understood. What works for veteran nurse educators might be considered for novice nurse educators to adopt. It was believed that the results from this study would identify any gap in teaching preparation and delivery of nursing content between veteran and novice educators.

Ivankova (2015) argued that pragmatism denounces dogmatism and endorses the truth as "what works best" in better understanding research problems irrespective of research methodology (p. 16). Hence, positivism was used as the research paradigm that backs this quantitative study so that the study findings would provide concrete empirical evidence. By answering the research questions, the outcome of this study would help recommend what works best in ways nurse educators prepare academically and in pedagogical, andragogical, and heutagogical strategies to deliver nursing content to diverse nursing student populations in the ADN program.

Purpose of the Research Study

The purpose of this study was to examine the teaching preparation of nurse educators in the ADN program and its association with instruction and content delivery. Instruction strategies and the relationships between nurse educators' teaching preparation and choice of content delivery strategies were examined. Nurse educators' choice of instruction strategies and the use of technology in the classroom were examined. The perception of nurse educators about the support they get from nursing education administrators and the extent of the challenge they experience as they transition from the clinical setting to the academic environment were identified. This study attempted to identify, determine, and suggest learning theories and instructional strategies for nurse educators in the ADN program. It made recommendations for nursing education administrators to consider supporting nurse educators in performing their teaching duties.

Research Questions

This study examined the teaching preparation of nurse educators and content delivery methods and attempted to address questions about the teaching readiness of nurse educators, the pedagogical, andragogical, and heutagogical practices, as well as the use of differentiated instruction strategies utilized by nurse educators in the ADN program. The research questions this study attempts to address include:

1. What are the relationships between the teaching preparation of nurse educators and the choice of instruction methods in the ADN program?
2. What are the relationships between nurse educators academic background and the use of different teaching methods in the ADN program?
3. How is the transition of nurse educators from the clinical setting to the academic environment?

Site and Sample Selection

Participants

Participants were selected from the four colleges in the Rio Grande Valley (RGV). The RGV is located in the southern tip of Texas, in the United States of America. The target population was nurse educators in the ADN program in the four colleges in the RGV. Participants included full-time and part-time nurse educators in the four ADN programs from the colleges mentioned earlier. Criterion sampling was done, and the criteria for selection were that participants must hold a minimum of a master's degree and must have worked in clinical settings prior to transitioning to nursing education. The sample was taken from the target population at the four ADN programs in the RGV.

Sampling

Sample selection is one of the essential parts of a research study. Gay, Mills, and Airasian (2012) discussed different types of sampling for research studies and explained that criterion sampling is when a researcher selects samples that "meet some set of criteria or have some characteristic" (p. 147). This study used criterion sampling because participants needed to meet specific characteristics to participate. The sample size for the study was forty-three nurse educators teaching in the ADN program in the four colleges in the RGV. However, the survey was sent to thirty-seven participants whose email addresses appeared on their school website. Thirty-four participants accessed the survey, but thirty (n = 30, 88.2%) completed the survey, while four (n = 4, 11.8%) accessed the survey but did not respond to the survey questions.

Criteria

Nursing programs that offer entry-level nursing education include the Vocational Nursing (VN) program, the ADN program, and some Bachelor of Science in Nursing (BSN) programs. The nursing program included in this study was the ADN program only. Staff members and

students in the ADN program were not included in the study. The location of the study was limited to the RGV. The focus was on this area only since there was no existing literature to indicate a similar study existed in the area. Due to time factors, the study was extended to only some of the state of Texas and nationwide.

The sample was taken from nurse educators teaching in the four ADN programs in the RGV. The criterion sampling method is suitable for the study because the participants had the characteristics the investigator was considering for the study, characteristics included that the participant should be teaching in the ADN program, have worked in a clinical setting, have a minimum of master's degree in nursing and have experience and knowledge about the study problem.

The Researcher's Role

The researcher obtained an Institutional Review Board (IRB) approval from the University of Texas Rio Grande Valley (UTRGV) prior to sending out online survey questionnaires to the selected sample. After obtaining the IRB approval, the researcher accessed the websites of the four ADN programs selected for the study, obtained the email addresses of the selected sample for the study, and sent out an online survey questionnaire via email. The researcher contacted the program administrators of the four ADN programs chosen for the study via email. The purpose of the study and the roles of participants were included in the email. Contact with the administrators was made so that the administrators could help reinforce to participants the need to participate in the study. Although four institutions were selected for the study, the researcher intends not to generalize the outcome of the study. The development of the survey instruments, test of validity and reliability, analysis, and interpretation of the data were done by the researcher.

Data Collection Method

Instrument

This study is a quantitative research study that used a survey design. An online survey questionnaire was used to address the research questions and to collect data for analysis to use in drawing statistical conclusions. Considering the population studied, the instrument was in the English language. Questionnaires with a 5-point Likert scale were used, and the survey was prepared using Qualtrics. Consent was obtained from participants, and the consent was on the first page of the survey. Participants consented before they were able to proceed to the next page to answer questions on the questionnaire. Various positive statements were included in the 5-point Likert scale. Information on students' grades was not collected. Each statement was assigned a point value. The number of items on the questionnaire was twenty-two. Among the items included in the questionnaire were the following constructs:

1. Nursing educators' demographics
2. Years of experience in the clinical setting
3. Years of Teaching experience
4. Academic preparation
5. Choice of teaching methods
6. Knowledge of the ADN program curriculum
7. Classroom management
8. Use of educational technology in the classroom
9. Participants' perception of students' likeness when educational technology was used in the classroom.

10. Participants' likelihood of recommending colleagues from the clinical area to teach in the ADN program.

The instrument used in this study was given to a team of six nursing education experts to validate, and the validity was calculated using the Content Validity Index (CVI) before being administered to participants. The five instruction knowledge and two academic preparation questions on the questionnaire answered research question number one, one question on the choice of teaching method, and five questions on educational technology answered research questions number one and two; the questions on technology indicated how well educational technology was used as a teaching method in the ADN program. One question on the item that addressed educators' transition experience answered research question number three. One question on curriculum knowledge, years of clinical experience, and classroom management was related and was used to assess the influence of experience on those items/constructs on the questionnaire, while the demographic questions were to identify educators' age and gender.

Validity and Reliability Features

Validity and Reliability

The principal investigator developed her instrument specifically for this study, and the validity was established using the content validity index (CVI). According to Ivankova (2015), Validity and Reliability are traditionally used to evaluate the quality of quantitative data. The above author defined validity as a way of testing if an instrument actually measures what it was meant to measure. Validity assesses the relevance and fitness of the items to the study purpose and research questions. For the overall validity assessment, three major validity are interrelated and interconnected, and these are the content, criterion, and construct validity. Sürücü et al. (2020) agreed that among the methods used to determine content validity is “taking expert opinion,” and this involves the process whereby the researcher(s) consult experts in the field

intended to be studied to evaluate the content and appropriateness of each item in the developed instrument prior to administering the instrument to participants, to ascertain that the instrument would measure what it was intended to measure (p. 2698). This study followed the process of determining content validity discussed by Sürücü et al. (2020) by sending the twenty-two-item questionnaire to nursing education experts to validate the instrument prior to the items being administered to the actual participants. This substantiated the relevance and the accuracy of the concepts measured in this study. Since the principal investigator developed the instruments used for this study and tested the instrument for validity using a team of nursing education experts, a pilot study was not done. The instrument was also checked for Reliability using Cronbach's alpha coefficient.

Reliability is a statistical measure used to measure the internal consistency of constructs in a research study. Reliability tests the extent to which a test measures what it intended to measure consistently, including internal consistency, test-retest, and equivalent forms reliabilites. Also, Reliability gives assurance that if the instrument is administered in a similar research study, it will yield the same data or result (Ivankova, 2015, pp. 260-261). According to Sürücü & Maslakci (2020), Cronbach's alpha coefficient is the most popular, preferred, and acceptable method of testing internal consistency used by researchers. Its value is between 0 and 1, and as it gets closer to +1, its internal consistency is stated to be high. Cronbach's alpha coefficient was developed by "Cronbach (1951)" (pp. 2713 - 2714). Sürücü et al. (2020) argued that Reliability is the

> stability of measuring instruments to give similar results when applied at different times, ---- a strong positive correlation between the results of the measuring instrument is an

> indication of Reliability. The Reliability of the measuring instrument is an essential consideration for the results of the study to be healthy. (p. 2707)

Construct Reliability for this study was assessed using Cronbach's Alpha. So, to check the Reliability of the instrument, five items were grouped together to measure participants' instruction knowledge/preparation to teach, three items measured the use of technology, two items measured participants' transition experience from the clinical setting to an academic environment, two items measured participants curriculum knowledge while two items measured participants confident teaching in the ADN program. SPSS was used to analyze the data to check the Reliability of the instrument through its internal consistency using Cronbach's Alpha Coefficient.

Sürücü et al. (2020) classified and interpreted the Cronbach's Alpha Coefficient and shared that the Cronbach's Alpha Coefficient with ≤ 0.9 internal consistency scale is high, ≤ 0.7 $\alpha < 0.9$ has internal consistency, $0.6 \leq \alpha$ 0.7 internal consistency is acceptable, $0.5 \leq \alpha < 0.6$ internal consistency is weak, and $\alpha \leq 0.5$ has no internal consistency (p. 2714). Sürücü et al. (2020) further argued that the absence of consistency could be due to limited sample size and a minimal number of items or expressions in the category, and when participants may not have adequately read the item prior to responding, or they indicated their response randomly. The reliability testing result conducted on the constructs in this study revealed that Instruction knowledge/preparation to teach with five items ($\alpha = .690$) is acceptable, use of technology with three items ($\alpha = .782$) has internal consistency, clinical and teaching experience, and age with three items ($\alpha = .752$) has acceptable internal consistency. The curriculum knowledge with two items ($\alpha = .603$) and confident teaching in the ADN program with two items ($\alpha = .572$) has weak consistency. The overall Reliability of all constructs on the survey had a Cronbach's alpha

coefficient of .828, indicating high internal consistency. The reliability results are presented in Table 1.

Table 1

Reliability of constructs

Constructs	Number of items	Alpha (α)
Instruction knowledge/Preparation to teach	5	.690
Use of technology	3	.782
Clinical and teaching experiences, and age	3	.752
Curriculum knowledge	2	.603
Confident teaching in ADN program	2	.572
All constructs on the survey	16	.828

Triangulation using information from multiple sources was done through an extensive literature review to investigate the identified study problem, view a complete picture of the study problem, support the purpose of the study, and establish the trustworthiness of the overall study. Prior to commencing the study, ethical consideration was made to protect the rights of participants.

Ethical Considerations

In conducting human subject research, ethical consideration is essential and should be maintained. Morrow and Richards (1996, as cited in Roni, Merga & Morris, 2020) defined ethics as “a set of moral principles and conduct” (p. 33), and due to the remarkable power inequality between research subjects and researchers in the educational field, ethical consideration becomes even more critical to protect research subject who is at the negative part of the inequality. Prior to sending out the online survey to participants, the principal investigator sent materials intended for use in this research to the Institutional Review Board (IRB) at the University of Texas Rio Grande Valley (UTRGV) for review. After the IRB review process was completed, IRB approval was issued to the principal investigator. Upon obtaining the IRB approval, the online survey was dispatched to participants. Since the survey was virtual, obtaining IRB approval from

participants' institutions was irrelevant and unnecessary. The survey was anonymous to protect the privacy of participants. Neither the participants' name nor their institutions were disclosed.

Data Collection Procedure

Participation in the study was voluntary, and data was collected only from those nurse educators who were available through active employment. Data was collected simultaneously from all the four participating institutions. The survey was sent out to all the nurse educators whose emails appeared on their respective institutions' websites, regardless of their employment status (be it part-time or full-time). This was to provide comprehensive information about the clinical and teaching experiences and the educational preparation of the study population.

The survey questionnaire given to all the participants in the four institutions had the same set of questions. Participants were asked to indicate whether they *strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree* with the items on the survey. Items on the questionnaire included but not limited to questions on demographics, educational qualification, years of previous clinical experiences, and teaching experiences. Completion of the survey was estimated to take about ten minutes.

The principal investigator went to the website of the four institutions within the geographic area selected for the study to get the contact information of the participants. The contact information was the email address of the participants. The survey was sent to thirty-seven participants after the investigator received IRB approval. Two weeks after the initial dissemination of the survey, a reminder was sent twice at two-week intervals to remind participants who may still need to complete the survey the first time to participate in the study. Since this was an anonymous study, there was no way the investigator could know who responded to the survey. So, the reminder email was sent to the same thirty-seven participants who got the initial email, with instructions

that those participants who had already completed the survey should not complete it a second time but could forward it to nurse educators who met the study criteria stated on the email. The survey was anonymous, as no one could know who participated or who did not participate in the study. Out of the thirty-seven participants, thirty responded (92%). At the completion of the data collection phase, the data was managed with utmost confidentiality.

Data Management Strategies

1. The survey was unanimous, with neither the participants' names nor institutions.
2. Numerical values were used for coding the survey responses.
3. After the survey, data was collected, responses were analyzed, and data collected from the survey was stored in an encrypted flash drive in the researcher's home. Only the researcher had access to the flash drive and the documents.
4. The researcher intends to shred and destroy all the data at the end of five years after the completion of the research.

After the survey data collection was completed, the data was analyzed.

Data Analysis Strategies

Data Analysis Procedure

The data analysis procedure followed the steps recommended by Creswell & Plano Clark (2018), which included preparing the data for analysis, exploring the data, analyzing the data, representing the data analysis, interpreting the results, and validating the data and the results (pp. 210-212). Once the data was collected, it was organized, transcribed, and analyzed. Levels of measurement were considered in organizing the data. Allanson and Notar (2020) discussed how to categorize data, the four levels of measurement, and the importance of knowing each level of measurement because its knowledge helps researchers categorize data appropriately to decide the

suitable statistical methods to use and for accurate data interpretation. The four levels of measurement mentioned by the author included nominal scales like gender; ordinal scales such as Likert items; interval scale, which is helpful in calculating mean, median, mode, and standard deviation; and ratio scale, for example, age. The above author further emphasized that the ratio scale is "considered the highest level of measurement because it satisfies all four levels of measurement, contains the most information about the data values, and includes the presence of zero as a starting point" (Allanson & Notar, 2020, p. 381). All the data collected from participants in this study were analyzed at the same time. There was no separation of employment status to match or compare responses. Also, institutions were not identified in the survey; hence, this study was unable to discuss specific institutions' data or responses. Considering the purpose of this study, research questions, and the study design, the statistical tests that were used included both descriptive and inferential statistical tests. Some of these statistical tests are discussed later. The choice of statistical test was relevant to this study because raw data collected through the survey needed to be analyzed efficiently and carefully to come up with results and interpretations that drew meta-inferences to the study problem. The results from this study outcome were used to determine the recommendations made to nurse educators and nursing education administrators at the conclusion of the study.

Descriptive Statistics Analytical Methods

Ivankova (2015) discussed various descriptive statistics approaches that can be used in research studies and described the usefulness of descriptive statistics in analyzing data for a quantitative research methodology (pp. 220-221) that this study would adopt to identify trends and patterns in quantitative data. It would summarize information from quantitative data for easy understanding. Descriptive statistical tests also provide information about the relationships

between the independent variable (faculty education and teaching preparation) and dependent variable (instructional strategies) used in the study. Descriptive statistical tests would introduce general and initial information in the study in an organized manner using graphs, tables, and charts to show central tendency like the mean, mode, and median, and the frequency of occurrence that would be displayed to show the characteristics of nurse educators, such as age and gender, and academic qualification. With the use of descriptive statistics, measures of variability are considered in determining how well the study outcome can be generalized, and the measures of association between independent and dependent variables were determined.

Inferential Statistics Analytical Methods

According to Ivankova (2015), inferential statistics is vital for making predictions and drawing conclusions from available data collected from a chosen population in a research study. The inferential statistical method used for this study included continuous data analysis and categorical data analysis techniques, which include Regression (simple, multiple, and logistic Regression), Analysis of variance (ANOVA) as identified by (Ivankova, 2015, pp. 221-231), these statistical methods are described in the next paragraph. Inferential statistical test results were helpful in making assumptions and reaching conclusions about the relationship between the study population (nurse educators) academic and teaching preparation, teaching readiness, and instructional strategies. Inferential statistics also addressed the questions of whether there were relationships between nurse educators' teaching preparation and instructional strategies and other variables.

ANOVA, Regression, Spearman's correlation, and t-test

This study used a survey for data collection. The concept of regression has been discussed by many authors (Fang & Hong, 2020; Galton, 1886; Yule, 1897), and Fang et al.

(2020) argued that Galton first introduced regression analysis in biology and was extended later to statistics by Yule. According to the authors, the "variable of interest is called the response variable, or the dependent variable, and the other variables are named as the explanatory variables, or independent variables, or predictors" (p. 2655), and the regression model was described as a measure used to quantify relationships between independent variables and dependent variables. Two types of regression exist depending on the presence or absence of a pattern in the relationship between the dependent and independent variables computed. A parametric regression model is applied when a pattern exists, and a non-parametric regression model is used when there is no precise pattern (Lestari, Fatmawati, Budiantara, & Chamidah, 2018, p. 1). Regression analysis was used in this study to identify variables that predicted participants' comfort with technology use in the ADN program.

Spearman's correlation was another statistical measure used in this study. According to (Ali Abd Al-Hameed, 2022), Spearman's correlation coefficient is a statistical procedure that shows a linear relationship between two variables, and it also measures the strength and direction of the relationship between variables. When an increase in one variable causes a corresponding increase in the other variable, a positive relationship is said to exist; hence, Spearman's correlation is "a coefficient that expresses the strength and direction of the relationship between two phenomena only" (pp. 3249-3250). The above author further shared the values of the correlation coefficient and the interpretation as follows: +1 means entirely positive correlation, from 0.70 to 0.99 means there is a strong positive correlation, from 0.50 to 0.69 means average positive correlation, 0.01 to 0.49 means weak positive correlation while zero (0) means that there is no positive association (Ali Abd Al-Hameed, 2022, p. 3251). A value closer to negative one (-1) or zero (0) indicates a weaker relationship. While Pearson correlation (r) measures the linear

relationship between two normally distributed random variables, Spearman rank correlation (rs) measures the monotonic association between two variables. It is used for ordinal data, and it also provides insight into outliers (Schober, Boer, & Schwarte, 2018). The interpretation of the correlation coefficient by Schober et al. (2018) is similar to that of (Ali Abd Al-Hameed, 2022). According to Schober et al. (2018), when the value is 0.00 to 0.10, the relationship is negligible, 0.10 – 0.39 is weak relationship, 0.40 to 0.69 means the correlation is moderate, 0.70 to 0.89 means the correlation is strong, while 0.90 to 1.00 means the correlation is very strong and coefficient of determination is computed to explain the proportion of variance in one variable that is accounted for by the other variable (p. 1765).

In this study, the nominal data included nurse educators' age and gender, while ordinal data included nurse educators' educational levels. Hence, using Regression, *t*-test, and ANOVA statistical test methods were well suited for this study because these statistical tests are parametric statistical tests. Simple regression is used to predict whether a relationship exists between two continuous variables, and multiple regression predicts if there is a relationship between more than two continuous variables. In comparison, logistic regression predicts the relationship between more than two continuous or categorical variables. A simple *t*-test compares a group to a known population, and an independent measure *t*-test compares two groups under similar conditions.

In contrast, a paired t-test compares the same group under two separate conditions. ANOVA is used with one or more independent variables and with one or more categorical data to compare multiple variables in different conditions using the group mean. With one-way ANOVA, three or more groups are compared under similar conditions, while with two-way ANOVA, two or more groups are compared under two different conditions (Ivankova, 2015, pp. 226-227). This

study tested the relationships between nurse educators' teaching preparation, choice of content-delivering methods, and the transition experience of nursing educators from clinical settings to academic environments. Using Regression, *t*-test, and ANOVA statistical tests helped draw assumptions about whether there was a significant statistical difference in the relationships between nurse educators' teaching preparation choice of instruction strategies and transition experience.

Statistical Software for Data Analysis

To analyze data, Creswell & Plano Clark (2018) listed different types of statistical software for analyzing data and informed how researchers can use this software in analyzing data. Among the ones listed were Statistical Package for the Social Sciences (SPSS) and John's Macintosh Project (JMP) statistical software for quantitative data analysis (pp. 214-215). The use of this software involves many steps that proceed from descriptive to inferential analysis. After data collection, the data was coded. Creswell & Plano Clark (2018) describe coding as a "process of grouping evidence and labeling ideas so that they reflect increasingly broader perspectives" and "Coding evidence can – be grouped into broad themes" (p. 214). Coding was important, which is why it was necessary to code the data collected via survey. The survey data was analyzed with the use of SPSS software, and the investigator interpreted it.

Summary

The purpose of this study was to examine the teaching preparation of nurse educators in the ADN program and its association with instruction and content delivery. This study attempted to identify, determine, and suggest learning theories and instructional strategies for nurse educators in the ADN program. Recommendations were made for nursing education administrators to consider to support nurse educators in performing their teaching duties. The following research questions guide this quantitative research methodology:

1. What are the relationships between the teaching preparation of nurse educators and the choice of instruction methods in the ADN program?
2. What are the relationships between nursing educators academic background and the use of different teaching methods in the ADN program?
3. How is the transition of nurse educators from the clinical setting to the academic environment?

Descriptive and inferential statistics were used in analyzing the data, and both parametric and non-parametric statistical testing methods were used for data analysis. Ethical consideration was observed. The validity of the instrument was established using CVI prior to administering the instrument to participants. The reliability of the instrument was checked using Cronbach's alpha coefficient. Triangulation was done using this research dataset, learning theories, and literature review to address the research questions and establish the credibility of this study's findings.

CHAPTER IV

DATA ANALYSIS AND RESULTS

The purpose of this study was to examine the teaching preparation of nurse educators in the ADN program and its association with instruction and content delivery. Instruction strategies and the relationship between nurse educators' teaching preparation and choice of content delivery strategies were examined to establish if the teaching preparation is efficient. Nurse educators' choice of instruction strategies and the use of technology in the classroom were also examined. The perception of nurse educators about the support they got from nursing education administrators and the extent of the challenge they experienced as they transitioned from the clinical setting to the academic classroom were identified.

The study utilized an online survey that was sent to thirty-seven participants from the chosen population studied. Thirty-four (n = 34, 92.0%) responded, thirty participants (n = 30, 88.2%) completed the survey, while four (n = 4, 11.8%) accessed the survey but did not respond. The four participants who did not respond to the survey questions were excluded from the study analysis. There were twenty-two constructs on the survey, and one of them inquired about participants' ages.

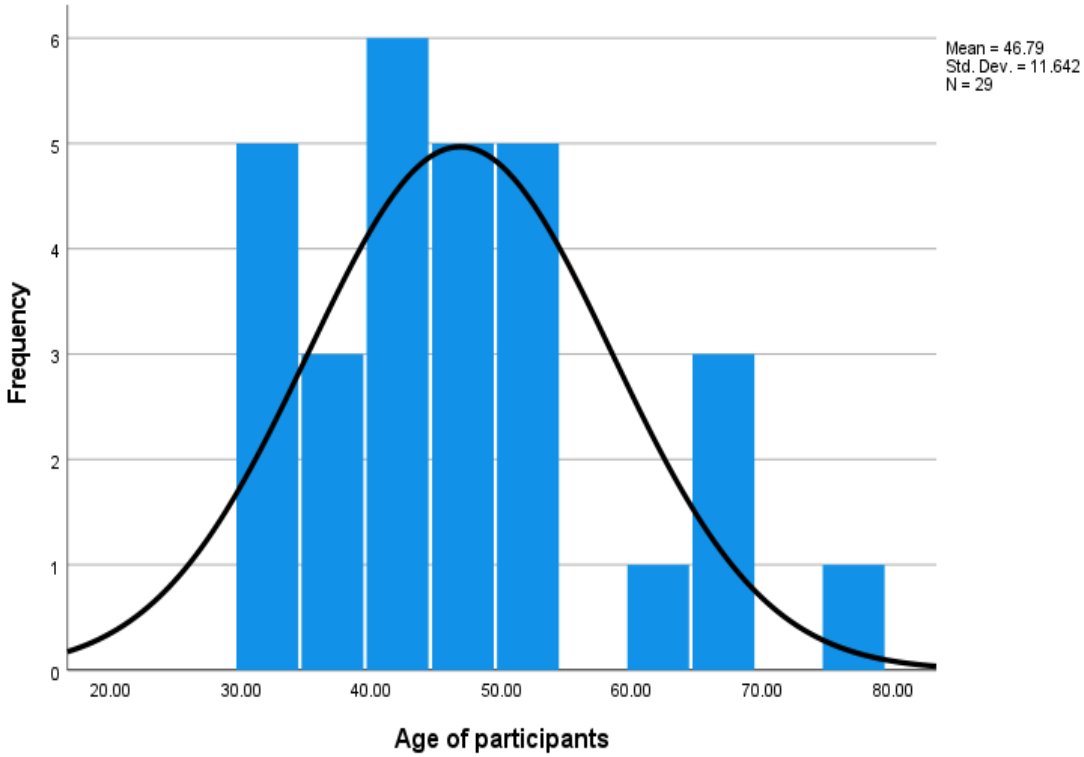
Age Distribution of Participants

Participants were asked to indicate their age, and the data collected showed that participants (n = 29, 96.7%) responded to the question, while (n =1, 3.3%) preferred not to say.

The result showed the median age of participants as 45.0, and the average age of participants was 46.79 (11.64). These figures were below the national average age of nurse educators published by (Brown et al., 2017; TCNWS, 2020). The identified disparity in the age of participants in this study and that recorded by previous studies signified a decrease in the age of the educator population in the RGV. Figure 2 presents the data on the age distribution of participants.

Figure 2

Age of participants



Educational Qualification

The academic preparation of participants was investigated by asking respondents to select the qualification that applied to them, and they could select more than one qualification. The result from this study revealed that participants (n = 30) responded to the question, and

participants (n = 15, 62.5%) answered “Yes” to having a Master of Science in Nursing (MSN) with education specialization. Nine participants (n = 9, 37.5%) responded “No” to this question. The data is shown in Table 2 and Figure 3.

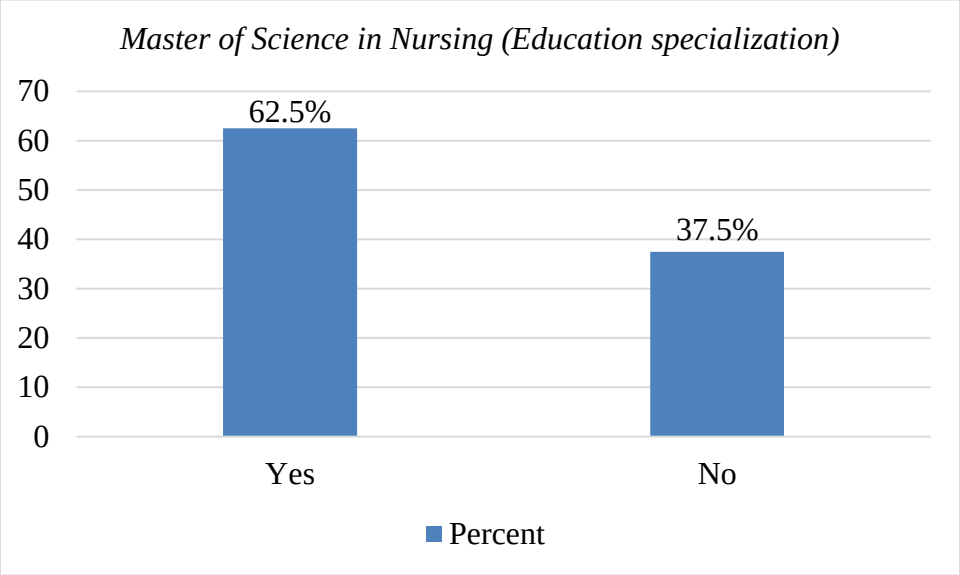
Table 2

Master of Science in Nursing (Education specialization)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	15	50.0	62.5	62.5
	No	9	30.0	37.5	100.0
	Total	24	80.0	100.0	
Missing	System	6	20.0		
Total		30	100.0		

Figure 3

Percentage of participants with MSN (Education specialization)



To further determine how many participants had qualifications that related to the nursing education specialty, participants were asked to indicate if they had a certificate in nursing education. Nine participants indicated "Yes", while fifteen (n = 9, M = 2.62, SD = 1.65) indicated “No” to having a certificate in nursing education. The data is presented in Table 3 and Figure 4.

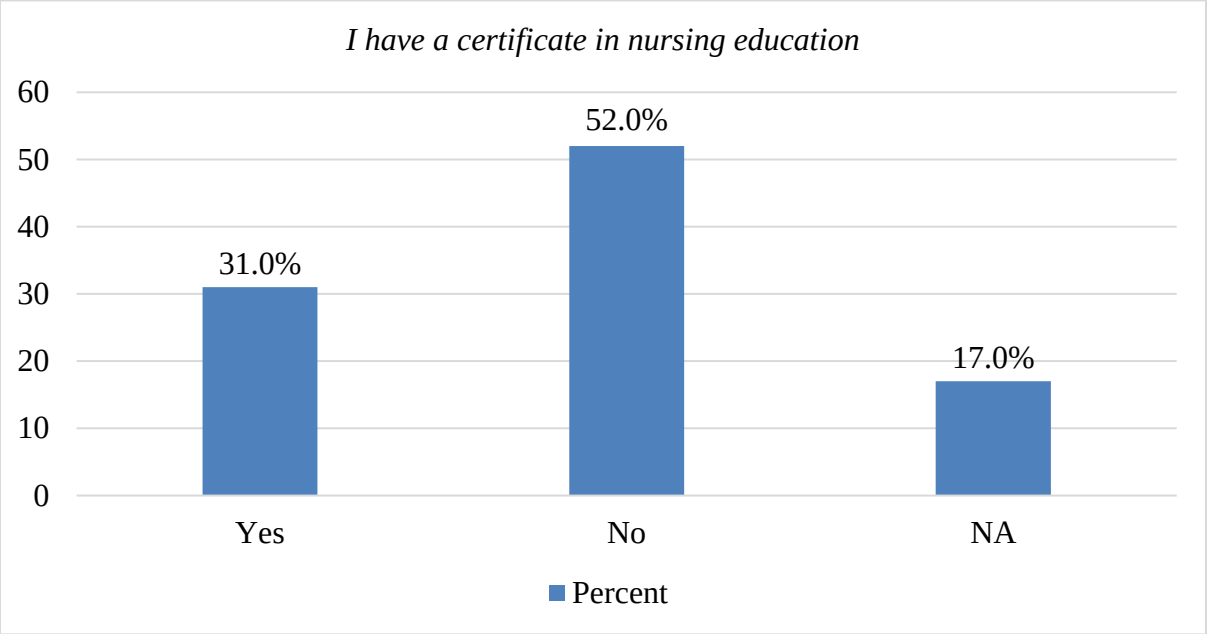
Table 3

I have a certificate in nursing education

	Frequency	Percent
Yes	9	31.0
No	15	52.0
NA	5	17.0

Figure 4

Number of participants with nursing education certificate



When participants were asked if they had a Master of Science in Nursing (MSN) in another specialty other than nursing, respondents (*n* = 13, 52.0%) indicated a "Yes" to the question, and participants (*n* = 12, 48.0%) indicated a "No", while (*n* = 5, 16.7%) did not respond to the question. The total number of participants who responded to this question was (*n* = 25, 83.3%). The data is shown in Table 4 and Figure 5.

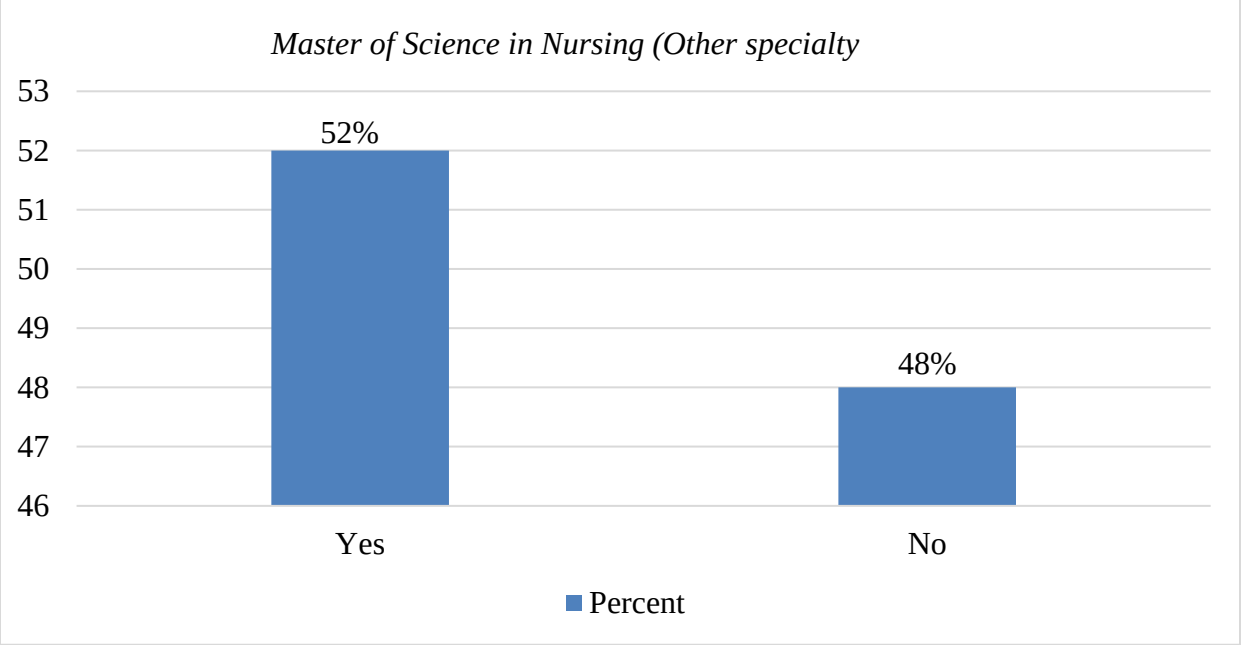
Table 4

Master of Science in Nursing (Other Specialty)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	13	43.3	52.0	52.0
	No	12	40.0	48.0	100.0
	Total	25	83.3	100.0	
Missing System		5	16.7		
Total		30	100.0		

Figure 5

Percentage of participants with MSN (other specialty)



Participants were also asked to select if they held a master's degree in another field of study other than nursing. The result revealed that participants (n = 1, 4.5%) responded "Yes", and participants (n = 21, 95.5%) responded "No", while participants (n = 8, 26.7%) did not respond to this variable. Table 5 and Figure 6 present the data.

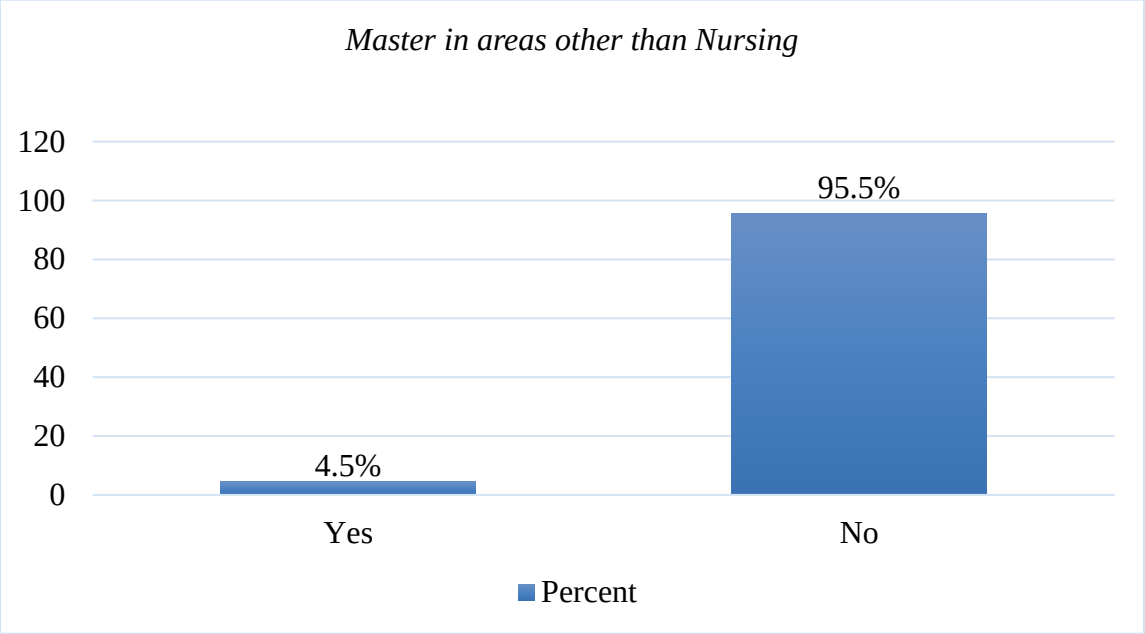
Table 5

Master in areas other than Nursing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	3.3	4.5	4.5
	No	21	70.0	95.5	100.0
	Total	22	73.3	100.0	
Missing System		8	26.7		
Total		30	100.0		

Figure 6

Percentage of participants with master's degree in areas other than nursing



Participants were asked to indicate if they have a Doctoral degree (Ph.D.) in Nursing. Out of (n = 30) who participated in the study, (n = 22, 100.0%) responded "No", while (n = 8, 26.7%) of the total participants in the study did not respond to this particular question. No participant indicated a "Yes" to this variable. The data is shown in Table 6 and Figure 7.

Table 6

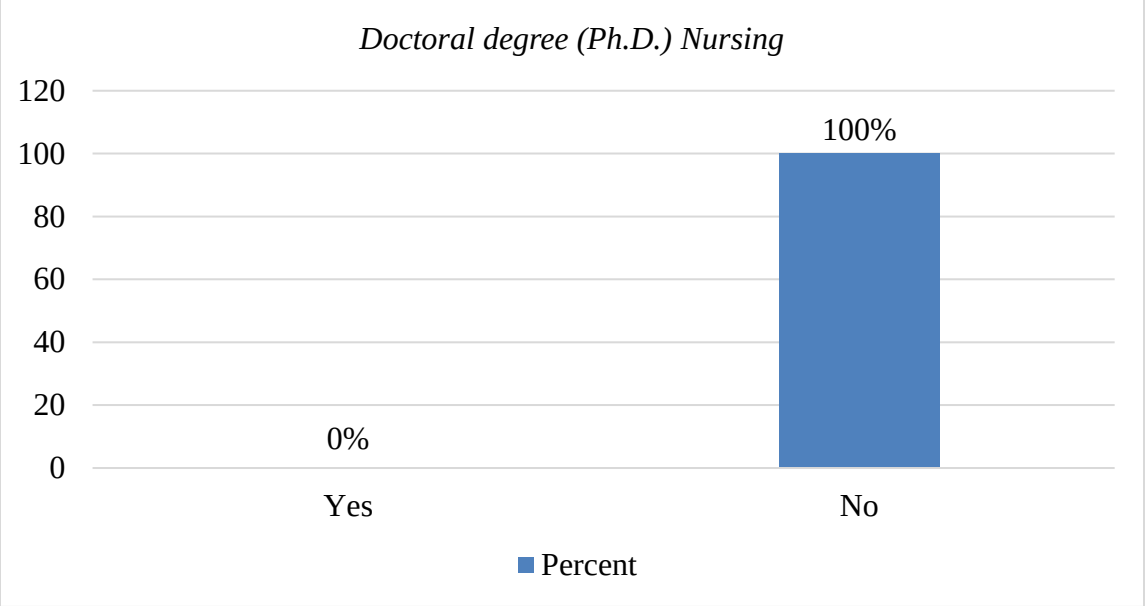
Doctoral degree (Ph.D.) Nursing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	22	73.3	100.0	100.0
	Yes	-	-	-	-
Missing System		8	26.7		
Total		30	100.0		

Note: No participant responded yes to the variable

Figure 7

Percentage of participants with doctoral degrees (Ph. D.) Nursing



Participants who indicated "Yes" to having a Doctoral degree (Ph.D.) in a specialty other than nursing was (*n* = 1, 4.3%), while participants (*n* = 22, 95.7%) responded "No", to this question, and (*n* = 7, 23.3%) of the total (*n* = 30) participants in the study did not respond to this variable. Table 7 and Figure 8 present the data.

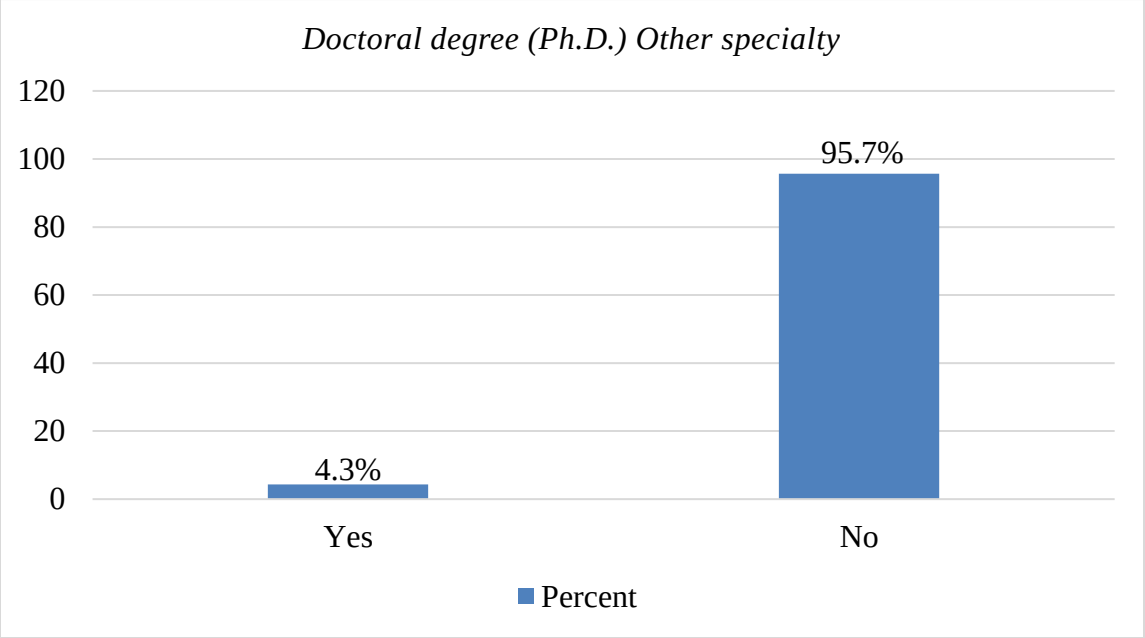
Table 7

Doctoral degree (Ph.D.) other specialty

		Frequency	Percent	Valid Percent	Cumulative percent
Valid	Yes	1	3.3	4.3	4.3
	No	22	73.3	95.7	100.0
	Total	23	76.7	100.0	
Missing	System	7	23.3		
Total		30	100.0		

Figure 8

Percentage of participants with doctoral degree (Ph. D) other specialty



Participants (*n* = 5, 21.7%) indicated "Yes" that they had a doctoral degree (DNP) when they were asked to select their qualifications. Participants (*n* = 18, 78.3%) responded "No". The total number of participants who responded to this variable was (*n* = 23), while participants (*n* = 7) did not respond. Table 8 and Figure 9 present the data for this variable.

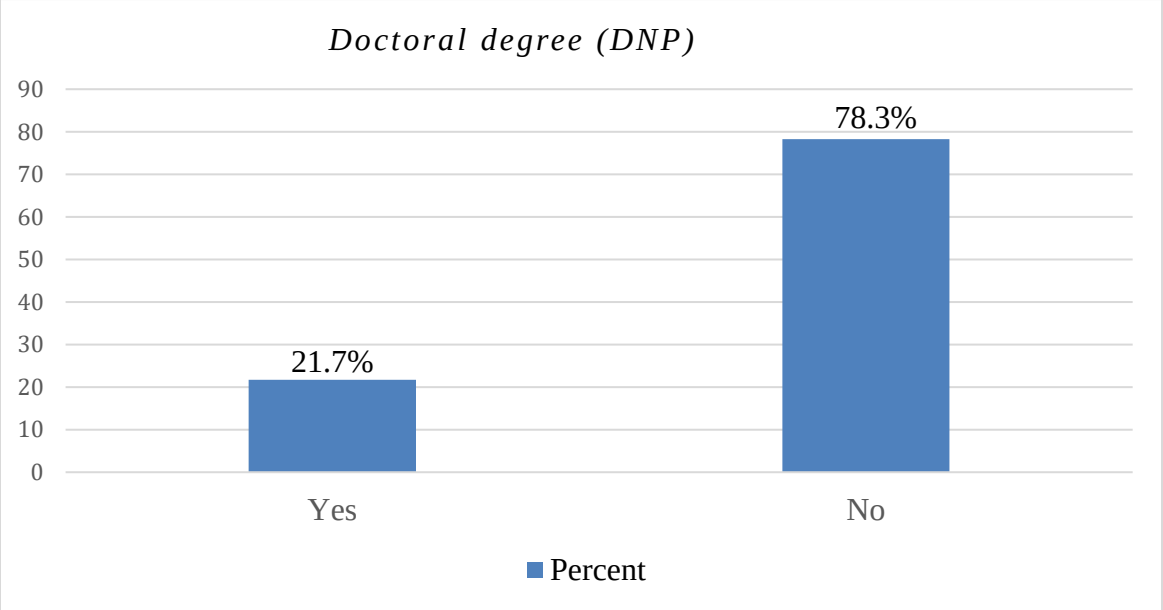
Table 8

Doctoral degree (DNP)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	16.7	21.7	21.7
	No	18	60.0	78.3	100.0
	Total	23	76.7	100.0	
Missing System		7	23.3		
Total		30	100.0		

Figure 9

Percentage of participants with doctoral degree (DNP)



A total of (*n* = 30, 100.0%) participated in this study. Those who responded to the variable inquiring participants to indicate if they had a Doctoral degree (Ed.D.) was (*n* = 22, 100.0%), and all the participants (*n* = 22) who responded to this variable indicated "No". Participants (*n* = 8, 26.7%) did not respond to this variable. Table 9 and Figure 10 shows the data.

Table 9

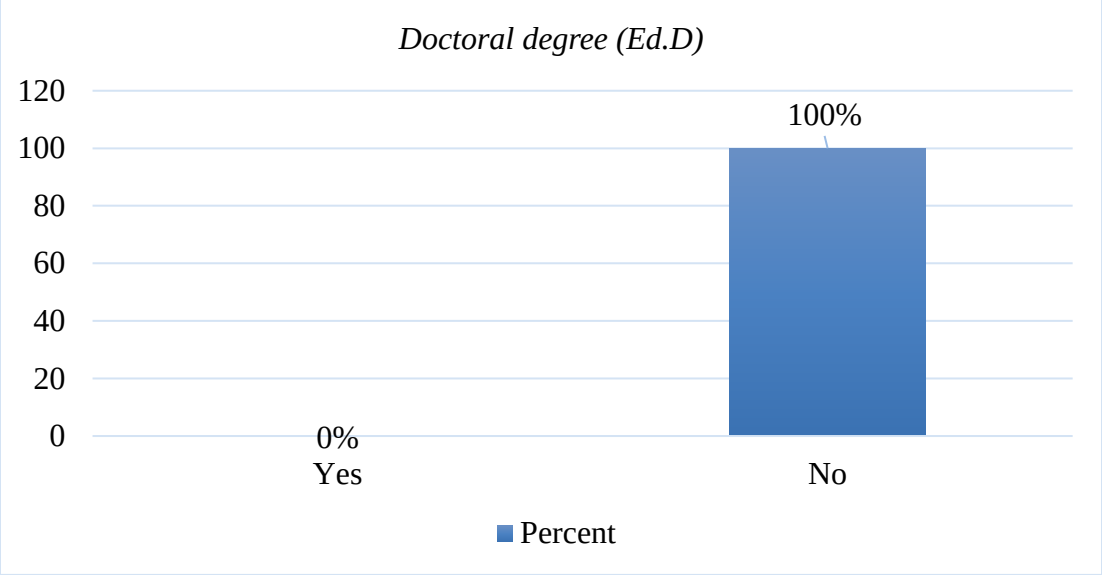
Doctoral degree (Ed. D)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	22	73.3	100.0	100.0
	Yes	-	-		
Missing System		8	26.7		
Total		30	100		

Note: No participant responded yes to the variable

Figure 10

Percentage of participants with doctoral degree (Ed.D.)



Academic Degrees

Academic degrees showed the different academic qualifications of participants who responded to the variables on academic qualification. The findings from this study showed that participants (n = 24) responded to the variable inquiring participants to indicate whether they had a Master of Science in Nursing (MSN) with (education specialization); participants (n = 6) did not respond. Participants (n = 15) indicated a "Yes", that they had MSN with education specialization. The number of participants who responded to indicate whether they had a Master of Science in nursing but in other specialty instead of Nursing education was (n = 25), while (n =

5) did not respond. Participants (*n* = 13) indicated a "Yes", they had a Master of Science in areas other than nursing. Participants (*n* = 22) responded to indicate if they had a Doctoral degree (Ph.D.) in nursing, while (*n* = 8) did not respond. No participant indicated a "Yes" to this variable. Participants who responded to the inquiry seeking to know if they had a Doctoral degree (Ph.D.) in another specialty other than nursing (*n* = 23), (*n* = 7) did not respond. Participants (*n* = 1) indicated a "Yes" to having a Ph.D. in another specialty. When participants were asked if they had a Doctoral degree (DNP), (*n* = 23) participants responded, and (*n* = 7) did not respond, while (*n* = 5) indicated a "Yes" to this variable. Participants (*n* = 22) responded to indicate if they had a Doctoral degree (Ed.D.), while (*n* = 8) did not respond. No participant indicated a "Yes" to this variable. See Table 10 and Figure 11 for the statistical data.

Table 10

Academic degrees

		MSN (Education Specialization)	MS (Other Specialty)	Dr (Ph.D.) Nursing	Dr (Ph.D.) Other specialty	Dr (DNP)	Dr (Ed.D.)	M
	Yes	15	13	0	1	5	0	1
N	Valid	24	25	22	23	23	22	22
	Missing	6	5	8	7	7	8	8

Note: MSN = Master of Science in Nursing, Education Specialization

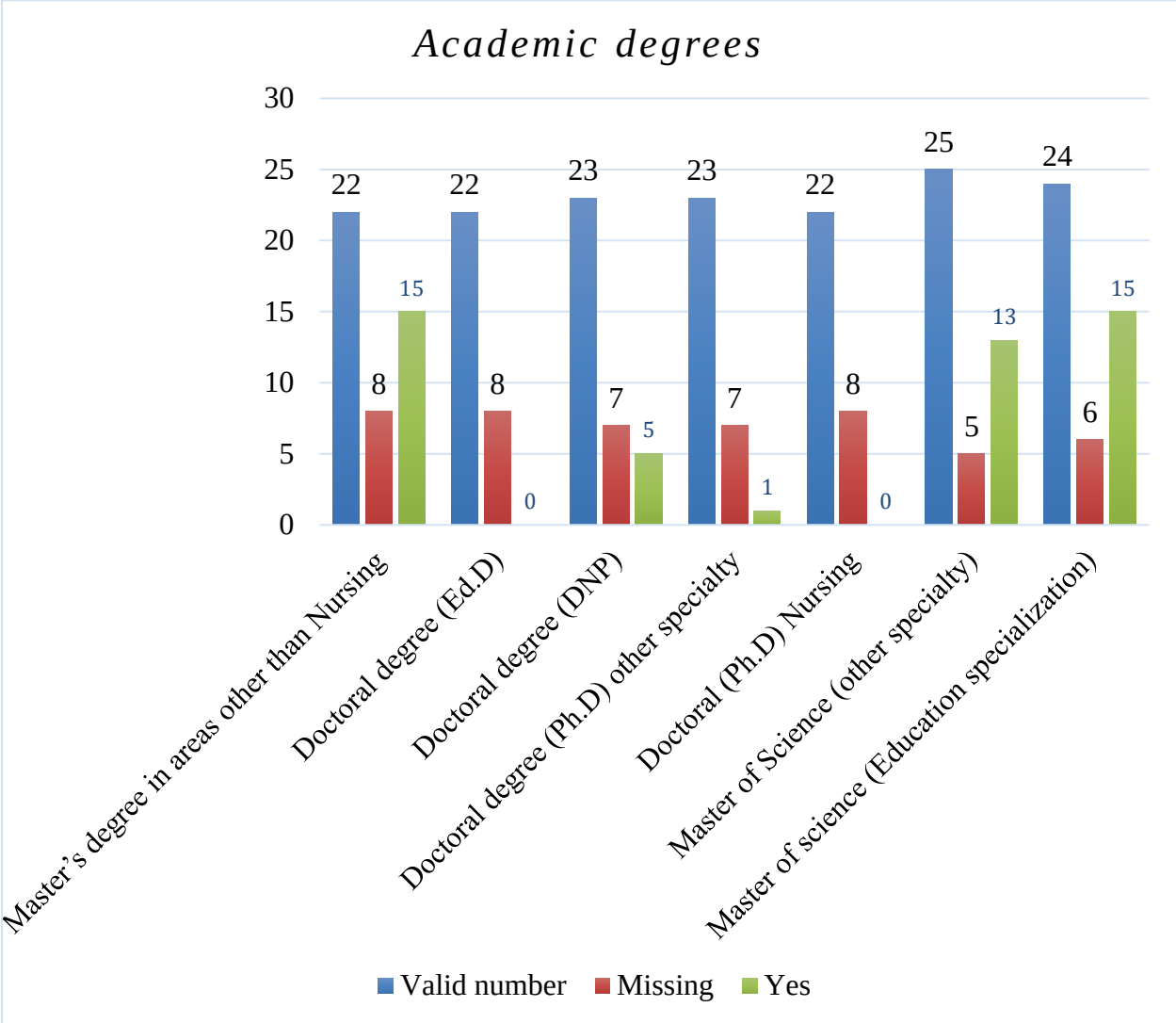
MS = Master of Science

M = master's degree in areas other than Nursing

Dr = Doctoral degree

Figure 11

Distribution of academic degrees



Transition Experience from Clinical

Participants (*n* = 29, 96.7%, *M* = 3.41, *SD* = 1.26) responded to indicate if their transition from clinical to teaching was very challenging, while (*n* =1, 3.3%) did not respond. Among those who responded, (*n* = 5, 17.2%) indicate that they strongly agree, (*n* = 13, 44.8%) somewhat agree, (*n* = 3, 10.3%) neither agree nor disagree, (*n* = 5, 17.2%) somewhat disagree, and (*n* = 3,

10.3%) strongly disagree that their transition from clinical to teaching was very challenging.

Table 11 and Figure 12 presents the data.

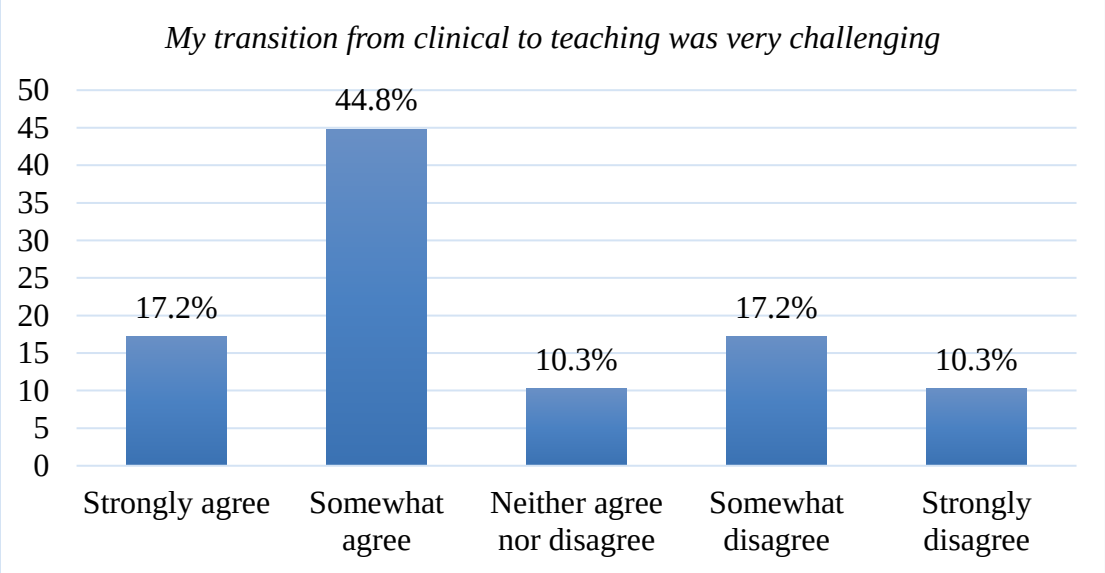
Table 11

My transition from clinical to teaching was very challenging.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	5	16.7	17.2	17.2
	Somewhat agree	13	43.3	44.8	62.1
	Neither agree nor disagree	3	10.0	10.3	72.4
	Somewhat disagree	5	16.7	17.2	89.7
	Strongly disagree	3	10.0	10.3	100.0
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 12

Percentage indicating transition experience.



Feeling Prepared to Teach the First Semester of Hire

The question asking about preparation to teach the first semester of hiring had (n = 29, 96.7%, M = 4.50, SD = 0.96) responding to indicate if they felt prepared to teach the first semester they were hired, while (n = 1, 3.3%) did not respond. Those who strongly agreed that

they felt prepared to teach the first semester of their hire were (*n* = 5, 17.2%). Those who somewhat agree were (*n* = 10, 34.5%), while respondents (*n* = 1, 3.4%) neither agree nor disagree, (*n* = 10, 34.5%) somewhat disagree, (*n* = 3, 10.3%) strongly disagree that they felt prepared to teach the first semester they were hired. See Table 12 and Figure 13.

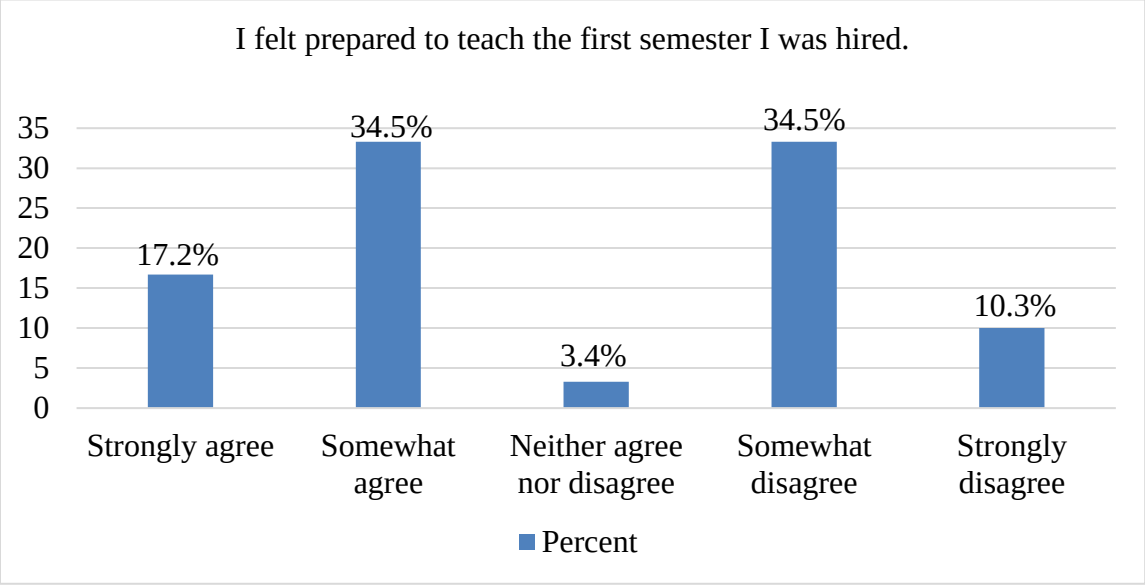
Table 12

I felt prepared to teach the first semester I was hired.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	5	16.7	17.2	17.2
	Somewhat agree	10	33.3	34.5	51.7
	Neither agree nor disagree	1	3.3	3.4	55.2
	Somewhat disagree	10	33.3	34.5	89.7
	Strongly disagree	3	10.0	10.3	100.0
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 13

Percentage indicating preparation first semester of hire



Knowing the Teaching Methods to use Upon Hiring

Participants who responded to knowing the teaching methods they would use when hired were (n = 29, 96.7%, M = 3.00, SD = 1.33), (n = 1, 3.3%) did not respond. Respondents who strongly agree were (n = 4, 13.8%), somewhat agree were (n = 9, 31.0%), (n = 3, 10.3%) neither agree nor agree, (n = 9, 31.0%) somewhat disagree, while (n = 4, 13.8%) responded that they strongly disagree to knowing what teaching methods to use upon hire. Table 13 and Figure 14 represent the data collected.

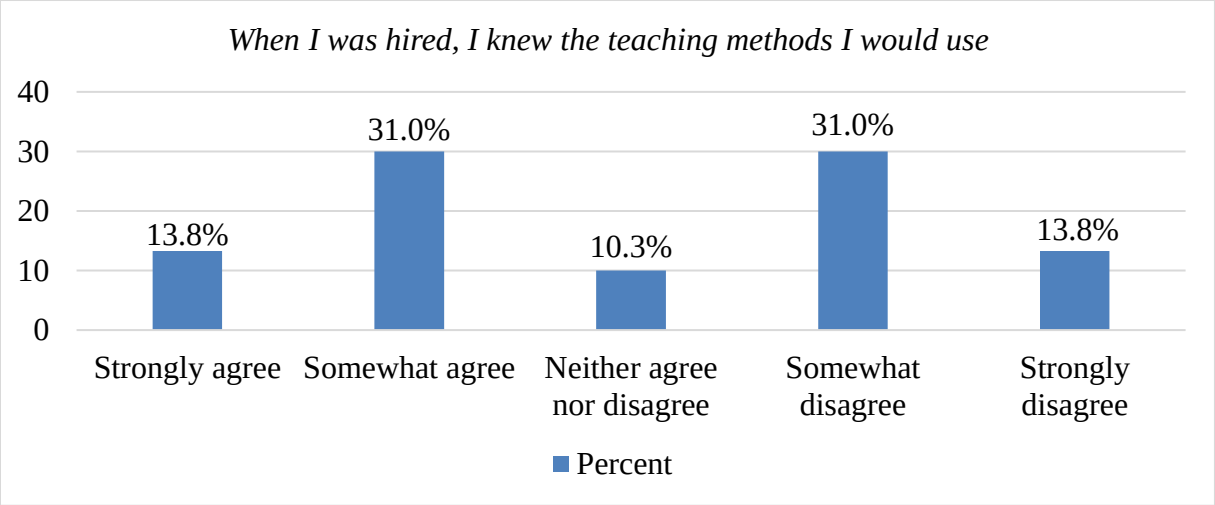
Table 13

When I was hired, I knew the teaching methods I would use.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	4	13.3	13.8	13.8
	Somewhat agree	9	30.0	31.0	44.8
	Neither agree nor disagree	3	10.0	10.3	55.2
	Somewhat disagree	9	30.0	31.0	86.2
	Strongly disagree	4	13.3	13.8	100.0
	Total	29	96.7		
Missing System		1	3.3		
Total		30	100.0		

Figure 14

Teaching methods first semester of hire



Feeling Prepared to Teach in the ADN Program

A total of (n = 28, 93.3%, M = 4.50, SD = 0.96) participants responded to indicate whether they feel prepared to teach in the ADN program, while (n = 2, 6.7%) failed to respond. Participants who strongly agree they feel prepared to teach in the ADN program were (n = 19, 67.9%), (n = 7, 25.0%) somewhat agree, (n = 1, 3.6%) somewhat disagree, (n = 1, 3.6%) strongly disagree. Table 14 and Figure 15 indicate the data.

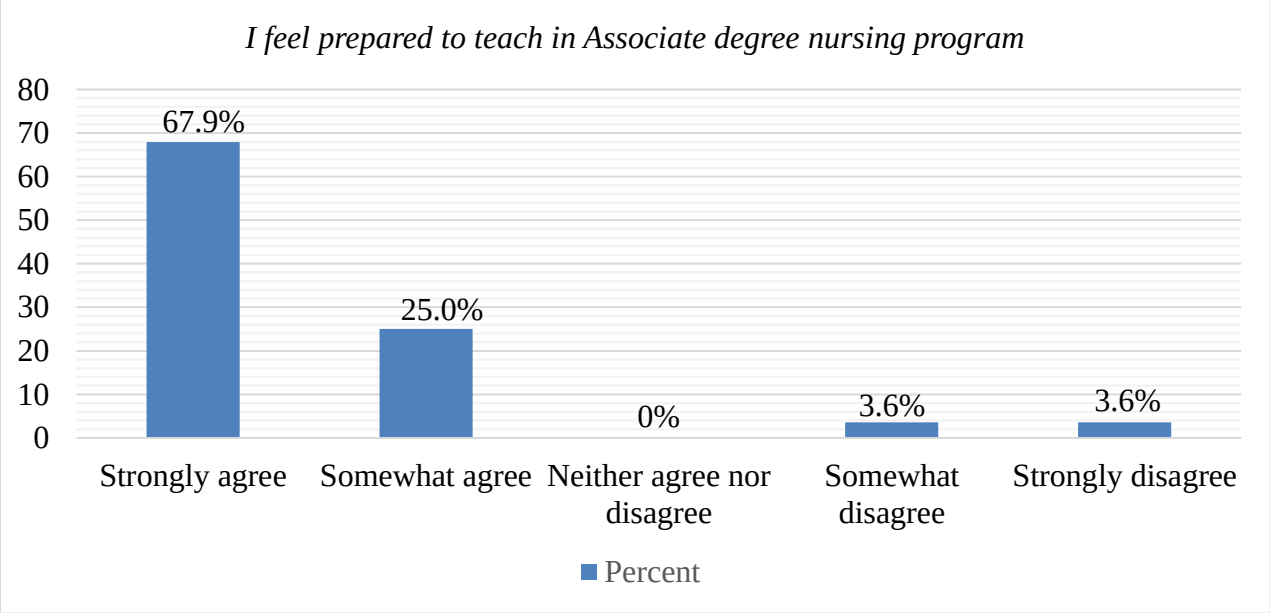
Table 14

I feel prepared to teach in Associate degree nursing program

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	19	63.3	67.9	67.9
	Somewhat agree	7	23.3	25.0	92.9
	Neither agree nor disagree	-	-	-	-
	Somewhat disagree	1	3.3	3.6	96.4
	Strongly disagree	1	3.3	3.6	100.0
	Total	28	93.3	100.0	
Missing System		2	6.7		
Total		30	100.0		

Figure 15

Participants who felt prepared to teach in ADN program



Having Strong Background in Courses

The total participants who indicated their response to the variable inquiring if participants have a strong background in the course or courses they teach were (n = 29, 96.7%, M = 4.24, SD = 1.18), and (n = 1, 3.3%) did not respond. Of the respondents, those who strongly agree were (n - 17, 58.6%), somewhat agree were (n = 7, 24.1%), neither agree nor disagree were (n = 2, 6.9%), somewhat agree were (n = 1, 3.4%), while (n = 2, 6.9%) strongly disagree to having a strong background in the course or courses they teach. The data is presented in Table 15 and Figure 16.

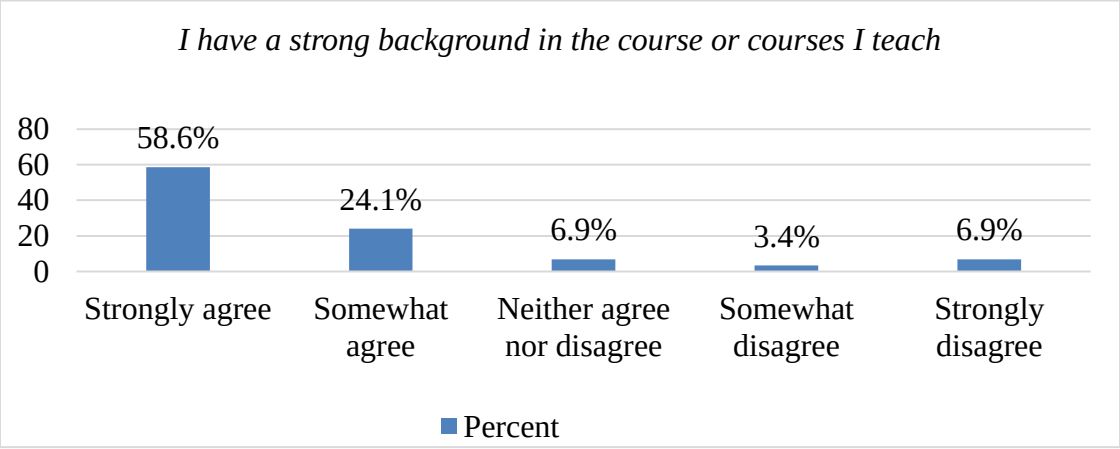
Table 15

I have a strong background in the course or courses I teach

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	17	56.7	58.6	58.6
	Somewhat agree	7	23.3	24.1	82.8
	Neither agree nor disagree	2	6.7	6.9	89.7
	Somewhat disagree	1	3.3	3.4	93.1
	Strongly disagree	2	6.7	6.9	100.0
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 16

Participants who have strong background in courses



Confident Teaching in the ADN program

How confident participants feel teaching in the ADN program was indicated by a total of (*n* =26, 86.7%, *M* = 4.57, *SD* = .77) participants, while participants (*n* = 4, 13.3%) did not respond. Participants (*n* = 18, 69.2%) strongly agree that they feel confident teaching in the ADN program, (*n* = 6, 23.1%) somewhat agree, (*n* = 1, 3.8%) neither agree nor disagree, (*n* = 1, 3.8%) somewhat disagree. Table 16 and Figure 17 present the data.

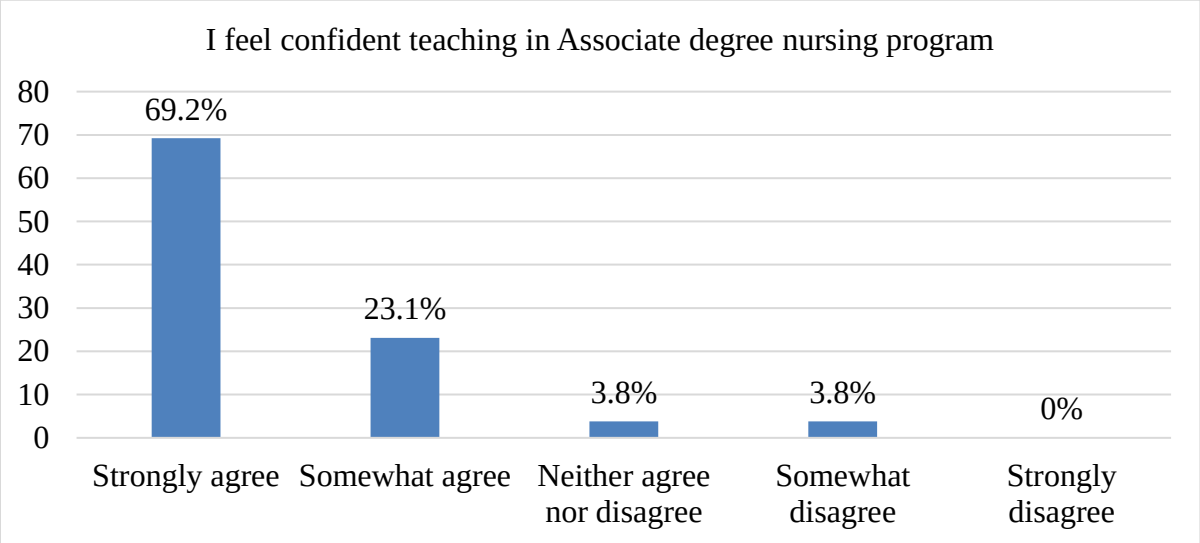
Table 16

I feel confident teaching in Associate degree nursing program

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	18	60.0	69.2	69.2
	Somewhat agree	6	20.0	23.1	92.3
	Neither agree nor disagree	1	3.3	3.8	96.2
	Somewhat disagree	1	3.3	3.8	100.0
	Strongly disagree	-	-	-	
	Total	26	86.7	100.0	
Missing System		4	13.3		
Total		30	100.0		

Figure 17

Confident teaching in ADN program



Getting Support from Administrators

Participants (n = 29, 96.7%, M = 4.65, SD = .86) responded when asked if they get the support that they need from nursing education administrators. Among the respondents, (n = 24, 82.8% strongly agree that they get the support they need from nursing education administrators, (n = 2, 6.9%) somewhat agree, (n = 1, 3.4%) neither agree nor disagree, while (n = 2, 6.9) somewhat disagree that they get the support they need from nursing education administrators. Table 17 and Figure 18 have the data.

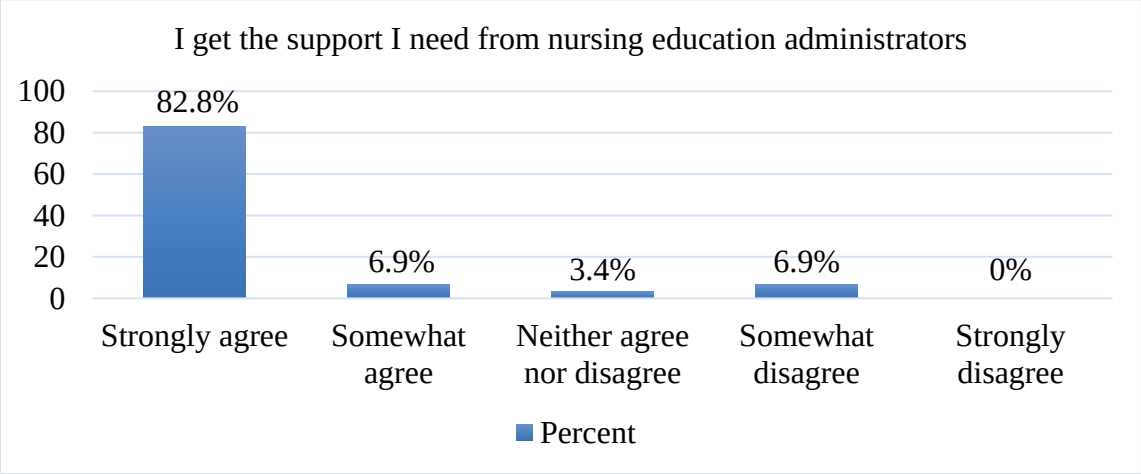
Table 17

I get the support I need from nursing education administrators.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	24	80.0	82.8	82.8
	Somewhat agree	2	6.7	6.9	89.7
	Neither agree nor disagree	1	3.3	3.4	93.1
	Somewhat disagree	2	6.7	6.9	100.0
	Strongly disagree	-	-	-	
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 18

Support from Nursing Education Administrators



Improve Nursing Education

Participants were asked if they perceived there was a lot to improve in nursing education; (*n* =1, 3.3%) did not respond, but (*n* = 29, 96.7%, *M* = 4.14, *SD* = 1.16) responded. Out of the (*n* = 29) who responded, (*n* = 15, 51.7%) strongly agree there was a lot to improve in nursing education, (*n* = 8, 27.6%) somewhat agree, (*n* = 2, 6.9%) neither agree nor disagree, (*n* = 3, 10.3%) somewhat disagree, (*n* = 1, 3.4%) strongly disagree. The data is indicated in Table 18 and Figure 19.

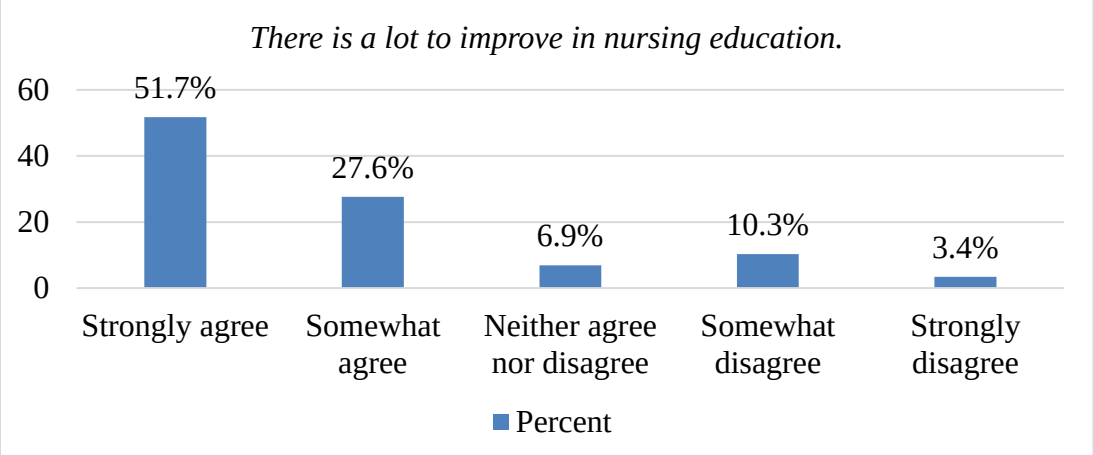
Table 18

There is a lot to improve in nursing education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	15	50.0	51.7	51.7
	Somewhat agree	8	26.7	27.6	79.3
	Neither agree nor disagree	2	6.7	6.9	86.2
	Somewhat disagree	3	10.0	10.3	96.6
	Strongly disagree	1	3.3	3.4	100.0
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 19

A lot to improve in nursing education



Selecting Educational Technology

Participants were asked if they could Select educational technologies to enhance students' learning. Participants (*n* = 29, 96.7%, *M* = 4.51, *SD* = .83) responded, while (*n* = 1, 3.3%) did not respond. Of the (*n* = 29) who responded, (*n* = 19, 65.5%) indicated that they strongly agree that they do select educational technologies to enhance students learning, (*n* = 8, 27.6%) somewhat agree, and (*n* = 2, 6.9%) somewhat disagree. The data is shown in Table 19 and Figure 20.

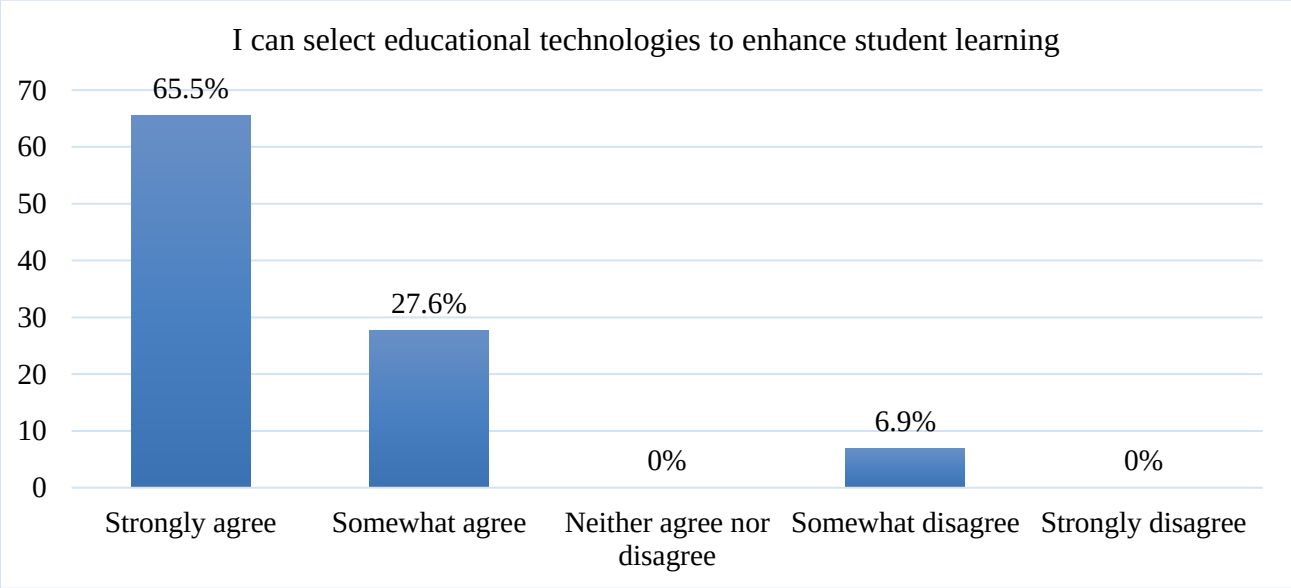
Table 19

I can select educational technologies to enhance student learning.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	19	63.3	65.5	65.5
	Somewhat agree	8	26.7	27.6	93.1
	Neither agree nor disagree	-	-	-	-
	Somewhat disagree	2	6.7	6.9	100.0
	Strongly disagree	0	0	0	
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 20

Selection of educational technologies



Using More than Three Teaching Methods

Another variable to examine nurse educators' teaching preparation and use of differentiated instruction strategies was inquiring if participants used more than three methods to teach one class session. Participants (n = 29, 96.7%, M = 4.24, SD = 1.02) responded, and (n = 1, 3.3%) did not respond to this variable. Respondents (n =15, 51.7%) indicated that they strongly agree that they use more than three methods to teach one class session, (n = 9, 31.0%) somewhat agree, (n = 3, 10.3%) neither agree nor disagree, (n = 1, 3.4%) somewhat disagree, while (n = 1, 3.4%) strongly disagree. The data is presented in Table 20 and Figure 21.

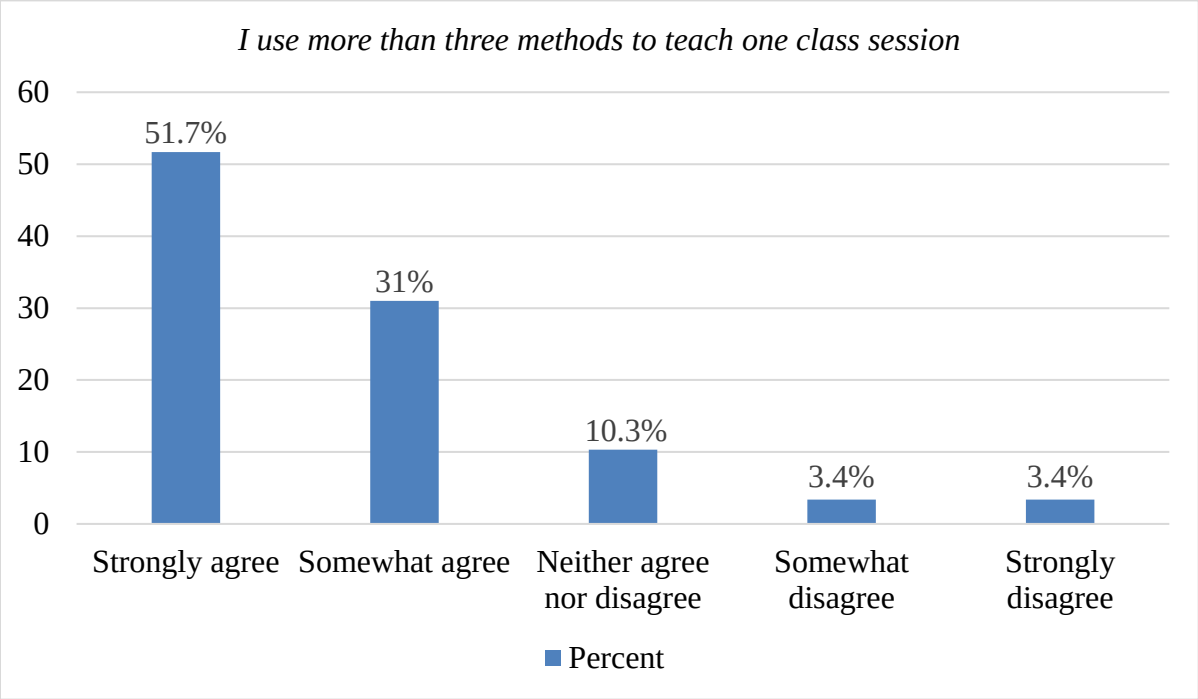
Table 20

I use more than three methods to teach one class session.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	15	50.0	51.7	51.7
	Somewhat agree	9	30.0	31.0	82.8
	Neither agree nor disagree	3	10.0	10.3	93.1
	Somewhat disagree	1	3.3	3.4	96.6
	Strongly disagree	1	3.3	3.4	100.0
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 21

Use more than three methods to teach



Classroom Management

Classroom management was part of what participants were to indicate. Those who responded were (*n* = 29, 96.7%, *M* = 4.44, *SD* = .98), while (*n* = 1, 3.3%) did not respond. Of the (*n* = 29) who responded (*n* = 20, 69.0% strongly agree with managing their classroom without frustration. Respondents (*n* = 4, 13.8%) somewhat agree, (*n* = 4, 13.8%) neither agree nor disagree, while (*n* = 1, 3.4%) strongly disagree that they can manage their classroom without frustration. Table 21 and Figure 22 reflects the data.

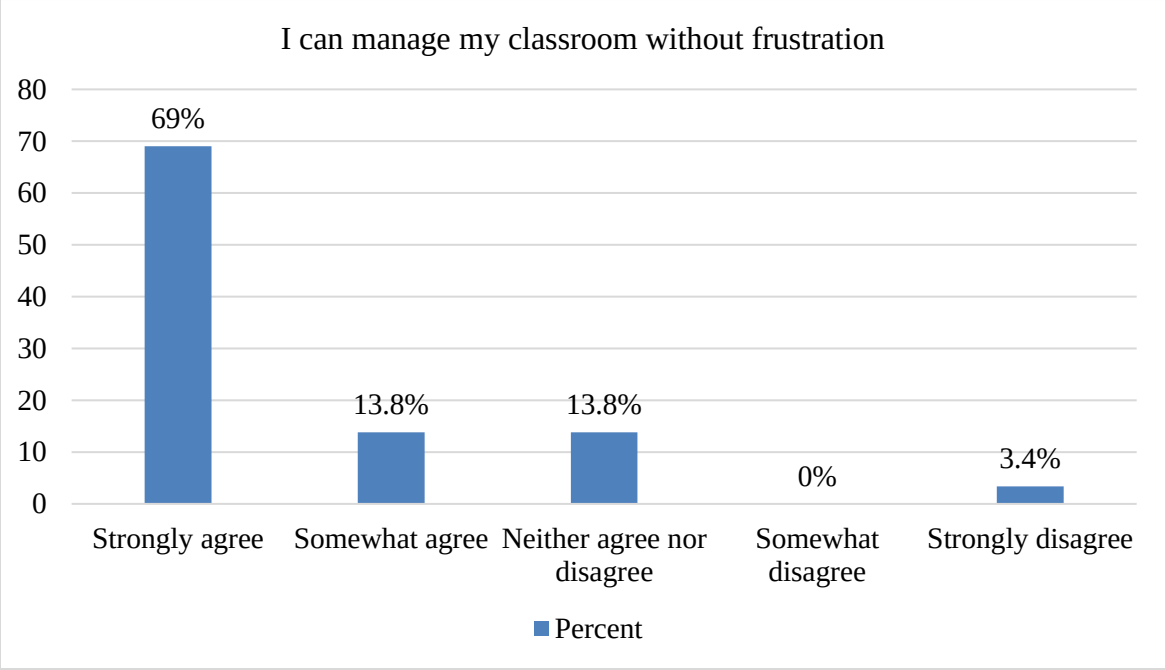
Table 21

I can manage my classroom without frustration.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	20	66.7	69.0	69.0
	Somewhat agree	4	13.3	13.8	82.8
	Neither agree nor disagree	4	13.3	13.8	96.6
	Somewhat disagree	-	-	-	-
	Strongly disagree	1	3.3	3.4	100.0
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 22

Percentage that can manage classroom



Participants were asked whether they knew what educational technologies to use in the classroom and if they were comfortable using them. Participants (n = 29, 96.7%, M = 4.41, SD = .94) responded, while (n = 1, 3.3%) did not respond. Participants (n = 17, 58.6%) strongly agree, (n = 10, 34.5%) somewhat agree, (n = 1, 3.4%) somewhat disagree, and (n = 1, 3.4%) strongly

disagree to knowing what educational technologies to use in their classroom and their comfort using them. Table 22 and Figure 23 have the data.

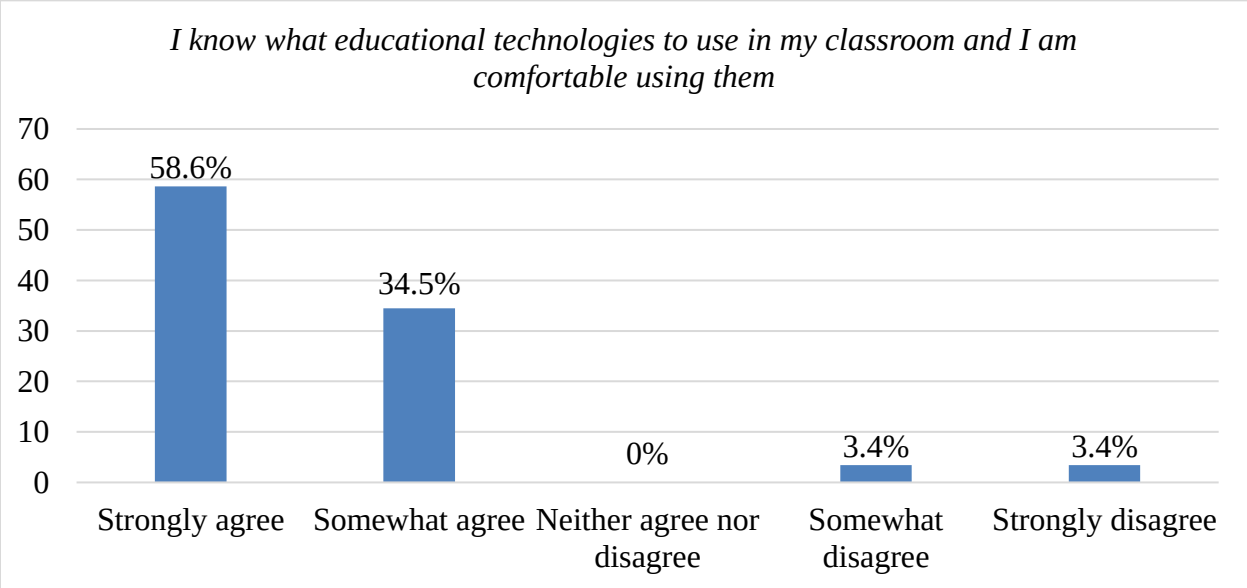
Table 22

Educational technologies to use in the classroom and comfort using them

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	17	56.7	58.6	58.6
	Somewhat agree	10	33.3	34.5	93.1
	Neither agree nor disagree	-	-	-	-
	Somewhat disagree	1	3.3	3.4	96.6
	Strongly disagree	1	3.3	3.4	100.0
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 23

Participants who know what educational technologies to use



Students Like Technology in Classroom

Participants were asked to indicate if students like it when participants use educational technologies, (n = 29, 96.7%, M = 4.37, SD = .90) responded, and (n = 1, 3.3%) failed to

respond. Participants (*n* = 16, 55.2%) strongly agree, (*n* = 10, 34.5%) somewhat agree, (*n* = 2, 6.9%) neither agree nor disagree, (*n* = 1, 3.4%) strongly disagree that students like it when participants use educational technologies in class. The data is presented in Table 23 and Figure 24.

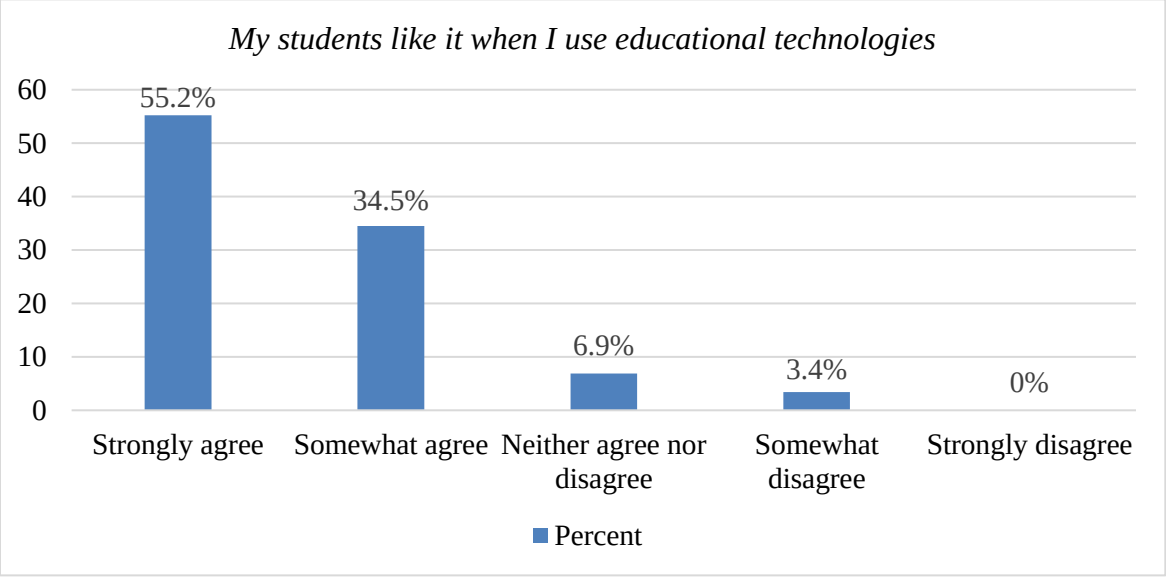
Table 23

My students like it when I use educational technologies.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	16	53.3	55.2	55.2
	Somewhat agree	10	33.3	34.5	89.7
	Neither agree nor disagree	2	6.7	6.9	96.6
	Somewhat disagree	1	3.3	3.4	100.0
	Strongly disagree	-	-	-	
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 24

Students like educational technologies



Familiarity with the ADN curriculum

Participants (n = 28, 93.3%, M = 4.39, SD = 0.91) responded to the variable inquiring if participants were very familiar with the ADN curriculum, (n = 2, 6.7%) did not respond to this variable. Among those who responded, (n = 16, 57.1%) strongly agree that they were very familiar with the ADN curriculum, (n = 9, 32.1%) somewhat agree, (n = 2, 7.1%) neither agree nor disagree, (n = 1, 3.6%) strongly disagree. The data is presented in Table 24 and Figure 25.

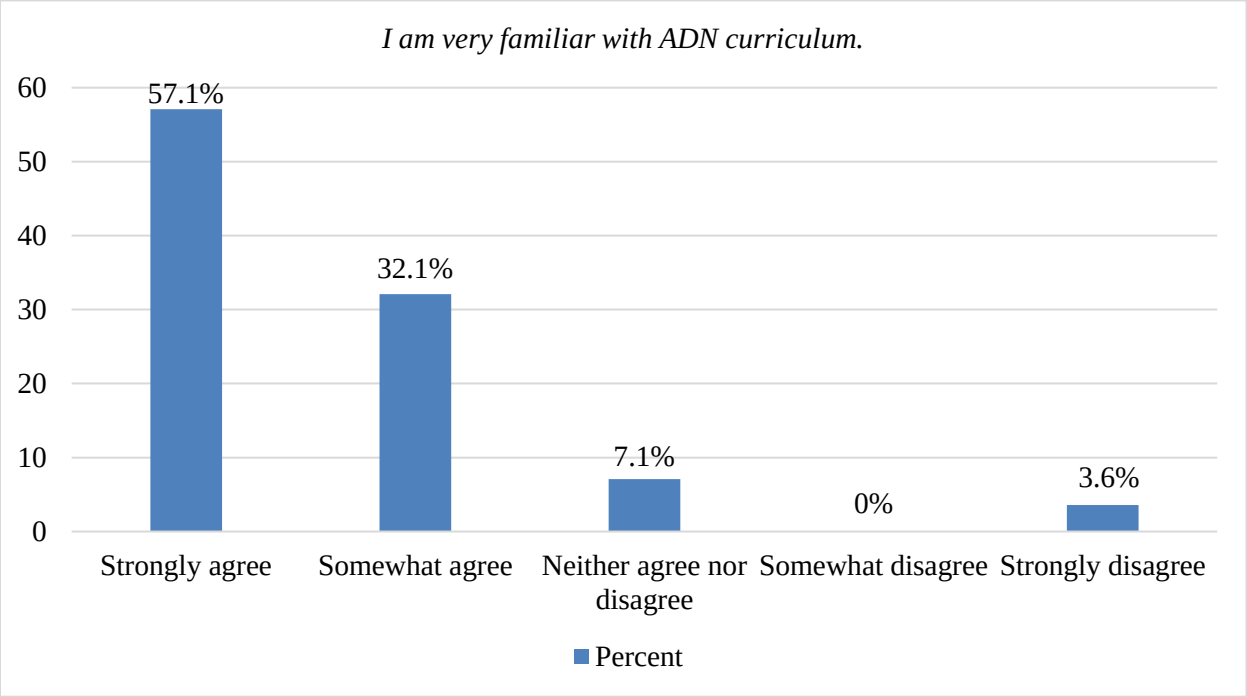
Table 24

I am very familiar with ADN curriculum.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	16	53.3	57.1	57.1
	Somewhat agree	9	30.0	32.1	89.3
	Neither agree nor disagree	2	6.7	7.1	96.4
	Somewhat disagree	-	-	-	-
	Strongly disagree	1	3.3	3.6	100.0
	Total	28	93.3	100.0	
Missing System		2	6.7		
Total		30	100.0		

Figure 25

Familiar with ADN curriculum



Years of Clinical Nursing Experience

Participants were asked to indicate their years of clinical nursing experience, (*n* = 29, 96.7%, *M* = 20.41, *SD* = 11.06) responded, while (*n* = 1, 3.3%) did not respond. The data shown in Table 24, and Figure 27 shows the number of years of clinical experience indicated by participants, (*n* = 1, 3.3%) had three years of clinical experience, (*n* = 1, 3.3%) had five years, (*n* = 1, 3.3%) had ten years, (*n* = 2, 6.7%) had eleven years, (*n* = 4, 13.3%) had twelve years, (*n* = 2, 6.7%) had thirteen years, (*n* = 4, 13.3%) had fifteen years, (*n* = 1, 3.3%) had twenty years, (*n* = 2, 6.7%) had twenty-three years, (*n* = 2, 6.7%) had twenty-five years, (*n* = 1, 3.3%) had twenty-six years, (*n* = 1, 3.3%) had twenty-eight years, (*n* = 2, 6.7%) had thirty years, (*n*= 1, 3.3%) had thirty-one years, (*n* = 1, 3.3%) had thirty-two years, (*n* = 1, 3.3%) had thirty-three years, (*n* = 1, 3.3%) had forty-one years, and (*n* = 1, 3.3%) had fifty-one years of clinical experience. Table 25 and Figure 26 present the data.

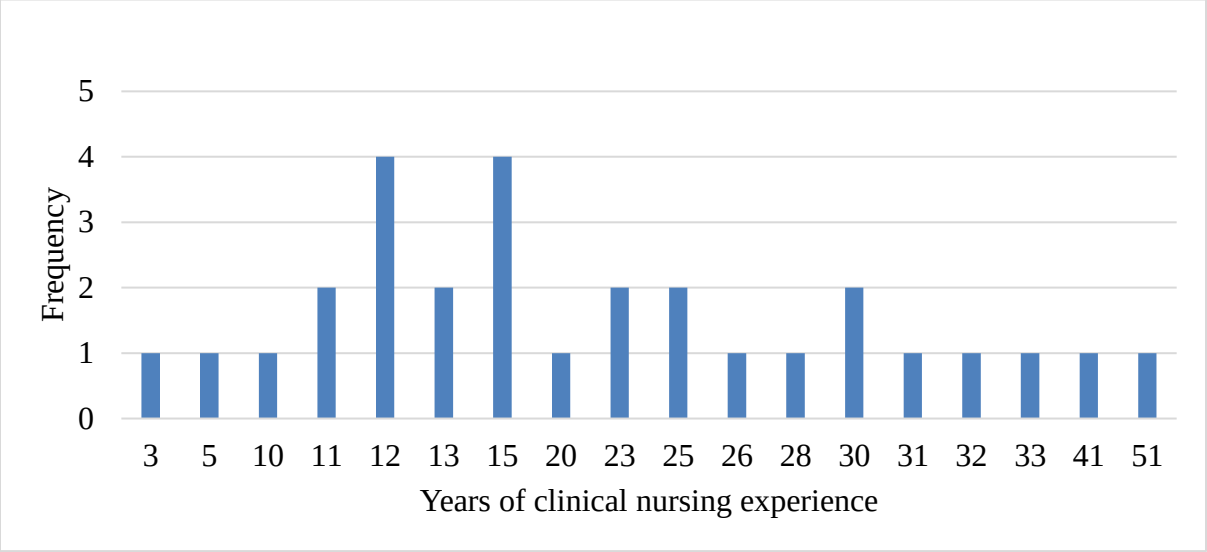
Table 25

Years of clinical nursing experience

Years of clinical experience	*n*	%
3.00	1	3.3
5.00	1	3.3
10.00	1	3.3
11.00	2	6.7
12.00	4	13.3
13.00	2	6.7
15.00	4	13.3
20.00	1	3.3
23.00	2	6.7
25.00	2	6.7
26.00	1	3.3
28.00	1	3.3
30.00	2	6.7
31.00	1	3.3
32.00	1	3.3
33.00	1	3.3
41.00	1	3.3
51.00	1	3.3
Missing system	1	3.3

Figure 26

Years of clinical nursing experience



Years of Teaching Experience

Participants were asked to indicate their years of teaching experience (M = 8.96, SD = 8.40). Participants (n = 2, 6.7%) indicated that they had less than one year of teaching experience, (n = 2, 6.7%) had one year, (n = 3, 10.0%) two years, (n = 4, 13.3%) three years, (n = 2, 6.7%) four years of experience, (n = 4, 13.3%) had five years' experience, (n= 1, 3.3%) had six years' experience, (n = 9, 3.3%) had nine years of experience, (n = 1, 3.3%) had thirteen years of experience, (n = 1, 3.3%) had fifteen years, (n = 1, 3.3%) had seventeen years, (n = 1, 3.3%) had eighteen years, (n = 2, 6.7%) had nineteen years, (n = 1, 3.3%) had twenty years, (n= 2, 6.7%) had twenty-five years, and (n = 1, 3.3%) had twenty-six years of teaching experience. The data is shown in Table 26 and Figure 27.

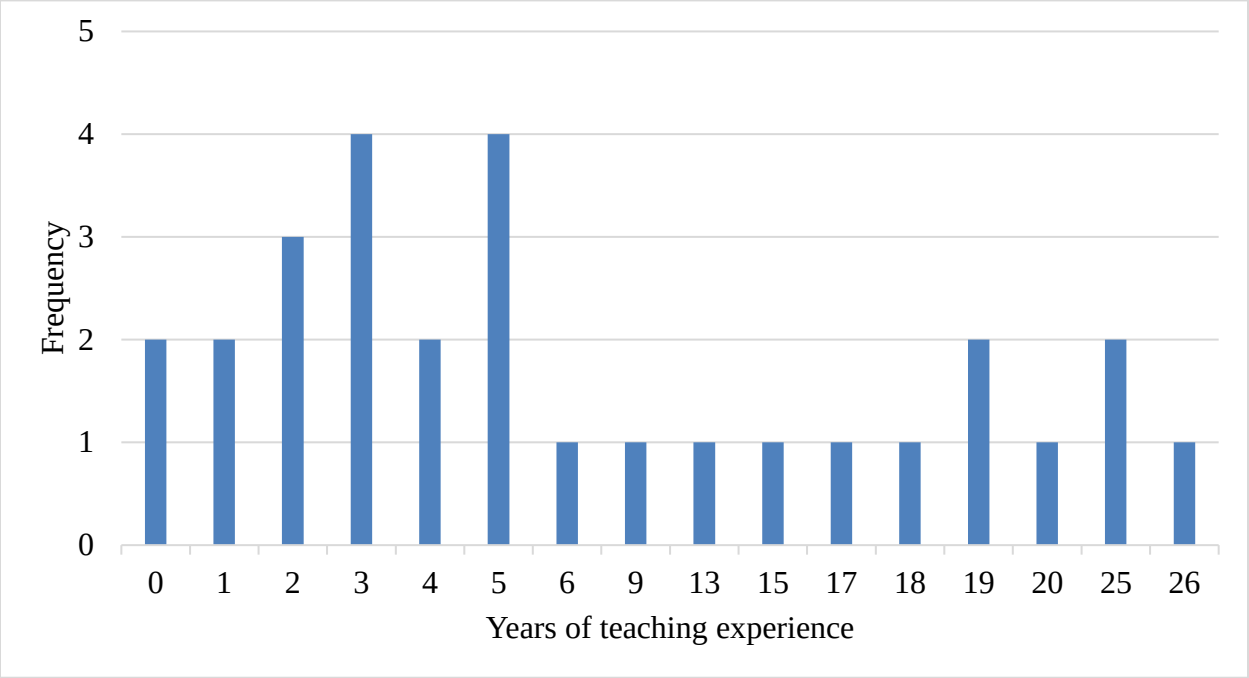
Table 26

Years of teaching experience

Years of experience	*n*	%
.00	2	6.7
1.00	2	6.7
2.00	3	10.0
3.00	4	13.3
4.00	2	6.7
5.00	4	13.3
6.00	1	3.3
9.00	1	3.3
13.00	1	3.3
15.00	1	3.3
17.00	1	3.3
18.00	1	3.3
19.00	2	6.7
20.00	1	3.3
25.00	2	6.7
26.00	1	3.3
Missing system	1	3.3

Figure 27

Years of teaching experience



Indicating the Number of Educational Technology Applications

Participants were asked to indicate the number of educational technology applications or software they use in their class. Participants (n = 29, 96.7%, M = 4.79, SD = 3.21) responded to this variable, while (n = 1, 3.3%) did not respond. Participants (n = 1, 3.3%) indicated that they used two educational technology applications or software in their class, (n = 14, 46.7%) used three, (n = 4, 13.3%) used four, (n = 4, 13.3%) used five, (n = 2, 6.7%) used six, (n = 3, 10.0%) used ten, while (n = 1, 3.3%) used seventeen educational technology software or applications in class. Table 27 and Figure 28 have the data.

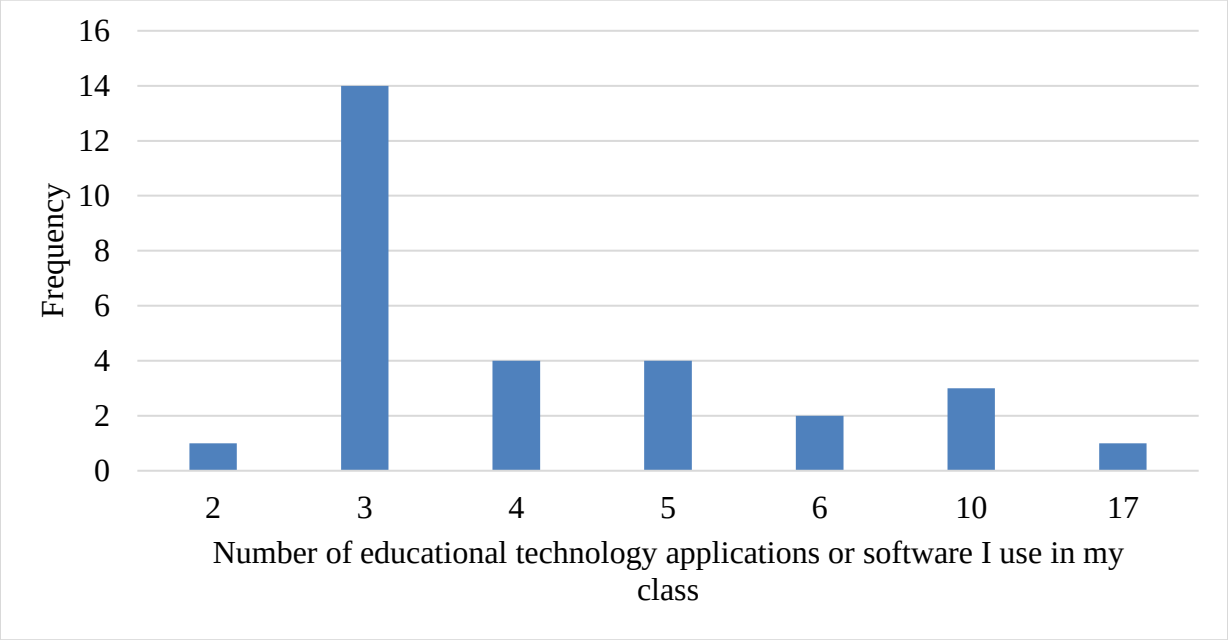
Table 27

Number of educational technology applications or software I use in my class

Number of technologies used	*n*	%
2.00	1	3.3
3.00	14	46.7
4.00	4	13.3
5.00	4	13.3
6.00	2	6.7
10.00	3	10.0
17.00	1	3.3
Missing system	1	3.3

Figure 28

Number of educational technology applications used in class



Recommending Colleagues to teach in the ADN Program

Participants were asked how likely they were to recommend a colleague from the clinical area to teach in the ADN program. Participants were to rate from a scale of zero (0) to ten (10). Zero is not at all likely, and ten is extremely likely. Participants who responded were (*n* = 29, 96.7%, *M* = 9.28, *SD* = .96), while (*n* = 1, 3.3%) did not respond to this variable. Participants (*n*

= 1, 3.3%) rated 7, (*n* = 7, 23.3%) rated 8, (*n* = 4, 13.3%) rated 9, while (*n* = 17, 56.7%) rated 10.

The data is presented in Table 28 and Figure 29.

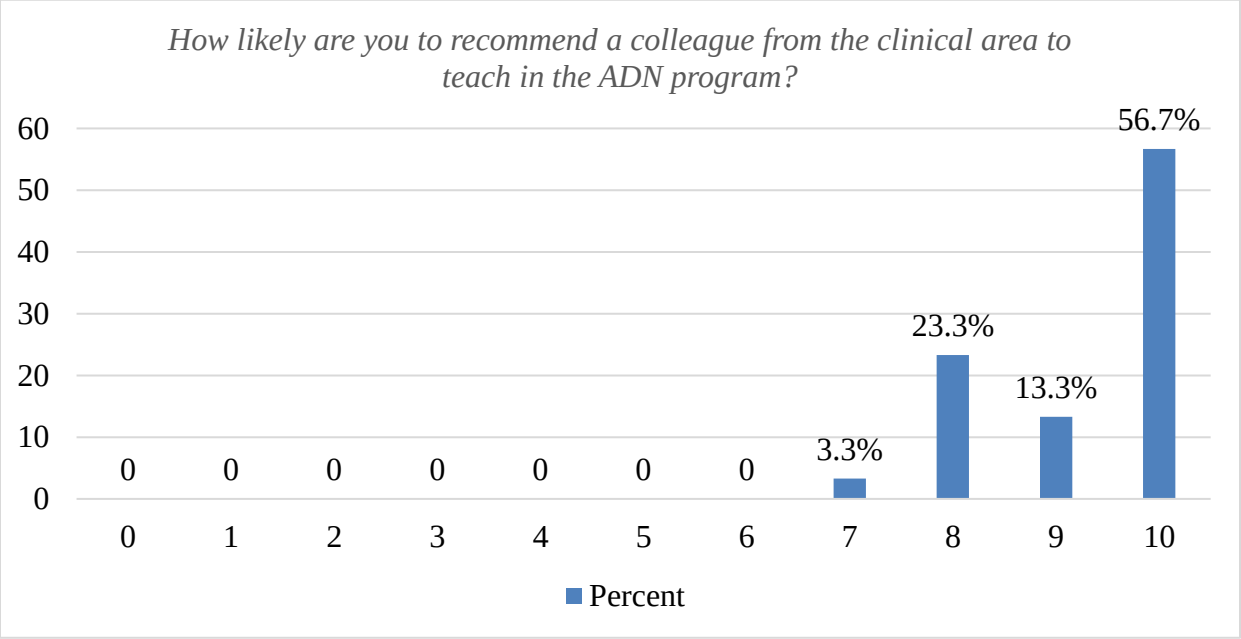
Table 28

How likely are you to recommend a colleague from the clinical area to teach?

Rating 0 -10	*n*	%
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	1	3.3
8	7	23.3
9	4	13.3
10	17	56.7
Missing System	1	3.0

Figure 29

How likely are you to recommend a colleague from the clinical area to teach?



Descriptive Statistics

Descriptive statistics were done to show the mean and standard deviation of participants' self-recorded responses to the survey questions. Participants responded to a series of questions to investigate their thoughts on pedagogy, use of technology in class, teaching preparation, transition experience, curriculum knowledge, and their age and gender. The mean and standard deviation of participants' age was (M = 46.79, SD = 11.64).

Variability of Clinical and Teaching Experiences, Educational Technology use and Recommending Colleagues

To check the amount of variability between the years of clinical experience, the years of teaching experience, the number of educational technology applications or software used in class, and how likely participants were to recommend a colleague from the clinical area to teach in the ADN program, a standard deviation and mean of the above variables were computed. The result showed that there was a wide gap between participants' years of clinical experience and the years of teaching experience, as shown by (M = 20.41, SD = 11.06) for clinical experience, and (M = 8.96, SD = 8.49) for teaching experience. Nurse educators had many years of clinical experience compared to years of teaching experience. The number of educational technology applications respondents used shows (M = 4.79, SD = 3.21). This result suggested that there was some variation in the use of educational technology applications or software. How participants are likely to recommend colleagues from the clinical areas to teach in the ADN program was indicated by (M = 9.28, SD = .96). This indicated that many participants were likely to recommend their colleagues to teach in the AND program. The data is presented in Table 29.

Table 29

Mean and standard deviation of Clinical experience and other variables

		CE	TE	Ed Tech	How likely
N	Valid	29	29	29	29
	Missing	1	1	1	1
Mean		20.41	8.96	4.79	9.28
Std. Deviation		11.06	8.49	3.21	.96
Minimum		3.00	.00	2.00	7
Maximum		51.00	26.00	17.00	10
Sum		592.00	260.00	139.00	269

Note: CE = Years of clinical nursing experience

TE = Years of teaching experience

Ed Tech = Number of educational technology applications or software I use in my class

How likely = How likely are you to recommend a colleague from clinical area to teach in the ADN program

Readiness to Teach

Participants' readiness to teach was examined, five variables were used, and the variability between the variables was checked. The areas of knowledge of teaching methods upon hire, the number of teaching methods used in a class session, how participants felt prepared to teach in the ADN program, and also classroom management were categorized under readiness and preparation. Participants who responded that they feel prepared to teach the first semester of hired were (M = 3.13, SD = 1.35) and (M = 4.50, SD = .96) participants responded that they feel prepared to teach in the ADN program. Participants (M = 3.0, SD = 1.33) indicated if they knew the teaching methods to use when they were hired, and those who responded to whether they used more than three methods to teach one class session were (M = 4.24, SD = 1.00). Participants (M = 4.44, SD = .98) indicated whether they could manage the classroom without frustration. Table 30 and Figure 30 present the data.

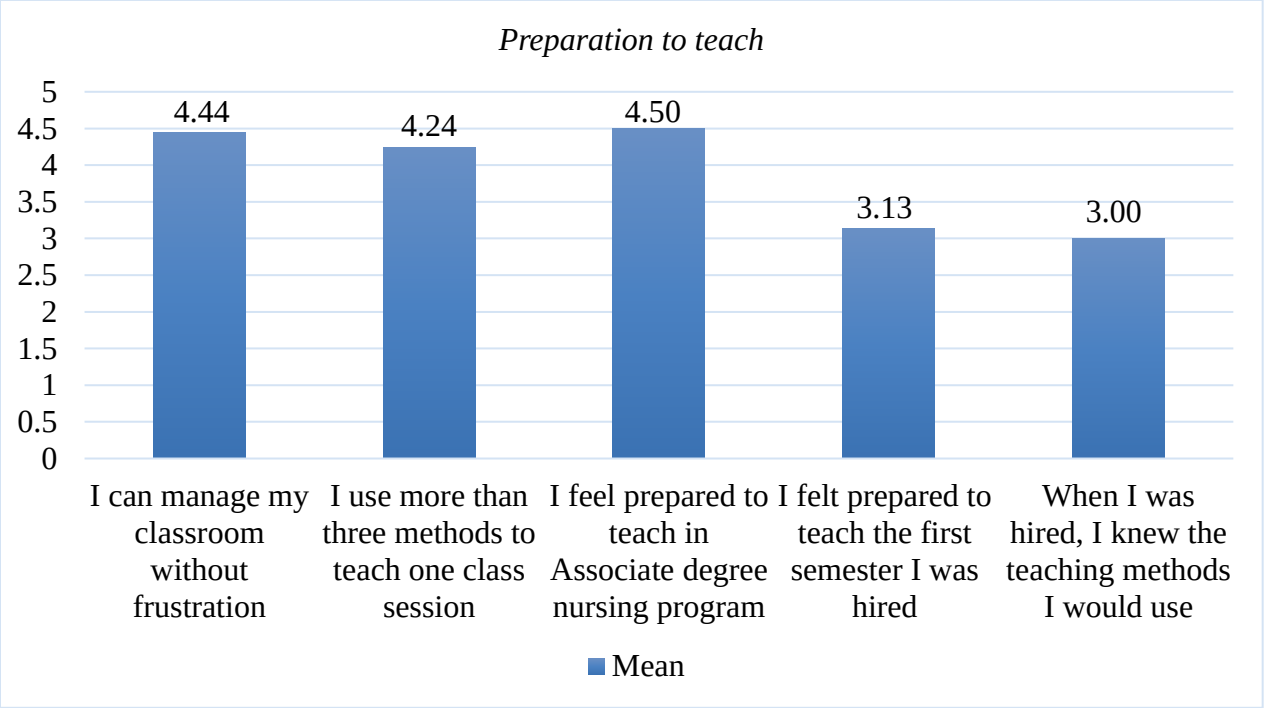
Table 30

Mean and standard deviation of participants preparation to teach.

Variables	Mean	Standard deviation
When I was hired, I knew the teaching methods I would use	3.00	1.33
I felt prepared to teach the first semester I was hired	3.13	1.35
I feel prepared to teach in Associate degree nursing program	4.50	.96
I use more than three methods to teach one class session	4.24	1.02
I can manage my classroom without frustration	4.44	.98

Figure 30

Mean for participants preparation to teach



Technology use in the Classrooms

To further examine the use of differentiated instruction strategies by nurse educators in the ADN program, an investigation was done on the use of technology in the classroom. Participants indicated if they could select educational technologies to enhance students learning

(*M* = 4.51, *SD* = .82). If students like when participants use educational technologies in classroom was indicated by (*M* = 4.37, *SD* = .90). Response to knowing what educational technologies to use in classroom and comfort using them was indicated by (*M* = 4.41, *SD* = .94), while response to the variable on knowing the number of educational technology applications or software used in class by participants was (*M* = 4.79, *SD* = 3.21). See Table 31 and Figure 31.

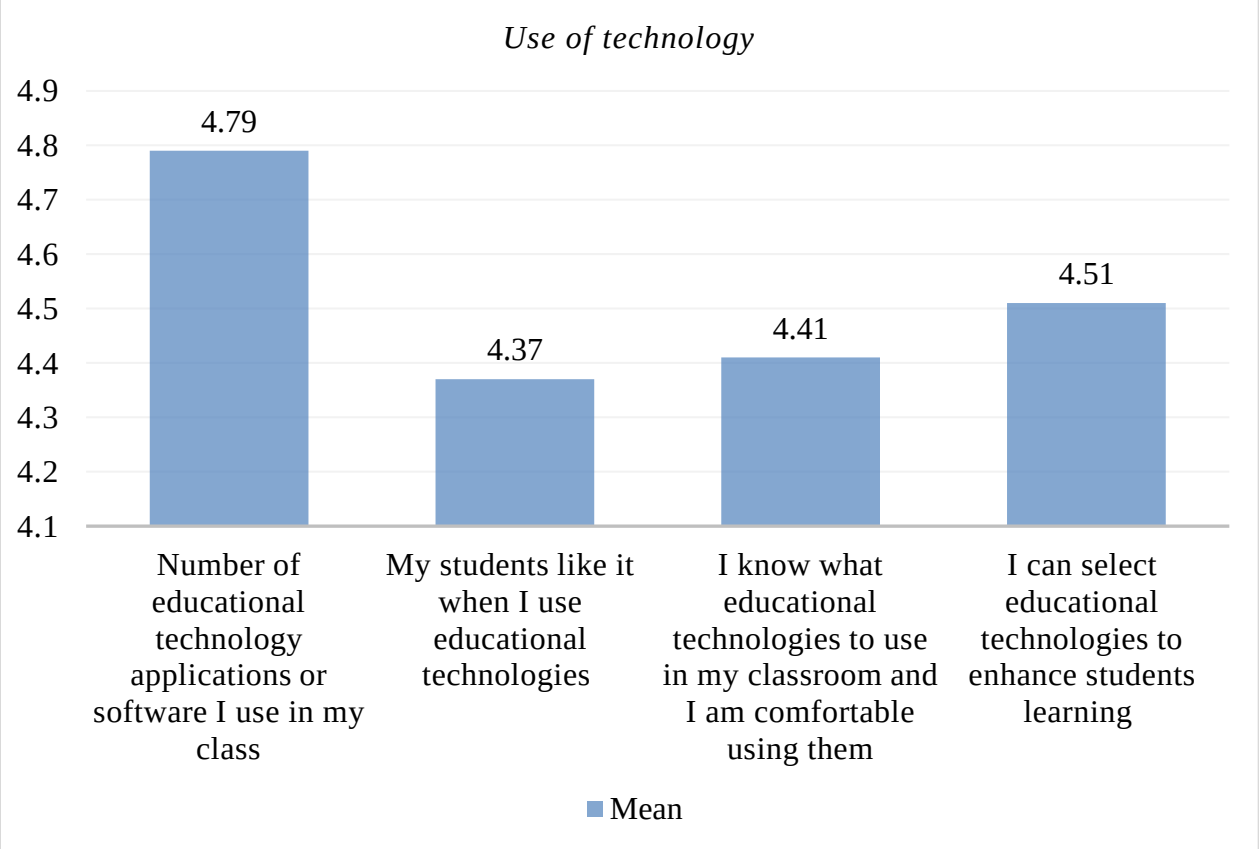
Table 31

Use of technology

Variables	Mean	Standard deviation
I can select educational technologies to enhance students learning	4.51	.82
I know what educational technologies to use in my classroom and I am comfortable using them	4.41	.94
My students like it when I use educational technologies	4.37	.90
Number of educational technology applications or software I use in my class	4.79	3.21

Figure 31

Mean for the use of technology



The transition experience of participants was investigated using four variables. The mean and standard deviations on each of the variables were checked. On the variable that inquired how challenging it was to transition from clinical to teaching, the result showed (M = 3.41, SD = 1.26), years of teaching experience (M = 8.96, SD = 8.49), and years of clinical nursing experience was (M = 20.41, SD = 11.06). Participants also indicated if they get the support that they need from nursing education administrators (M = 4.65, SD = .85). See Table 32 and Figure 32 for the data.

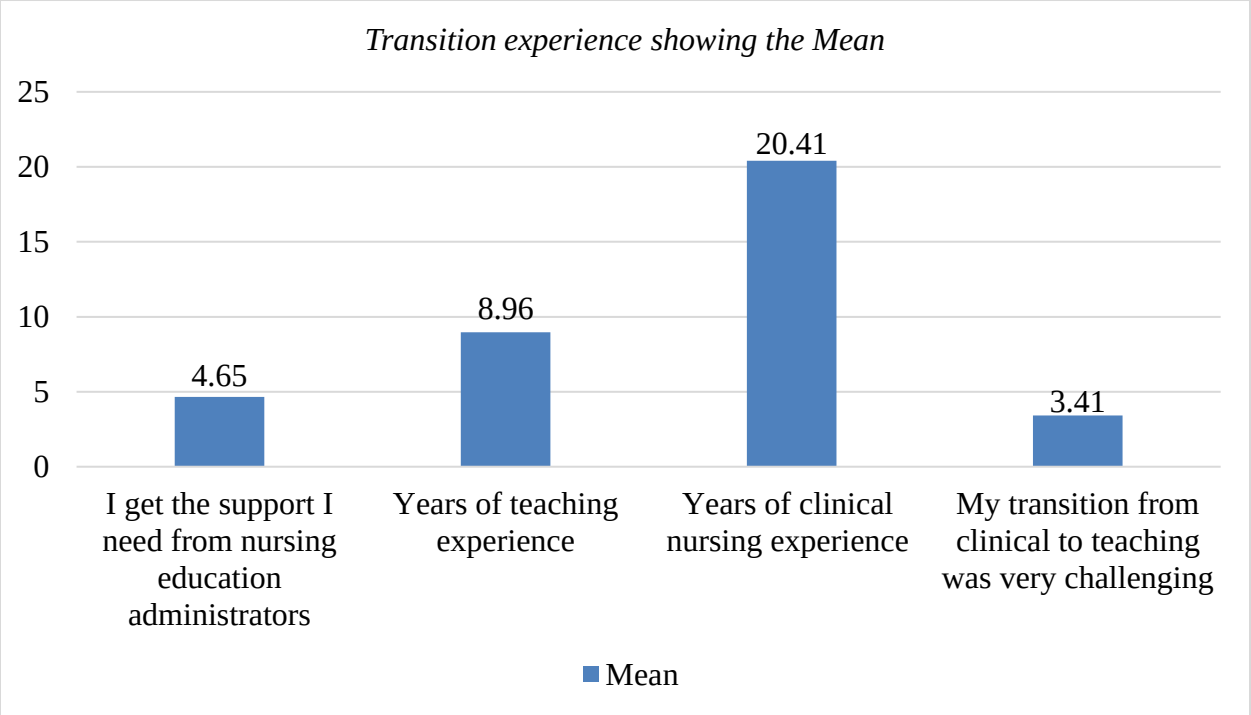
Table 32

Transition experience

Variables	Mean	Standard deviation
My transition from clinical to teaching was very challenging	3.41	1.26
Years of clinical nursing experience	20.41	11.06
Years of teaching experience	8.96	8.49
I get the support I need from nursing education administrators	4.65	.85

Figure 32

The mean for transition experience



Another area investigated was curriculum knowledge, and three variables were used to examine this area. Participants responded to the variables on curriculum knowledge and whether they were very familiar with the ADN curriculum (M = 4.39, SD = .91). Those who responded to indicate whether there was a lot to improve in nursing education were (M = 4.13, SD = 1.15). When participants were asked how likely they were to recommend a colleague from the clinical

area to teach in the ADN program, participants (M = 9.28, SD = .96) indicated their responses. The data is presented in Table 33 and Figure 33.

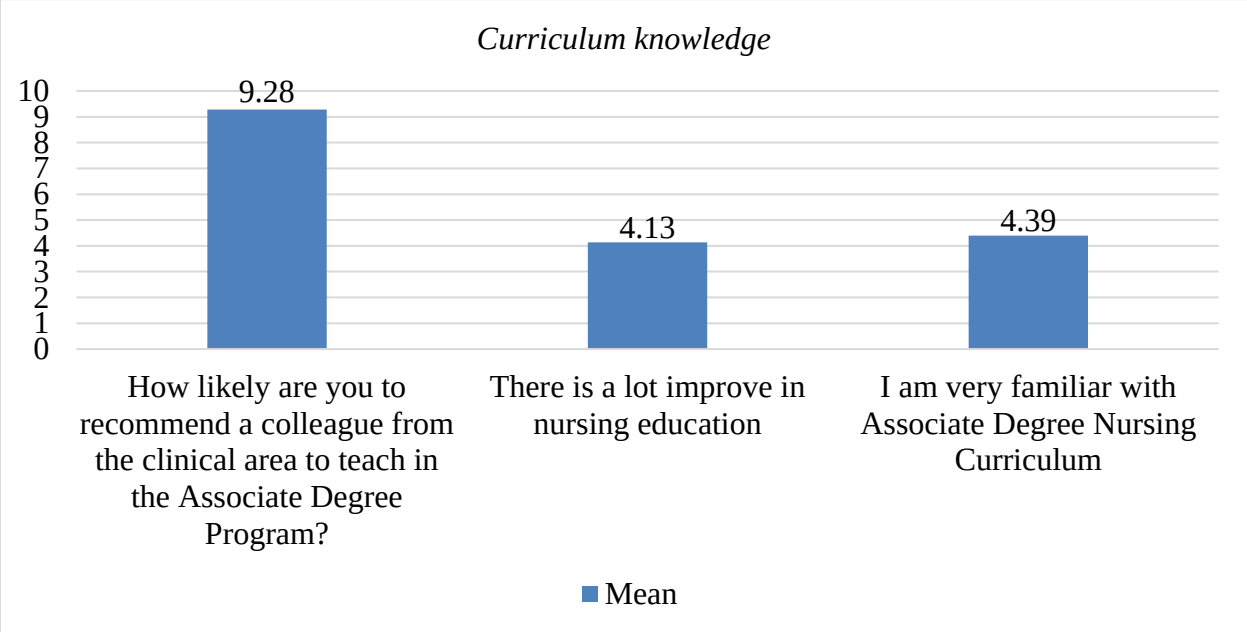
Table 33

Curriculum knowledge

Variable	Mean	Standard deviation
I am very familiar with Associate Degree Nursing Curriculum	4.39	.91
There is a lot to improve in nursing education	4.13	1.15
How likely are you to recommend a colleague from the clinical area to teach in the Associate Degree Nursing program?	9.28	.96

Figure 33

Mean for curriculum knowledge



The teaching confidence of participants was assessed to examine their readiness to teach further. Two variables were used to examine participants' teaching confidence. Respondents (M = 4.57, SD = 0.75) indicated that they feel confident teaching in the ADN program. While

respondents (*M* = 4.24, *SD* = 1.18) indicated whether they had a strong background in the course or courses they teach. Table 34 and Figure 34 present the data.

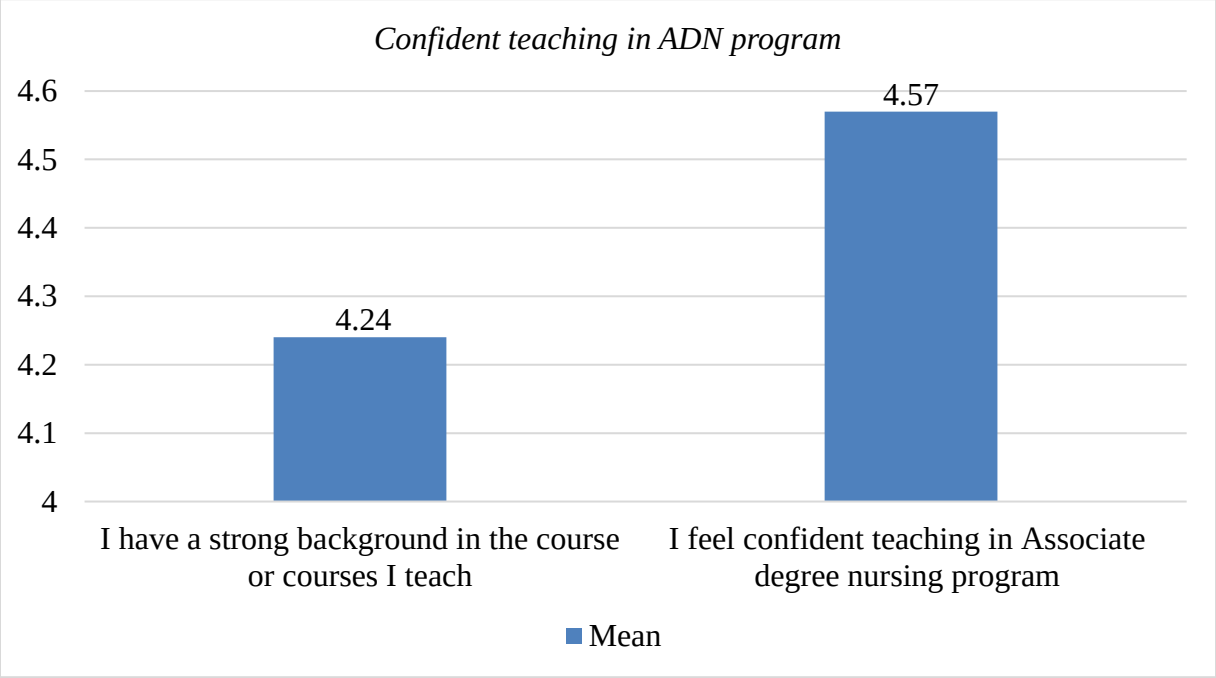
Table 34

Confidence teaching in ADN program

Variable	Mean	Standard deviation
I feel confident teaching in Associate degree nursing program	4.57	.75
I have a strong background in the course or courses I teach	4.24	1.18

Figure 34

Mean showing confident teaching in ADN program



Correlation

The purpose of this study was to examine the teaching preparation of nurse educators in the ADN program and its association with instruction and content delivery. Instruction strategies and the relationship between educators' teaching preparation and choice of content delivery strategies were examined. Nurse educators' choice of instruction strategies and the use of

technology in the classroom were investigated using responses of participants from the ADN programs in the RGV. To address research question number one, a Spearman's rank correlation coefficient with alpha = 0.05 ($\alpha = 0.05$) as significance level (2-tailed) was calculated to assess possible relationship between the teaching preparation, curriculum knowledge, pedagogy, and transition experience of the nurse educators in the ADN program.

Research Question 1

What are the relationships between the teaching preparation of nurse educators and the choice of instruction methods in the ADN program? This was one of the research questions that this investigation attempted to address.

The Age of Participants and Academic Responsibilities

In an attempt to answer research question one, Spearman's rank-order correlations were computed to examine the relationships between participants' age and years of clinical nursing experience. The Spearman's rank-order correlation, $r_s = .61$, $n = 29$, $p < .001$, showed a statistically strong positive relationship between the two variables. The age of participants and their transition from clinical to teaching being very challenging showed $r_s = .51$, $n = 29$, $p = .005$. This result indicated a positive statistically significant relationship between the two variables. The higher the age of participants, the more challenging it was to transition from the clinical environment to academic roles. The relationship between participants' age and the number of educational technology applications or software used in their classroom was $r_s = .36$, $n = 29$, $p = .054$. This finding showed a moderate positive correlation between the two variables. Technology use increased moderately as participants' age increased. Participants' age and overall confidence had no statistical significance, but there was a weak positive relationship between the two variables, $r_s = .17$, $n = 26$, $p = .406$. How participants felt prepared to teach the

first semester of hire and participants' age was not statistically significant. The two variables did not correlate, r_s = -.08, n = 29, p = .671. Also, how participants felt prepared to teach in the ADN program did not correlate with participants' age, r_s = -.08, n = 28, p = .674. The use of more than three teaching methods to teach one class session had a moderate positive correlation with participants' age, r_s = .33, n = 29, p = .082. Whether participants were familiar with the ADN curriculum did correlate with age, r_s. = .42, n = 28, p = .025, and the correlation was significant. As participants' age increased, there was a corresponding moderate positive increase in participants' familiarity with the ADN curriculum. The ability to manage the classroom without frustration had no statistical significance with participants' age, r_s = -.06, n = 29, p = .742. This result suggested a weak negative correlation between the variables. Knowing the teaching methods to use upon hire did not have statistical significance with participants' age, r_s = -.02, n = 29, p = .919. There was a weak negative correlation, which signifies no association between the two variables. Also, knowing what educational technologies to use in the classroom and comfortable using them did not correlate with participants' age, r_s = -.01, n = 29, p = .968, there was a weak negative correlation, which suggested a 96.8% probability that correlation between the two variables did not exist, and the probability cannot be supported since p = .968. See Table 35 for the data on Spearman's rho correlation for age and other variables.

Table 35

Spearman's rho for age and other variables

		1	2	3	4	5	6	7	8	9	10
1. I know what educational technologies to use in my classroom and I am comfortable using them	r_s	1.000	.468*	0.353	.645**	0.153	-0.008	0.254	0.201	.462*	0.194
	p		0.012	0.065	0.000	0.428	0.968	0.184	0.296	0.012	0.313
	n		28	28	29	29	29	29	29	29	29
2. I feel prepared to teach in Associate degree program	r_s		1.000	.515**	0.273	0.034	-0.083	0.148	0.318	0.367	0.344
	p			0.006	0.160	0.865	0.674	0.452	0.099	0.055	0.073
	n			27	28	28	28	28	28	28	28
3. I am very familiar with Associate Degree Nursing Curriculum	r_s			1.000	.433*	0.371	.422*	0.372	0.322	0.212	0.113
	p				0.021	0.052	0.025	0.051	0.095	0.278	0.569
	n				28	28	28	28	28	28	28
4. I use more than three methods to teach one class session	r_s				1.000	0.186	0.328	.462*	0.111	0.192	0.067
	p					0.333	0.082	0.012	0.568	0.317	0.730
	n					29	29	29	29	29	29
5. My transition from clinical to teaching was very challenging	r_s					1.000	.510**	0.249	-0.208	-0.047	-0.305
	p						0.005	0.192	0.280	0.810	0.108
	n						29	29	29	29	29
6. My age	r_s						1.000	.606**	-0.020	-0.064	-0.082
	p							0.000	0.919	0.742	0.671
	n							29	29	29	29
7. Years of clinical nursing experience	r_s							1.000	0.075	-0.007	0.075
	p								0.699	0.972	0.699
	n								29	29	29
8. When I was hired, I knew the teaching methods I would use	r_s								1.000	0.083	.730**
	p									0.669	0.000
	n									29	29
9. I can manage my classroom without frustration	r_s									1.000	0.237
	p										0.215
	n										29
10. I felt prepared to teach the first semester I was hired	r_s										1.000
	p										
	n										

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Teaching Preparation and Clinical Background in Course and Courses

The Spearman's rank-order correlation coefficient to examine if there was an association between participants' responses to the variable that seeks whether participants have a strong clinical background in the course or courses they teach and how participants felt prepared to teach the first semester they were hired suggested a moderate positive correlation between the two variables, r_s = .34, n = 29, p = .071. The participants feeling prepared to teach in the ADN program had a moderate positive correlation with how participants felt prepared to teach the first semester they were hired, r_s = .34, n = 28, p = .073. The higher the participants rated on feeling

prepared to teach in the ADN program, the higher they felt prepared to teach the first semester of their hire. The responses to both variables were in the same positive direction, but statistically, the correlation was not significant since the *p*-value = .073. How participants felt prepared to teach the first semester they were hired and their response to how well they knew the teaching methods to use upon hire had a strong positive statistically significant relationship, $r_s = .73$, $n = 29$, $p < .001$, indicating that those who knew what teaching methods to use upon hire, also felt prepared to teach in their first semester, the relationship between these two variables were not by chance, the *p*-value of <.001 gives strong evidence of the association between the two variables, this was statistically significant. The correlation between the variable that asked participants to indicate if they have a strong background in the course or courses that they teach and the variable about whether participants know the teaching methods to use upon hire was $r_s = .36$, $n = 29$, $p = .057$, this indicated that those participants who rated high to having strong background in the course or courses they teach, also rated high to knowing the teaching methods to use upon hire, this showed a moderate positive correlation between the variables. As participants have a strong background in the course or courses they teach, they were able to know teaching methods to use upon hire. Also, participants have a strong background in the course or courses they teach indicated a relatively strong association with the variable that asked if participants knew what educational technologies to use in the classroom and were comfortable with them, $r_s = .54$, $n = 29$, $p = .003$, both variables move in the same positive direction which shows positive, statistically significant correlation, hence when participants have strong background in the course or courses they teach, they know what educational technologies to use in classroom. Participants who rated high that they felt prepared to teach in the ADN program rated high to the variable that asked if they knew what teaching methods they would use when hired, $r_s = .32$, $n = 28$, $p = .099$,

this shows a moderate positive correlation, which translates that those who knew what teaching methods to use, did feel prepared to teach in the ADN program. Participants who rated high on the variable seeking to know if participants felt prepared to teach in the ADN program also rated high that they know what educational technologies to use and were comfortable using them at r_s = .47, n = 28, p = .012, this is statistically significant and shows moderate to strong positive correlation. When participants knew what technologies to use, they also felt prepared to teach in the ADN program. Refer to Table 36 for Spearman's rho correlation of the variables and Figure 35 for Spearman's correlation coefficient.

Table 36

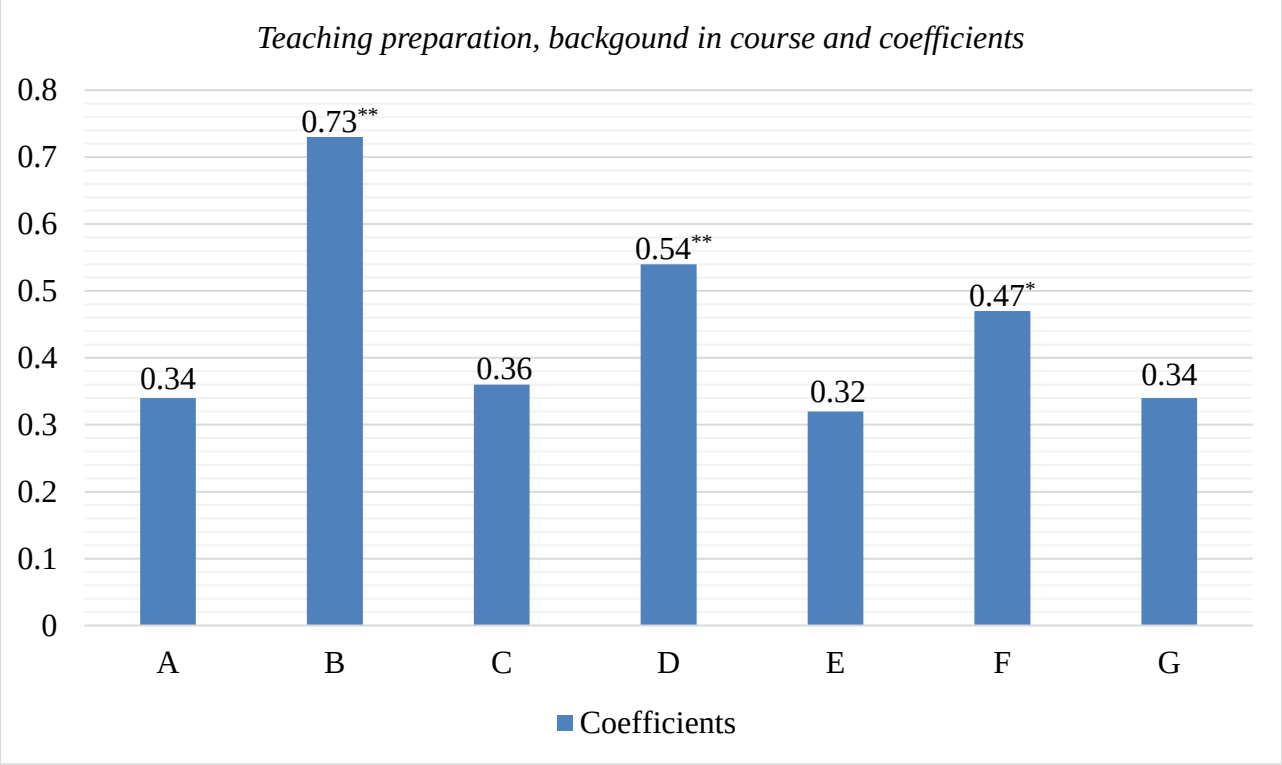
Spearman's rho for teaching preparation and clinical background in course

		1	2	3	4	5	6	7	8
1. I know what educational technologies to use in my classroom and I am comfortable using them	r_s	1.000	.468*	.645**	0.153	0.201	.462*	0.194	.536**
	p		0.012	0.000	0.428	0.296	0.012	0.313	0.003
	n		28	29	29	29	29	29	29
2. I feel prepared to teach in Associate degree nursing program	r_s		1.000	0.273	0.034	0.318	0.367	0.344	0.271
	p			0.160	0.865	0.099	0.055	0.073	0.163
	n			28	28	28	28	28	28
3. I use more than three methods to teach one class session	r_s			1.000	0.186	0.111	0.192	0.067	0.282
	p				0.333	0.568	0.317	0.730	0.139
	n				29	29	29	29	29
4. My transition from clinical to teaching was very challenging	r_s				1.000	-0.208	-0.047	-0.305	-0.084
	p					0.280	0.810	0.108	0.663
	n					29	29	29	29
5. When I was hired, I knew what teaching methods to use	r_s					1.000	0.083	.730**	0.358
	p						0.669	0.000	0.057
	n						29	29	29
6. I can manage my classroom without frustration	r_s						1.000	0.237	.527**
	p							0.215	0.003
	n							29	29
7. I felt prepared to teach the first semester I was hired	r_s							1.000	0.340
	p								0.071
	n								29
8. I have a strong background in the course or courses I teach	r_s								1.000
	p								
	n								

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Figure 35

Spearman's rho coefficient for Teaching preparation and background in course



Note: A = Strong background in courses and felt prepared to teach the first semester

B = Felt prepared to teach the first semester and know teaching to use methods upon hire

C = Strong background in courses and know teaching methods to use upon hire

D = Strong background in courses and know what educational technologies to use

E = Felt prepared to teach in the ADN program and knew what teaching methods to use upon hire

F = Felt prepared to teach in the ADN program and know what educational technologies to use

G = Felt prepared to teach in ADN program and felt prepared to teach first semester

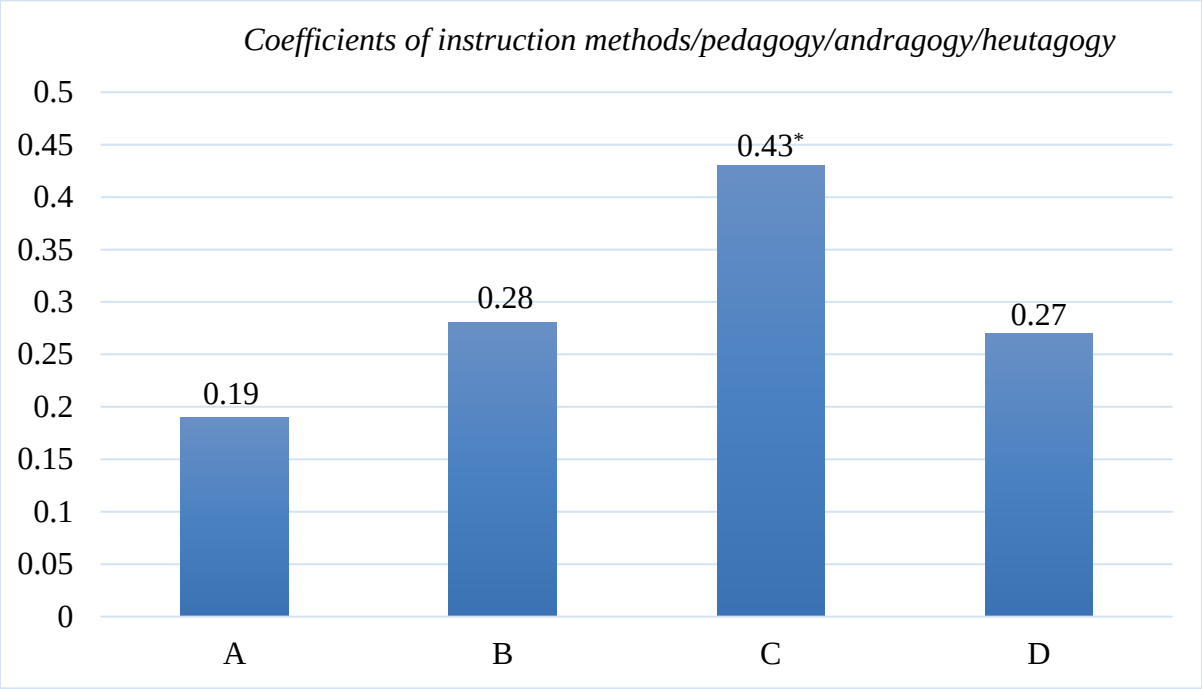
Instruction methods/Pedagogy/Andragogy/Heutagogy

Spearman's correlation coefficient was computed to examine participants' use of more than three methods to teach one class session and how participants can manage their classroom without frustration. The result showed a weak positive correlation between the two variables, r_s = .19, n = 29, p = .317. This result indicated that participants who can manage their classroom without frustration do use more than three methods to teach one class session. However, the

association could occur by random chance of 31.7% since $p = .317$, and the findings were not statistically significant. To assess the relationship between participants use of more than three methods to teach one class session and students like it when participants' use educational technologies, the Spearman's correlation coefficient between the two variables was found to be $r_s = .28$, $n = 29$, $p = .139$, indicating a positive relationship between the two variables. This result means that when more than three teaching methods were used in one class session, participants were able to manage their classroom without frustration, and there was a 13.9% chance of that happening. There was not enough evidence to reject the correlation since p-value = .139. Participants who rated high on the use of more than three methods to teach one class session also rated high on the variable that asked respondents to indicate if they were very familiar with the ADN curriculum. The result was indicated by, $r_s = .43$, $n = 28$, and $p = .021$, indicating a moderate positive correlation and a strong statistical significance. So, being very familiar with the ADN curriculum has a strong positive correlation with the use of more than three methods to teach one class session. Participants who rated higher on the use of more than three methods to teach one class session also rated higher on the feeling of being prepared to teach in the ADN program by $r_s = .27$, $n = 28$, $p = .160$. This result showed a weak positive correlation between the two variables. This correlation may not be disputed since $p = .160$. Figure 36 shows the correlation coefficients.

Figure 36

Spearman's correlation coefficients for teaching methods



Note: A = Use of more than three methods to teach one class session and how they can manage their classroom without frustration. B = Use of more than three methods to teach one class session and students like it when participants use educational technologies. C = Use of more than three methods to teach one class session and I am very familiar with the ADN curriculum D = Use of more than three methods to teach one class session and I feel prepared to teach in the ADN program

The Association Between Years of Teaching Experience with other Variables

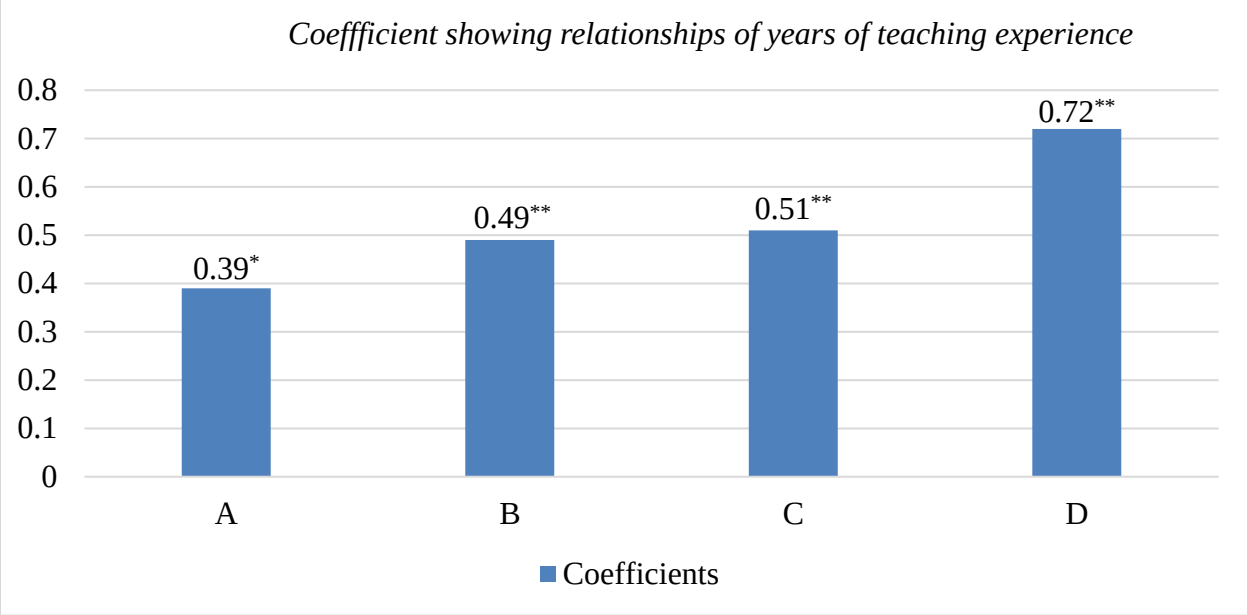
Spearman's correlation was conducted to examine the relationship between age and years of teaching experience. Findings showed that years of teaching experience and age of participants were statistically significant at $r_s = .72$, $n = 29$, $p < .001$. Participants who rated high to their age also rated high to years of teaching experience, showing a strong positive correlation between age and years of teaching experience. As participants' age increased, years of teaching experience also increased. There was a moderately strong correlation between years of clinical nursing experience and the number of educational technology applications or software used, $r_s = .51$, $n = 29$, $p = .005$. The rating for both variables did move in the same direction. Participants who rated high for years of clinical nursing experience also rated high for the number of

educational technology applications or software used. The relationship between the two variables was statistically significant. Participants who used a greater number of educational technology applications in the classroom had many years of clinical nursing experience. Years of teaching experience, when checked in relation to having a nursing education certificate, $r_s = .49$, $n = 29$, $p = .007$, indicated a moderately strong positive correlation between the variables, and the correlation was statistically significant. Having a nursing education certificate had a positive relationship with participants' years of teaching experience. Participants who had nursing education certificate, had more years of teaching experience.

Additionally, years of teaching experience had a moderate correlation with being very familiar with the ADN curriculum $r_s = .39$, $n = 28$, $p = .039$. This finding showed a positive correlation between the variables. Participants who were very familiar with the ADN curriculum had more years of teaching experience. See Figure 37 for Spearman's coefficient showing the relationship between years of teaching experience and age, years of teaching experience and familiarity with ADN curriculum, years of clinical experience and the number of educational technology applications or software use, and years of teaching experience and having a nursing education certificate.

Figure 37

Spearman's coefficient showing relationship of years of teaching experience



Note: A = Years of teaching experience and I am very familiar with ADN curriculum

B = Years of teaching experience and I have a nursing education certificate

C = Years of clinical nursing experience and the number of educational technology applications or software use

D = Years of teaching experience and age of participants

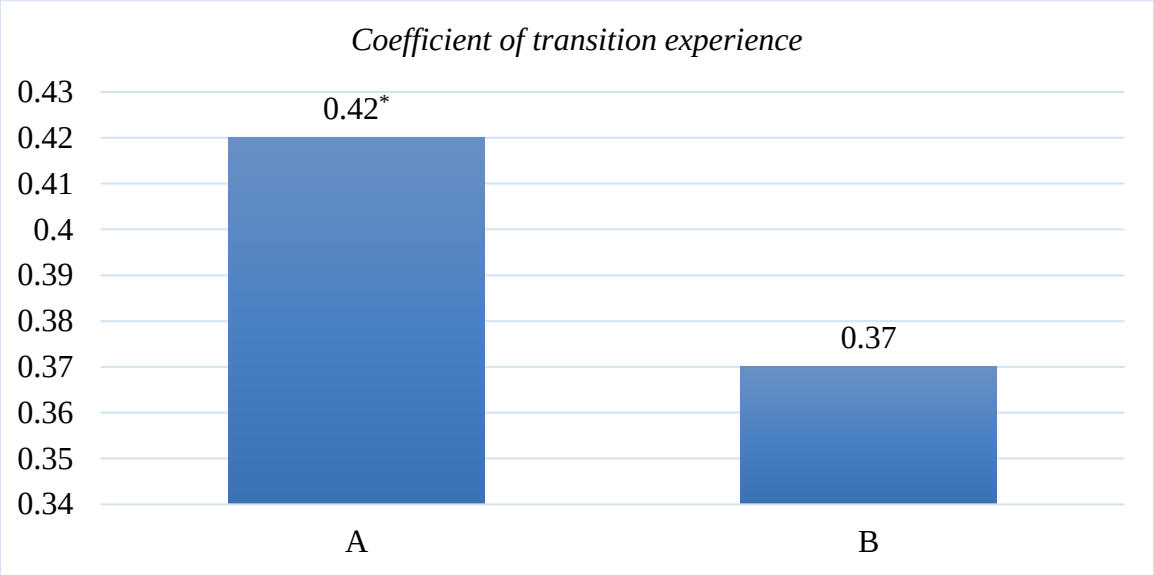
Transitioning Experience

The transition experience of participants was examined for association with other variables. Participants were asked to self-report their transition experience from a clinical setting to the academic environment. Participants who rated high that their transition from clinical to teaching was very challenging also rated high to indicate that there was a lot to improve in nursing education. This result showed a moderate positive and strong statistically significant relationship between the two variables $r_s = .42$, $n = 29$, $p = .022$. Transitioning from clinical was very challenging, moderately relates to participants being very familiar with the ADN curriculum. This relationship was shown in $r_s = .37$, $n = 28$, $p = .052$. Those who were very familiar with the ADN curriculum also had a challenging transition from clinical settings to

teaching roles. Figure 38 has the Spearman's correlation coefficient of the data. The relationship between transition experience and the presence of a lot to improve in nursing education was more substantial than transition experience and familiarity with the ADN curriculum.

Figure 38

Spearman's coefficient showing transition experience



Note: A = My transition from clinical to teaching was very challenging and there is a lot to improve in nursing education

B = Transitioning from clinical was very challenging and I am very familiar with the ADN curriculum

Technology use and Teaching Methods

A Spearman's correlation was computed to examine the relationship between the responses of participants who felt prepared to teach the first semester of hire and the number of educational technology applications or software used in their class had a positive but moderate relationship, $r_s = .35$, $n = 29$, $p = .063$. Educators who rated high on the number of educational technology use in class also rated high on that they felt prepared to teach the first semester they were hired. The association between the two variables had a 6.3% probability of random chance of occurrence. The rating on the feeling of confident teaching in ADN program and students like it, when participants used educational technologies, did correlate, $r_s = .27$, $n = 26$, $p = .191$. This result indicated a positive but weak relationship between both variables. Though the *p*-value of

.191 is not significant, there was a 19.1% chance that the association could occur by random chance. So, students liked it when educators who felt confident teaching in the ADN program used technology applications in class. The variable inquiring whether educators can select educational technologies to enhance students' learning had a weak to moderate association with the variable that inquired whether participants get the support they need from nursing education administrators, $r_s = .31$, $n = 29$, $p = .103$, the association occurs by 10.3% random chance since $p = .103$. The positive correlation showed that participants who get the support they need from nursing education administrators can select educational technology to enhance students' learning. More so, the construct seeking respondents to indicate if they can select educational technology to enhance students' learning significantly positively correlates with the construct seeking respondents to indicate if they use more than three teaching methods to teach one class session, $r_s = .32$, $n = 29$, $p = .097$. Though the association is weak to moderate, and the *p*-value of .097 was not statistically significant, there was a 9.7% probability of the association occurring. Participants who rated high that they can manage the classroom without frustration also rated high that they can select educational technologies to enhance students' learning, $r_s = .33$, $n = 29$, $p = .084$. These values indicate a moderate positive statistical correlation, meaning that participants who can select technology to enhance students' learning were able to manage their classroom without frustration, and there was an 8.4% chance of the correlation occurring, though the *p*-value is not statistically significant.

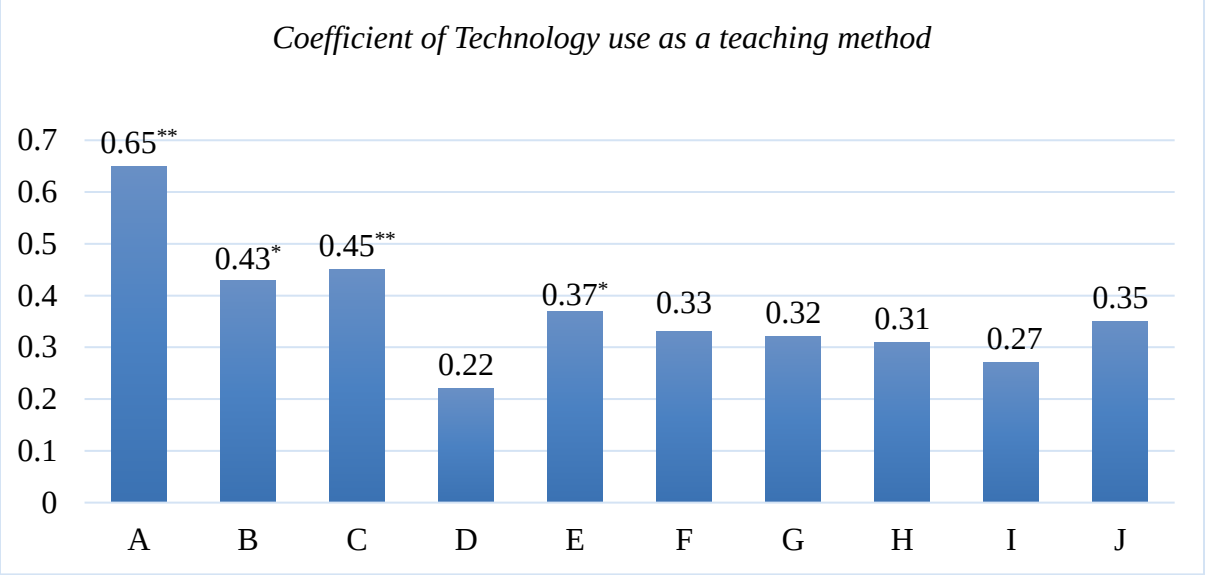
Participants who rated high that they select educational technology to enhance student's learning also rated high that students like it when participants use educational technology, $r_s = .37$, $n = 29$, $p = .050$. This result shows a moderate positive statistical correlation between the two variables; students like technology when participants are able to select educational

technology applications or software. The participants who rated high on the variable on whether participants were very familiar with the ADN curriculum also rated high on the variable that stated if participants can select educational technologies to enhance students learning, $r_s = .22$, $n = 28$, $p = .260$, the correlation result indicated that there was a positive relationship between the two variables, there was a 26.0% chance of the association between the two variables occurring, as the *p*-value was not statistically significant.

Participants who rated high that they can select educational technology to enhance students learning also rated high that they felt prepared to teach in the ADN program, $r_s = .43$, $n = 28$, $p = .022$. This finding showed a moderately strong positive relationship between both variables. This association was statistically significant. The relationship between participants knowing what educational technologies to use in the classroom and their comfort using them had a moderately strong, positive association and statistical significance with whether participants could select educational technologies to enhance students learning, this was indicated by $r_s = .45$, $n = 29$, $p = .015$. Participants knew what educational technologies to use in the classroom, and their comfort using them was associated with their use of more than three methods to teach one class session, $r_s = .65$, $n = 29$, $p < .001$. This result revealed a strong positive, relationship between the variables, and this was highly statistically significant. Figure 39 shows the Spearman's coefficient for technology use and teaching methods.

Figure 39

Spearman's coefficient for Technology use and teaching methods



Note: A = I Know what educational technologies to use in my classroom and I am comfortable using them, and I use more than three methods to teach one class session. B = Select educational technology to enhance students learning and felt prepared to teach in the ADN program. C = I know what educational technologies to use in my classroom and I am comfortable using them and I can select educational technologies to enhance students learning. D = I am very familiar with ADN curriculum and I can select educational technologies to enhance students learning. E = Select educational technology to enhance students learning and students like it when I use educational technologies. F = Can manage classroom without frustration and can select educational technologies to enhance students learning. G = I can select educational technology to enhance students learning and I use of more than three teaching methods to teach one class session. H = I can select educational technologies to enhance students' learning and I get support I need from nursing education administrators. I = I feel confident teaching in ADN program and students like it when I use educational technologies. J = I felt prepared to teach the first semester of hire and the number of educational technology applications or software use

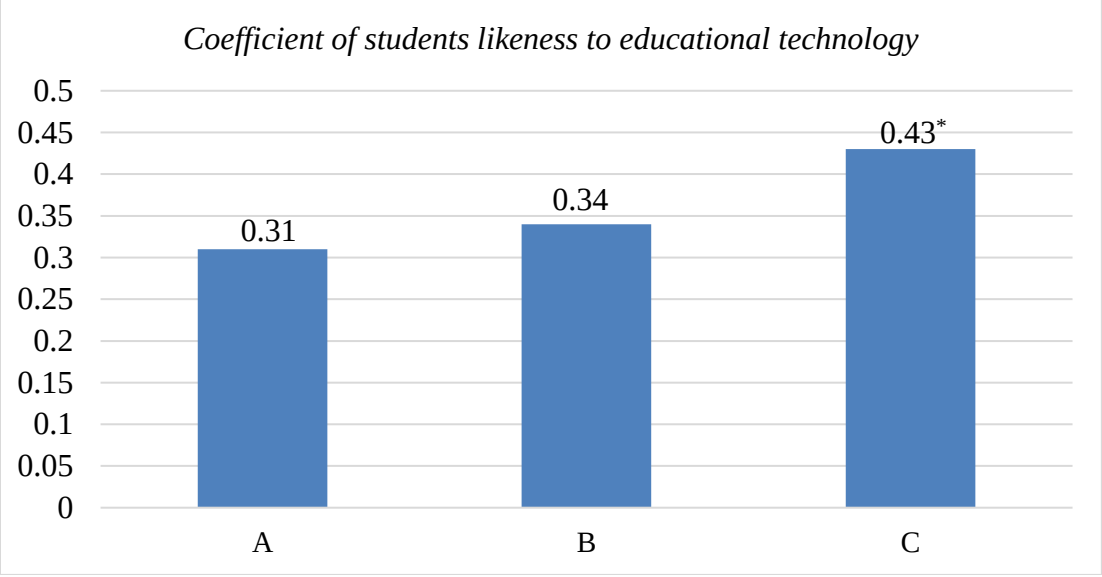
Students Likeness for Technology

Spearman's correlation was conducted to assess students' likeness to educational technology. Data collected showed that participants who rated high that students like educational technologies when used in the classroom also rated high to, participants being very familiar with the ADN curriculum $r_s = .31$, $n = 28$, $p = .104$, the correlation result indicates that there is a weak to moderate positive relationship between the two variables, which could occur by chance.

Students like educational technologies when used in the classroom, and participants felt prepared to teach in the ADN program showed a moderate positive relationship, $r_s = .34$, $n = 28$, $p = .076$. On average, students in the class of participants who felt prepared to teach in the ADN program, like educational technologies when used in class. When assessing the correlation between students like it when participants use educational technologies and participants know what educational technologies to use in the classroom and are comfortable using them, there was a moderately strong, positive correlation between the two variables. Aisn increase in one variable causes a significant increase in the other variable $r_s = .43$, $n = 29$, $p = .019$, this indicates a strong statistically significant association which suggest that when participants know what educational technology to use in their classroom, students like it. The Spearman's coefficient of the relationships is expressed in Figure 40.

Figure 40

Spearman's coefficient showing variables for student likeness for technology.



Note: A = Students like educational technologies when used in the classroom, and I am very familiar with the ADN curriculum B = Students like educational technologies when used in the classroom, and participants felt prepared to teach in the ADN program. C = Students like it when participants use educational technologies, and participants know what educational technologies to use in classroom and are comfortable using them

Confident, a Strong Force in Nursing Education

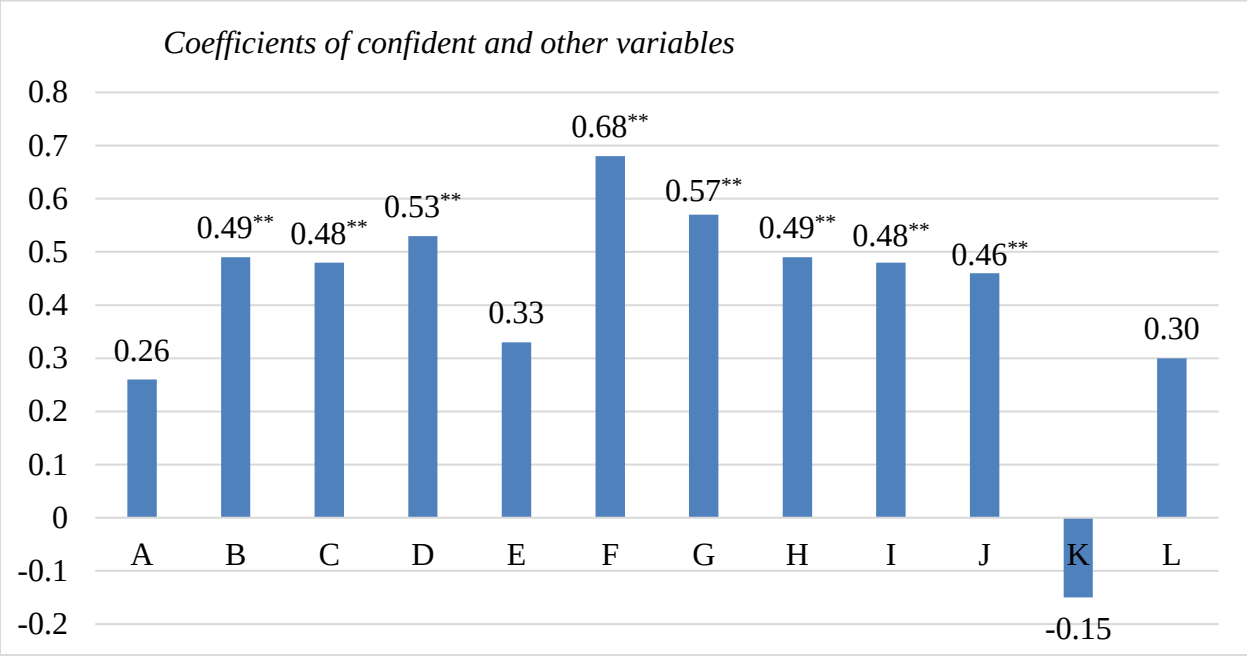
In the field of nursing, confidence is an essential key to performing well. This study reveals confidence as a positive factor in the delivery of educators' duties. To check the relationship between participants' confidence in teaching in the ADN program and if participants get the support they need from nursing education administrators, the result shows Spearman's correlation coefficient between the two variables to be $r_s = .26$, $n = 26$, with a corresponding $p = .200$. This result shows that feeling confident teaching in the ADN program has a weak positive correlation with the variable that participants support from nursing education administrators. Confident teaching in the ADN program and how participants can select educational technologies to enhance students learning $r_s = .49$, $n = 26$, $p = .011$, showed a moderately strong positive relationship between the variables, which is a statistically significant relationship. Participants who rated higher that they felt confident teaching in the ADN program also rated high to the use of more than three methods to teach one class session, $r_s = .48$, $n = 26$, $p = .014$. This indicates positive, strong, statistically relationship between the two variables. Feeling confident teaching in the ADN program had a moderately strong positive correlation with participants being very familiar with the ADN curriculum $r_s = .53$, $n = 26$, $p = .005$, indicating a strong statistically significant relationship between the two variables. Participants who rated high that they had a strong background in the course or courses they teach also rated high that they felt confident teaching in the ADN program, $r_s = .33$, $n = 26$, $p = .102$. This finding showed a moderate, positive association between the two variables. The association between both variables has the probability of occurring randomly 10.2% of the time, though the *p*-value is not statistically significant.

The result of the Spearman correlation coefficient between participants felt prepared to teach in the ADN program, and they felt confident teaching in the ADN program was found to be $r_s = .68$, $n = 26$, $p < .001$; this result showed a strong positive statistically significant relationship between the two variables. As participants felt confident about teaching in the ADN program, their feeling of being prepared to teach in the ADN program increased, and vice versa. Also, feeling confident teaching in the ADN program strongly correlates with participants knowing what educational technologies to use in their classroom and being comfortable using them $r_s = .57$, $n = 26$, $p = .002$. Feeling confident about teaching in the ADN program positively correlates with many other variables. Participants who rated high that they can select educational technology to enhance student learning also rated high that they have confident teaching in the ADN program, $r_s = .49$, $n = 26$, $p = .011$. The rating was in the same positive direction, which showed that the relationship between the two variables was moderately strong, positive, and statistically significant. Participants use of more than three methods to teach one class session strongly correlates with confident teaching in the ADN program, $r_s = .48$, $n = 26$, $p = .014$. This result showed a strong, positive, and statistically significant relationship. Feeling confident teaching in the ADN program also has a strong, positive, statistically significant relationship with participants being able to manage their classroom without frustration, as indicated by $r_s = .46$, $n = 26$, $p = .020$. The variables I feel confident about teaching in the ADN program and that participants have a strong background in the course or courses I teach were combined to form one variable (overall confidence). Although confidence is shown to have a strong driving force, this study shows that the relationship between years of teaching experience and overall confidence did not correlate $r_s = -.15$, $n = 29$, $p = .442$. The use of more than three methods to

teach one class session has a weak to moderate correlation with overall confidence r_s = .30, n = 29, p = .117. Figure 41 shows the Spearman's coefficient correlation.

Figure 41

Spearman's coefficients for confident and other variables



Note: A = Confident teaching in ADN program, and I get the support they need from nursing education administrators

B = Confident teaching in the ADN program, and I can select educational technologies to enhance students learning

C = Confident teaching in the ADN program, and use of more than three methods to teach one class session

D = Confident teaching in the ADN program, and being very familiar with ADN curriculum

E = Strong background in the course or courses they teach, and they felt confident teaching in the ADN program

F = Felt prepared to teach in the ADN program, and feel confident teaching in the ADN program

G = Confident teaching in the ADN program and knowing what educational technologies to use in their classroom and being comfortable using them. H = Can select educational technology to enhance students learning and have confident teaching in the ADN program. I = Use of more than three methods to teach one class session, and confident teaching in the ADN program

J = Confident teaching in the ADN program and able to manage their classroom without frustration

K = Years of teaching experience and overall confidence

L = More than three methods to teach one class session has no correlation with overall confidence

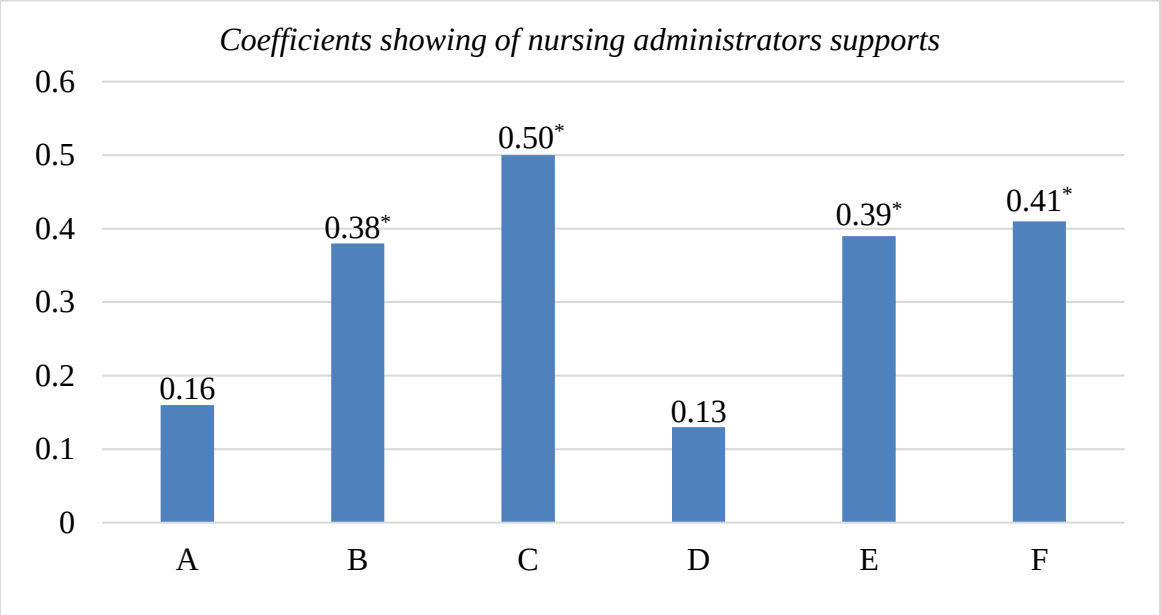
Educators Roles and Nursing Education Administrators Supports

Nursing educators need the support of nursing education administrators. This study confirms that the support participants get from nursing education administrators correlates with participants' use of more than three methods to teach one class session, $r_s = .16$, $n = 29$, $p = .040$. This Spearman's correlation result indicated a weak positive correlation between the two variables, and the relationship between the variables was statistically significant. Participants who rated positively that they manage their classroom without frustration also rated positively that they get the support they need from nursing education administrators $r_s = .38$, $n = 29$, $p = .045$, this indicated a moderate, positive association between the two variables, and it was statistically significant. Participants who rated high on the variable asking if they get the support they need from nursing administrators also rated high to the variable that enquired if students like it when participants use educational technologies, $r_s = .50$, $n = 29$, $p = .006$. The rating was in one positive direction, indicating a moderately strong positive association between getting support from nursing education administrators and students liking it when participants use educational technologies. The correlation between the two variables was statistically significant, and the results suggest that when students like technology use in the classroom, there was a corresponding increase in participants getting the support they need from nursing education administrators. Participants' responses to whether they get the support they need from nursing education administrators correlate with participants being very familiar with the ADN curriculum, $r_s = .13$, $n = 28$, $p = .506$. This finding showed a weak positive relationship between the two variables. The relationship is not statistically significant, but the association has a 50.6% random chance of occurring. Participants who rated high for getting the support they need from nursing education administrators also rated high to indicate that participants feel prepared to

teach in the ADN program, r_s = .39, n = 28, p =.040, this indicated a moderate positive correlation, and it was a statistically significant relationship at the 0.05 significant level. Participants get the support they need from nursing education administrators. There was also a correlation between participants knowing what educational technologies to use in their classroom and their comfort using them, r_s = .41, n = 29, p = .029. This result shows a positive, statistically moderate correlation between the two variables. See Figure 42 for the Spearman's coefficient of the variables.

Figure 42

Spearman's coefficients showing nursing administrators supports



Note: A = Get support from nursing education administrators, and use of more than three methods to teach one class session

B = I can manage their classroom without frustration, and get support they need from nursing education administrators

C = Get the support, they need from nursing administrators, and students like it when participants use educational technologies

D = Get support they need from nursing education administrators, and being very familiar with the ADN curriculum

E = Get support they need from nursing education administrators, and feel prepared to teach in the ADN program

F = Get the support they need from nursing education administrators, and knowing what educational technologies to use in their classroom and their comfort using them

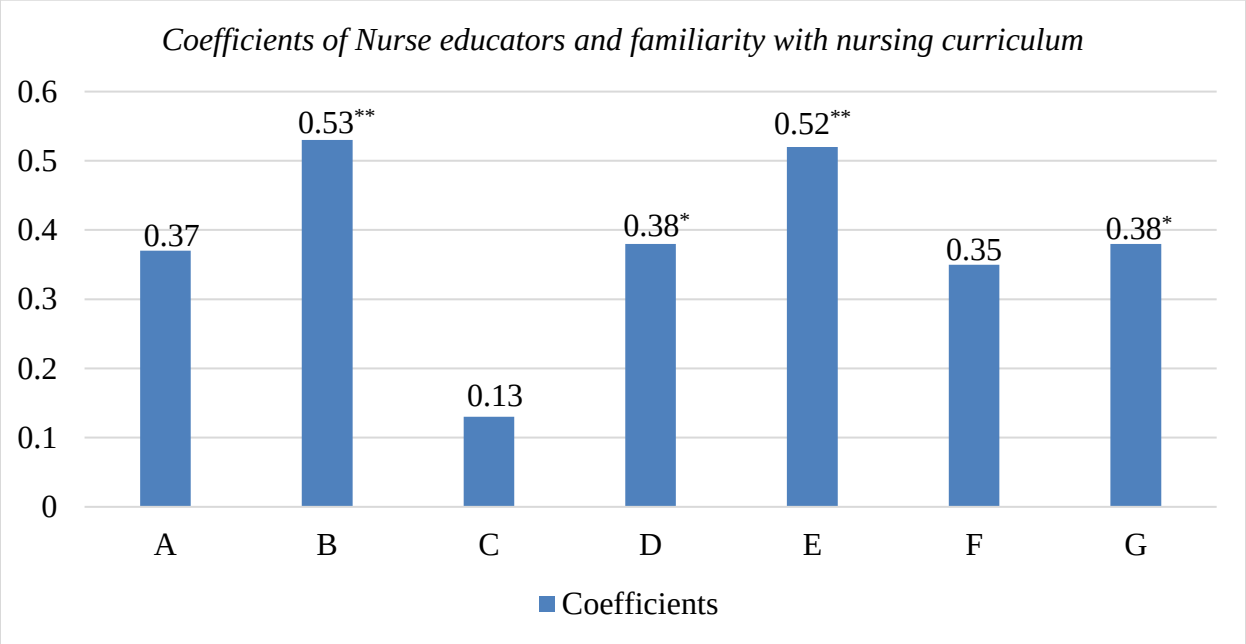
Nurse Educators and Familiarity with Nursing Curriculum

Using Spearman's correlation statistical test, the relationship between participants' familiarity with the ADN curriculum was assessed. Data from this study revealed that being very familiar with the ADN curriculum correlated with the transition from clinical settings to teaching was very challenging, $r_s = .37$, $n = 28$, $p = .052$, and this shows a moderate positive association, since an increase in one variable also caused a corresponding increase in the other variable moderately. Participants who rated positively about being familiar with the ADN curriculum also rated positively about feeling confident about teaching in the ADN program. Being familiar with the ADN curriculum had a moderately strong positive correlation with feeling confident in teaching in the ADN program, $r_s = .53$, $n = 26$, $p = .005$; this was statistically significant. Being familiar with the ADN curriculum had a positive correlation with getting support from nursing education administrators, $r_s = .13$, $n = 28$, $p = .506$. To be familiar with the ADN curriculum correlates with having a strong background in the course or courses participants teach, $r_s = .38$, $n = 28$, $p = .044$, which showed that participants who had a strong background in the course or courses they teach, were also very familiar with the ADN curriculum. Participants who rated high that they are very familiar with the ADN curriculum also rated high to indicate they felt prepared to teach in the ADN program, $r_s = .52$, $n = 27$, $p = .006$, this shows a moderately, strong, positive, statistically significant correlation between the two variables. On average, participants who felt prepared to teach in the ADN program were very familiar with the ADN curriculum. Participants who rated high on being familiar with the ADN curriculum also rated high on knowing what educational technologies to use in their classroom and are comfortable using them. There was a moderate, positive correlation between being very familiar with the ADN curriculum and knowing what educational technologies to use in the classroom and being

comfortable using them, r_s = .35, n = 28, p = .065. Though there was a moderate association between the variables, the relationship was not statistically significant since the p-value did not meet the statistical significance level of 0.05. However, the result indicated that participants who knew what educational technologies to use were very familiar with the ADN curriculum. Rating high to being very familiar with the ADN curriculum did correlate with the rating high that there is a lot to improve in nursing education at r_s = .38, n = 28, p = .043. Both variables show moderate, positive, statistically significant correlation. It is essential to be very familiar with the nursing curriculum. Classroom management is another vital responsibility that nursing educators need to accomplish. The data is presented in Figure 43.

Figure 43

Spearman's coefficients for participants' familiarity with nursing curriculum



Note: A = Familiar with the ADN curriculum, and transition from clinical settings to teaching was very challenging

B = Familiar with ADN curriculum, and felt confident to teaching in the ADN program.

C = Familiar with the ADN curriculum, and getting support from nursing education administrators.

D = Familiar with the ADN curriculum, and having strong background in the course or courses.

E = Familiar with the ADN curriculum, and felt prepared to teach in the ADN program.

F = Familiar with the ADN curriculum, and knowing what educational technologies to use in classroom and being comfortable using them. G = Familiar with the ADN curriculum, and there is a lot to improve in nursing education

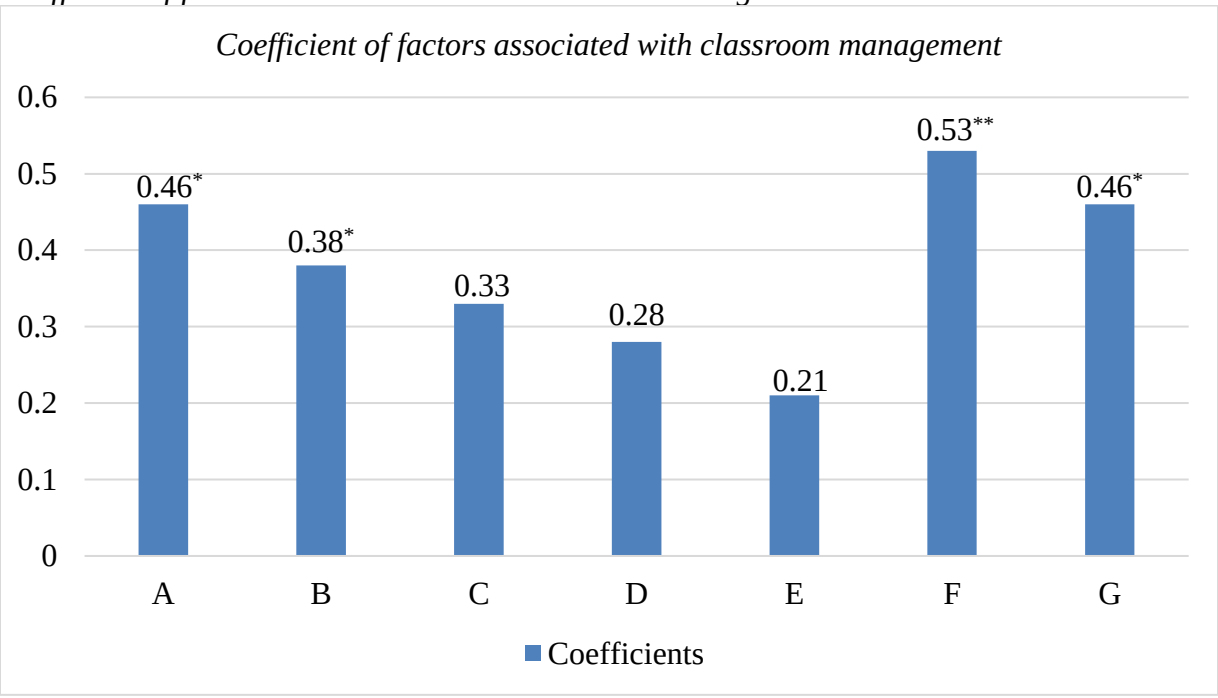
Related Factors to Classroom Management

The relationship between classroom management was checked with other variables using Spearman's correlation. Findings from this study inform that managing a classroom without frustration correlates with confidence in teaching in the ADN program at r_s= .46, n = 26, p = .020; this relationship is statistically significant and indicates a moderately strong, positive relationship. Participants who rated high that they can manage the classroom without frustration also rated high that they get support from nursing education administrators, r_s = .38, n = 29, p = .045. The correlation coefficient of .38 indicated a moderate, positive correlation between the two variables; both variables move in the same positive direction, meaning that when participants get support from nursing education administrators, they can manage their classroom without frustration. The relationship is statistically significant at a 0.05 significant level since p = .045. There is also a correlation between the variable that asked if participants can manage the classroom without frustration and if they can select educational technology to enhance student learning, r_s = .33, n = 29, p = .084; this indicates a moderate positive relationship between the two variables. The correlation can occur by 8.4% random chance since p = .084, which is above the significance level of 0.05. To manage the classroom without frustration positively correlates with students liking educational technologies when used in the classroom, r_s = .28, n = 29, p = .139; this relationship has a 13.9% chance of occurrence. Participants who rated high on the variable that inquired if participants could manage the classroom without frustration also rated high on the variable that inquired whether participants were very familiar with the ADN curriculum, r_s = .21, n = 28, p = .278, both ratings were in the positive direction. They showed a weak positive correlation between the variables; this correlation is not statistically significant, but there is a 27.8% chance of it occurring. To manage the classroom without frustration was

rated high, and likewise, to have a strong background in the course or courses taught, r_s = .53, n = 29, p = .003. This finding indicated a moderately strong positive correlation between the two variables, and the relationship is statistically significant. To manage the classroom without frustration and to know what educational technologies to use and be comfortable using them were rated high by participants, with a correlation coefficient of r_s = .46, n = 29, with a corresponding p-value of .012 indicating moderately, strong, positive relationship, this relationship is statistically significant. Classroom management correlates with nursing education administrators' support, familiarity with curriculum, confidence in teaching, selection of educational technology for use in class, students liking technology, and having a strong background in the course or courses taught. When educators can manage their classrooms, that adds to an increase in confidence. Figure 44 shows the Spearman's coefficient of the factors associated with classroom management.

Figure 44

Coefficient of factors that associate with classroom management



Note: A = Can manage classroom without frustration, and confident in teaching in the ADN program

B = Can manage classroom without frustration, and get support from nursing education administrators

C = Can manage classroom without frustration, and select educational technology to enhance student learning

D = Can manage classroom without frustration, and students like educational technologies when used in the classroom

E = Can manage classroom without frustration, and being familiar with the ADN curriculum

F = Can manage classroom without frustration, and having a strong background in the course or courses

G = Can manage classroom without frustration, and know what educational technology to use and being comfortable using them

Overall Confidence

Feeling confident teaching in the ADN program and having a strong background in the course or courses taught were combined to form one variable (overall confidence). Likewise, knowing the teaching methods to use upon hire and feeling prepared to teach the first semester of hire were combined to form one single variable (new hire), while feeling prepared to teach in the ADN program and the use of more than three methods to teach one class session, and managing classroom without frustration was combine as one variable (Preparation to teach). A Spearman nonparametric correlations test was done to examine any correlation between the three combined variables. The result indicated that preparation to teach, $r_s = .62$, $n = 29$, $p < .001$, and new hire $r_s = .43$, $n = 29$, $p = .019$, were positively correlated with overall confidence, and the relationship was statistically significant. Participants' readiness to teach when newly hired had a moderate correlation with academic qualifications $r_s = .35$, $n = 29$, $p = .067$.

Research Question 2

This study attempted to answer questions about nurse educators' academic background. The research question was: What are the relationships between nurse educators' academic background and the use of different teaching methods in the ADN program?

To further investigate the teaching readiness of nurse educators in the ADN program, this second research question investigated whether there were relationships between the academic preparation of participants and the use of different teaching methods. Participants were asked to

self-report their academic degrees and qualifications. All the different degrees reported by participants were compounded to form one variable named academic qualifications. After merging the reported academic degrees, a Spearman's correlation was conducted, and the result indicated that there was a moderately strong positive statistically significant correlation between academic qualifications and the use of more than three methods to teach one class session *rs* = .65, n = 29, p <.001. As participants academic qualifications increased, there was a corresponding moderate increase in the number of teaching methods applicants used. See Table 37 and Figure 45 for Spearman's correlation data.

Table 37

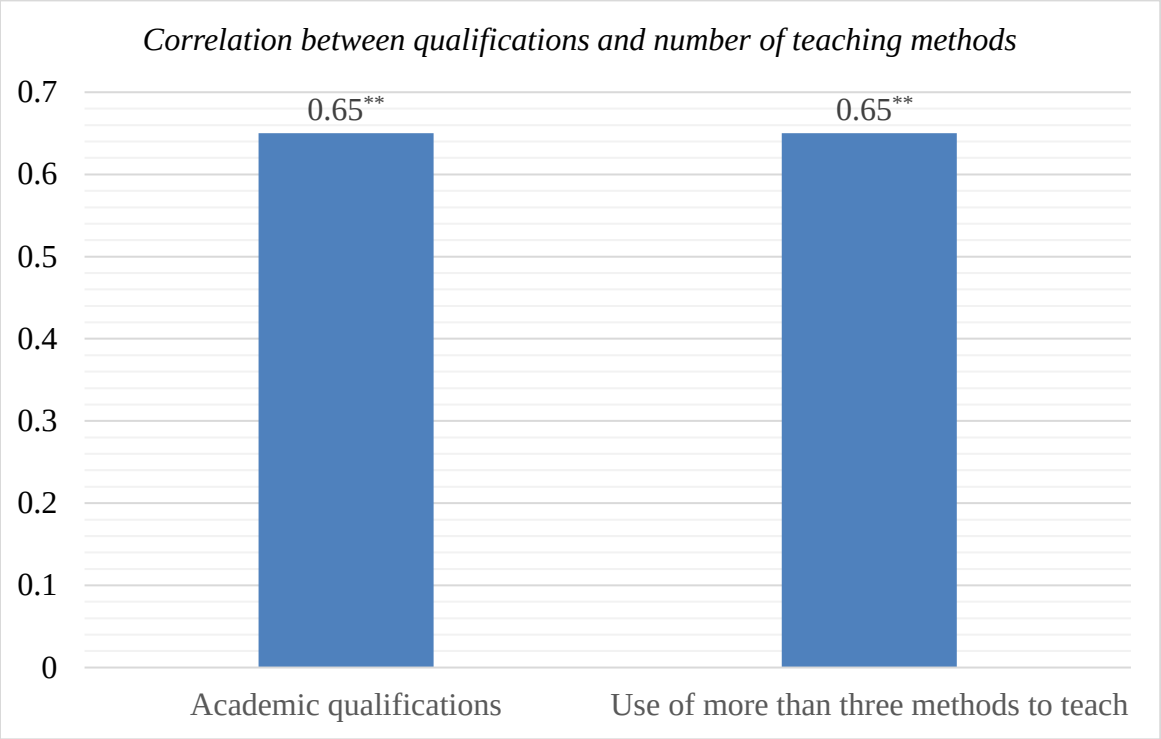
Spearman's correlation between qualifications and number of teaching methods

			1	2
Spearman's rho	1. Academic qualifications	r_s	1.000	.651**
		p		0.000
		n		29
	2. Use of more than three methods to teach one class session	r_s		1.000
		p		
		n		

**Correlation is significant at the 0.01 level (2-tailed)

Figure 45

Correlation between qualifications and number of teaching methods



Research Question 3

The third research question that this study attempts to investigate is to examine nurse educators' experience in the transition from clinical to academic environment. The question asked is: How is the transition of nurse educators from the clinical setting to the academic environment?

Participants were to self-report their level of agreement and disagreement with their transition experiences. Participants (n = 29, 96.7%, M = 3.41, SD = 1.26) responded to indicate if their transition from clinical to teaching was very challenging, while (n =1, 3.3%) did not respond. Among those who responded, (n = 5, 17.2%) indicate that they strongly agree, (n = 13, 44.8%) somewhat agree, (n = 3, 10.3%) neither agree nor disagree, (n = 5, 17.2%) somewhat

disagreed, (n = 3, 10.3%) strongly disagree that their transition from clinical to teaching was very challenging. Table 38, Figure 46, and Figure 47 presents the data. This finding shows that 62.0% of participants agreed that their transition from the clinical setting to the academic environment was challenging.

Table 38

My transition from clinical to teaching was very challenging.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	5	16.7	17.2	17.2
	Somewhat agree	13	43.3	44.8	62.1
	Neither agree nor disagree	3	10.0	10.3	72.4
	Somewhat disagree	5	16.7	17.2	89.7
	Strongly disagree	3	10.0	10.3	100.0
	Total	29	96.7	100.0	
Missing System		1	3.3		
Total		30	100.0		

Figure 46

Response to transition to teaching challenging

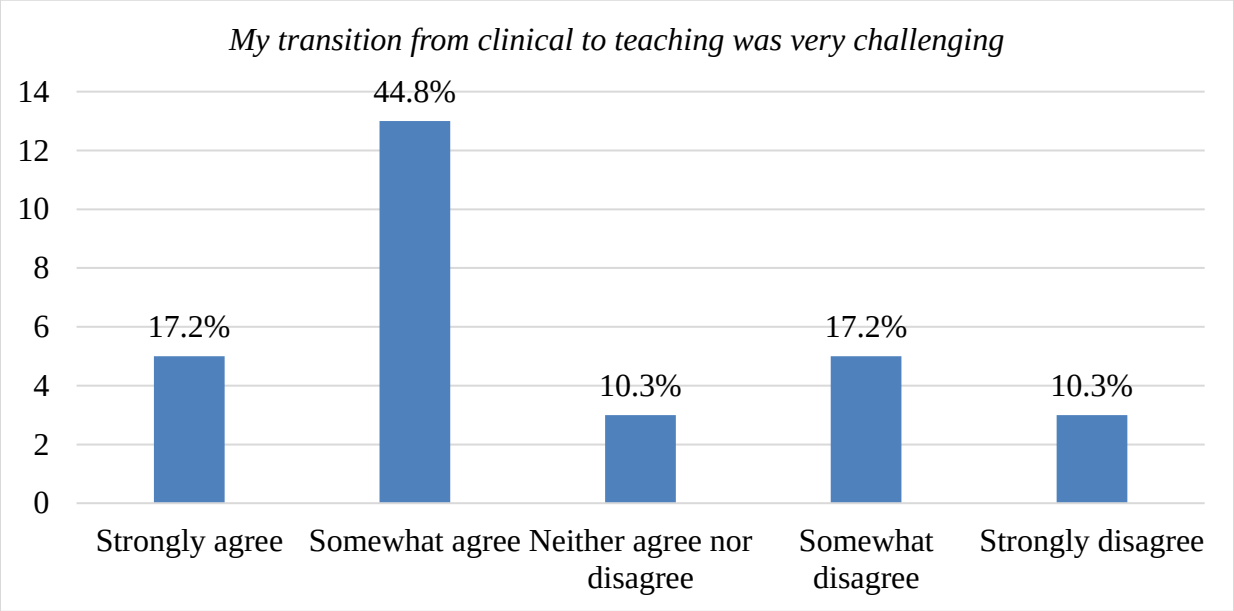
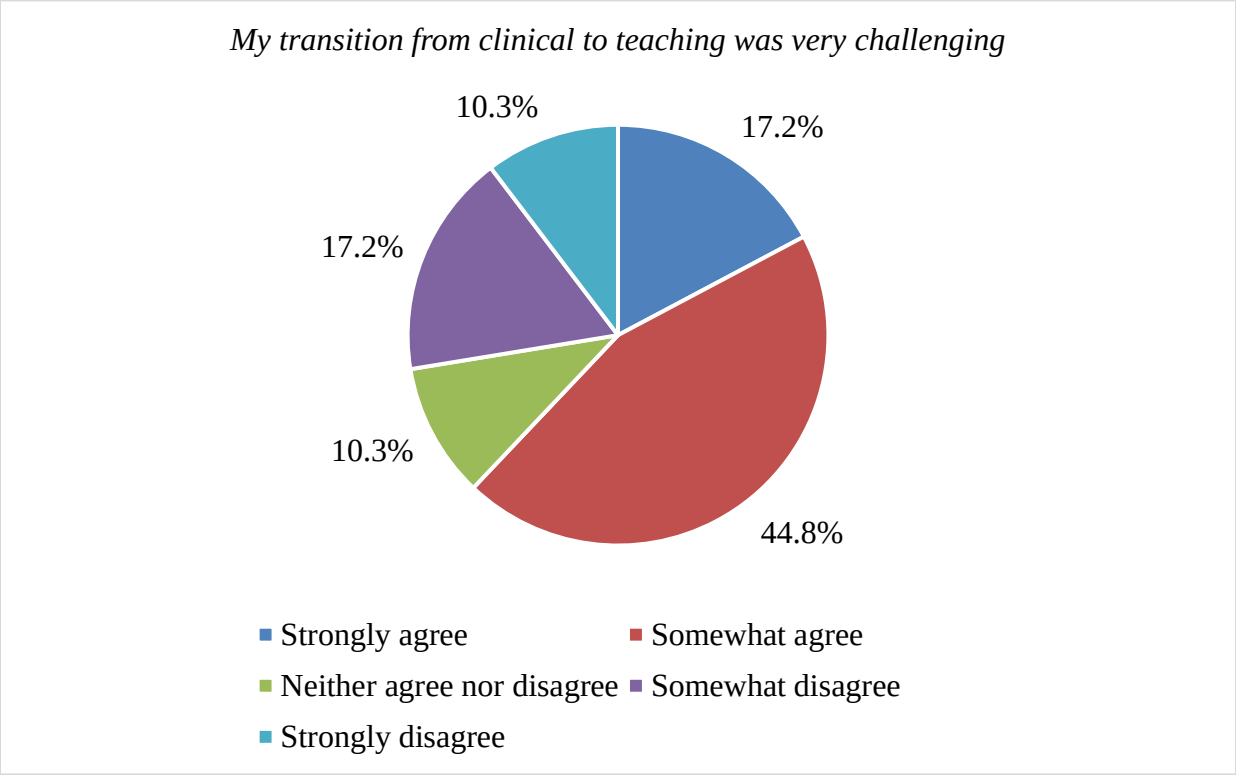


Figure 47

Pie chart showing My transition from clinical to teaching was very challenging



Independent Sample t-test Comparing Male and Female Responses

Gender Difference in Response to Study Constructs. In this study, there were a total of *n* = 29 participants. Participants were asked to identify their gender by indicating either female, male, non-binary/third gender, or preferred not to say. All the participants indicated their gender as either male or female. An independent sample *t*-test was conducted to examine if there was a gender difference in age between males and females in the ADN program. Males had a higher mean age than females in the ADN program, male *n* = 3 (*M* = 55, *SD* = 7.93), and female *n* = 25 (*M* = 46.32, *SD* = 11.72). The independent sample *t*-test was used to compare the means of responses between the two genders of participants with each variable in the survey. To compare the two groups of participants who identified as male or female, an independent samples *t*-test was tested for equality of means *t*(26) = -1.23, *p* = .220, which showed no significant difference.

Some of the constructs in the survey were related to pedagogy. Participants responded to whether they felt prepared to teach in the ADN program, female n = 24, rating yielded (M = 4.45, SD = 1.02) and male n = 3, rating yielded (M = 4.66, SD = .57) in their response, $t(25) = -.34$, $p = .730$, this showed no significant differences. Female n = 25, (M = 2.92, SD = 1.28) and male n = 3, (M = 4.00, SD = 1.73) responded to whether they know the teaching methods to use upon hire, $t(26) = -1.33$, $p = .195$, this indicates no significant difference in response. Female n = 25, (M = 3.04, SD = 1.36) and male n = 3, (M = 3.66, SD = 1.52), responded to the variable on whether they felt prepared to teach the first semester of hire, $t(26) = -.742$, $p = .465$, the difference in response between both male and female participants was not significant. Female n = 22 (M = 4.54, SD = .80) and male n = 3, (M = 4.66, SD = .57) responded to indicate if they feel confident teaching in the ADN program, $t(23) = -.251$, $p = .804$, the response from both groups had no significant difference. The variable asking if participants use more than three methods to teach one class was responded to by females n = 25, (M = 4.20, SD = 1.08). Male n = 3, (M = 4.66, SD = .57), the response indicated $t(26) = -.727$, $p = .473$, which showed no significant statistical difference. Female n = 25, (M = 4.48, SD = 1.00) and male n = 3, (M = 4.00, SD = 1.00), responded that they could manage their classroom without frustration, $t(26) = .782$, $p = .441$, this showed no significant difference. The overall responses to pedagogy questions showed no significant difference between male and female participants. See Table 39 and Figure 48 for the data.

Table 39

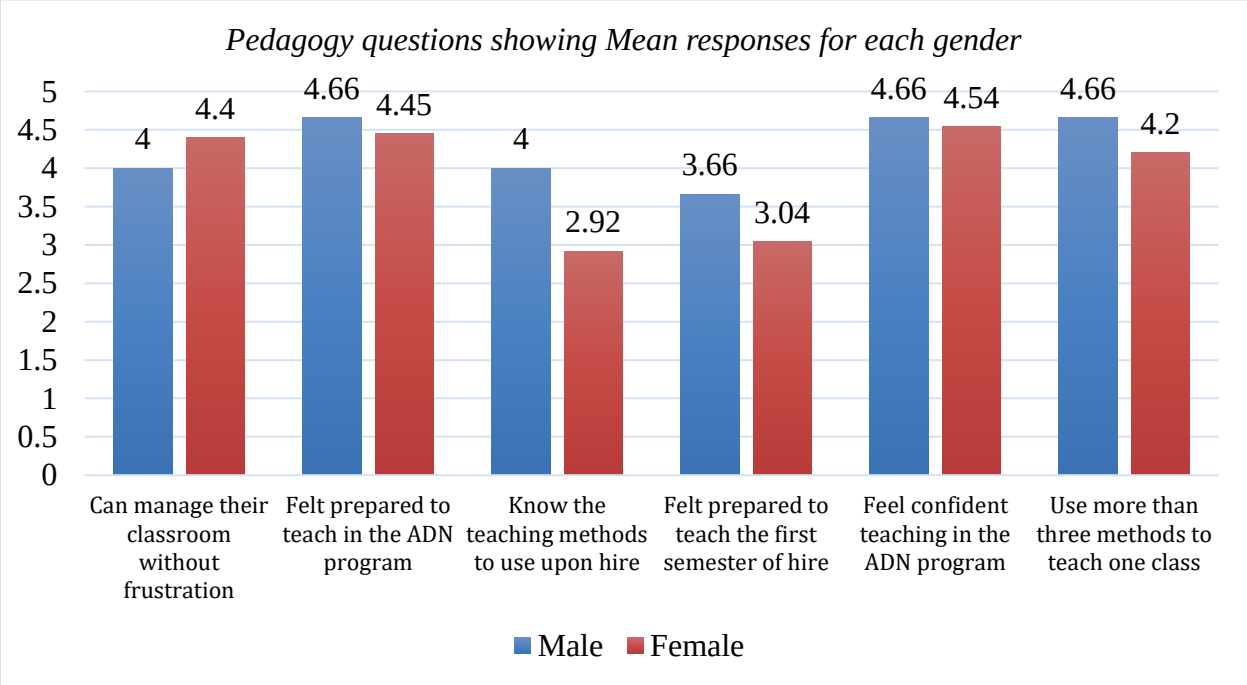
Instruction knowledge questions showing Mean responses for each gender

Constructs	Female (n = 25)		Male (n = 3)		t	df	p
	M	*SD*	*M*	*SD*			
I feel prepared to teach in Associate degree nursing program	4.45	1.02	4.66	.57	-.34	25	.730
When I was hired, I knew the teaching methods I would use	2.92	1.28	4.00	1.73	-1.33	26	.195
I felt prepared to teach the first semester I was hired	3.04	1.36	3.66	1.52	-.74	26	.465
I feel confident teaching in Associate degree nursing program	4.54	.80	4.66	.57	-.25	23	.804
I use more than three methods to teach one class session	4.20	1.08	4.66	.57	-.72	26	.473
I can manage my classroom without frustration	4.48	1.00	4.00	1.00	.78	26	.441

* p = .05. ** p = .01. *** p <.001

Figure 48

Pedagogy questions showing Mean responses for each gender



Technology Usage in Classroom

Responses to the questions related to the use of technology were checked for gender differences among participants. Female n = 25, (M = 4.56, SD = .71) and male n = 3, (M = 4.00, SD = 1.73) responded to indicate if they can select educational technologies to enhance students learning, $t(26) = 1.09$, $p = .283$, this showed no significant difference. To know what educational technologies to use in participants' classrooms and be comfortable using them was responded to by females n = 25 (M = 4.36, SD = .99. Male n = 3 (M = 4.66, SD = .57), $t(26) = -.518$, $p = .609$, is not statistically significant. The variable that asked if students like it when participants use educational technologies was responded to by female n = 25, (M = 4.40, SD = .91) and male n = 3, (M = 4.66, SD = .57), the result yielded $t(26) = -.490$, $p = .629$, showing no significant difference in response. Participants were to indicate the number of educational technology applications or software they use in their classroom, female n = 25, (M = 4.76, SD = 3.25) and male n = 3, (M = 5.66, SD = 3.78), responded, $t(26) = -.450$, $p = .657$, this showed no significant difference in the response. There were no significant differences in the female and male participants' responses to all the items on the use of technology in their classroom. The data is presented in Table 40.

Table 40

Use of technology for male and female

Constructs	Female (n = 25)		Male (n = 3)		t	df	p
	M	*SD*	*M*	*SD*			
I can select educational technologies to enhance students learning	4.56	.71	4.00	1.73	1.09	26	.283
I know what educational technologies to use in my classroom and I am comfortable using them	4.36	.99	4.66	.57	-.51	26	.609
My students like it when I use educational technologies	4.40	.91	4.66	.57	-.49	26	.629
Number of educational technology applications or software I use in my class	4.76	3.25	5.66	3.78	-.45	26	.657

* p = .05. ** p = .01. *** p <.001

Teaching Preparation

Some questions on the survey were on the teaching preparation of participants. The response to the question asking participants to indicate if they have a strong background in the course or courses they teach was responded to by female n = 25, (M =4.16, SD = 1.24) and male n = 3, (M = 4.66, SD = .57), t(26) = -.686, p = .499, this indicates that there was no significant difference between the responses by both genders. Female n = 25, (M = 2.44, SD = 1.58) and male n = 3, (M = 3.66, SD = 2.30) indicated whether they have nursing education certificate, t(26) = -1.216, p = .235, this was not significant. These findings indicated that the overall responses of both female and male participants on teaching preparation items were not significantly different. See Table 41 for the data.

Table 41

Teaching preparation for male and female

Constructs	Female (n = 25)		Male (n = 3)		t	df	p
	M	*SD*	*M*	*SD*			
I have a strong background in the course or courses I teach.	4.16	1.24	4.66	.57	-.68	26	.499
I have a certificate in nursing education	2.44	1.58	3.66	2.30	-1.21	26	.235

* p = .05. ** p = .01. *** p <.001

Transition Experience

Transition experience was investigated, and both male and female participants indicated their responses. The question on whether the transition from clinical to teaching was very challenging was responded to by female n = 25, (M = 3.32, SD = 1.31) and male n = 3, (M = 4.33, SD = .57), t(26) = -1.303, p = .204, the responses by each gender was not significantly different. The response on the item on years of clinical nursing experience, between male n = 3, (M = 25.66, SD = 18.58) and female n = 25, (M = 20.08, SD = 10.40) recorded t(26) = -.813, p = .424, the difference between the two groups was not significant. Male n = 3 (M = 17.00, SD = 3.46) and female n = 25 (M = 8.24, SD = 8.55) responded to years of teaching experience, t(26) = -1.732, p = .095, indicating no significant difference in their responses. The variable stating if participants do get the support they need from nursing education administrators was responded to by female n = 25, (M = 4.60, SD = .91). Male n = 3, (M = 5.00, SD = .00), t(26) = -.746, p = .462, showing that the difference in response was not significant. The difference in both responses from female and male participants on transition experience was not significant statistically. See Table 42 for the data.

Table 42

Transition experience for male and female

Constructs	Female (n = 25)		Male (n = 3)		t	df	p
	M	*SD*	*M*	*SD*			
My transition from clinical to teaching was very challenging	3.32	1.31	4.33	.57	-1.30	26	.204
Years of clinical nursing experience	20.08	10.40	25.66	18.58	-.81	26	.424
Years of teaching experience	8.24	8.55	17.00	3.46	-.17	26	.095
I get the support I need from nursing education administrators	4.60	.91	5.0	.00	-.74	26	.462

* p = .05. ** p = .01. *** p <.001

Curriculum Knowledge

Another construct on the survey was curriculum knowledge. Participants were asked if they were very familiar with the ADN curriculum, female n = 24, (M = 4.37, SD = 4.37) and male n = 3, (M = 4.66, SD = .57), indicated their response and there was no significant difference in their response, t(25) = -.504, p = .618. In response to the variable whether there is a lot to improve in nursing education, female n = 25, (M = 4.00, SD = 1.19) and male n = 3, (M = 5.00, SD = 0.00) responded, t(26) = -1.431, p = .164, indicating no significant difference in response. Female n = 25, (M = 9.28, SD = 0.98) and male n = 3, (M = 9.00, SD = 1.00) indicated how likely they were to recommend a colleague from the clinical area to teach in the ADN program, t(26), = .467, p = .644, no significant difference in response was noted. Hence, the responses of female and male participants to the variables on curriculum knowledge were not significantly different. Table 43 presents the data.

Table 43

Curriculum knowledge for male and female

Constructs	Female (n = 25)		Male (n = 3)		t	df	p
	M	*SD*	*M*	*SD*			
I am very familiar with Associate Degree Nursing Curriculum	4.37	4.37	4.66	.57	-.50	25	.618
There is a lot to improve in nursing education	4.00	1.19	5.00	0.00	-1.43	26	.164
How likely are you to recommend a colleague from the clinical area to teach in the Associate Degree Nursing program?	9.28	0.98	9.00	1.00	0.46	26	.644

* p = .05. ** p = .01. *** p <.001

Nursing Education Certificate and Readiness to Teach

An independent sample *t*-test was conducted to check if there exists a relationship between participants who have nursing education certificate and being familiar with the ADN curriculum, know what educational technologies to use in the classroom and are comfortable using them, if they feel prepared to teach the first semester they were hired, use more than three methods to teach one class session, know what teaching methods to use when they were hired, can manage classroom without frustration, can select educational technologies to enhance students learning, students like it when participants use educational technologies, feel confident teaching in the ADN program, and perception if there is a lot to improve in nursing education. The independent *t*-test result report indicated that there was no statistically significant relationship between these variables and participants who have nursing education certificate. The independent sample *t*-test result showed no significant relationship between participants who have nurse education certificate and those who felt prepared to teach the first semester of hire, $t(26) = -.742$, $p = .465$. Participants with a nursing education certificate $n = 20$, ($M = 3.15$, $SD = 1.38$) and those who do not have a nursing education certificate $n = 9$, ($M = 2.22$, $SD = 1.09$), indicated their response, $t(25) = 1.939$, $p = .067$, this showed no significant difference.

Regression

Regression equation: $DV = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 = e$

This study attempted to investigate the relationships between the teaching preparation of nurse educators, the choice of instruction methods, and the use of differentiated instruction strategies in the ADN program. The results of this study showed that 93.1% of participants agreed that they know what educational technologies to use in their classroom and are comfortable using them, and 93.1% indicated that they can select educational technology to enhance students learning. Based on the results of this study in the areas of technology use, a multiple regression analysis was conducted to the check the possible variables that may predict participants' comfortability in the use of educational technology. Comfortability of educational technology use was used as a dependent variable (DV). The dependent variable was predicted by the effect of the independent variable (IV). The independent variables used included (1) the use of more than three teaching methods to teach one class session, (2) the ability to select educational technology to enhance students learning, (3) getting support from nursing education administrators, and (4) teaching confident in the ADN program. See Table 44 for a summary of the regression model.

Table 44

Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.899[a]	.809	.773	.47045

Note: a. Predictors: (Constant), I use more than three teaching methods to teach one class session, I can select educational technologies to enhance students learning, I get the support I need from nursing education administrators, I feel confident teaching in associate degree nursing program.

The dependent variable was regressed on four predicting variables to determine whether participants knew what educational technology to use in the classroom and were comfortable using it. The four independent variables used were: (1) the use of more than three teaching methods to teach one class session, (2) ability to select educational technology to enhance students' learning, (3) getting support from nursing education administrators, and (4) teaching confidence in the ADN program. The independent variables were significant in participants knowing what educational technology to use in their classroom and being comfortable using them $F(4, 21) = 22.25$, $p < .001$; this indicated that the four independent variables significantly impacted the dependable variable. However, the $R^2 = .809$ indicated that the model explains 80.9% of the variance of knowledge and comfort of technology use in the classroom. Analysis of Variance (ANOVA) was created to check if the R^2 was significant, and the result, $p = <.001$, showed a very strong statistically significant relationship between the DV and the IVs. The data is presented in Table 45.

Table 45

ANOVA[a] to the show significance of R^2

	Model	Sum of Squares	*df*	Mean Square	*F*	*p*
1	Regression	19.698	4	4.925	22.250***	<.001[b]
	Residual	4.648	21	.221		
	Total	24.346	25			

$p = .05$. ** $p = .01$. *** $p < .001$

Note: a. Dependent Variable: I know what educational technologies to use in my classroom and I am comfortable using them.

b. Predictors: (Constant) I use more than three methods to teach one class session, I get the support I need from nursing education administrators, I can select educational technologies to enhance students learning, I feel confident teaching in Associate degree nursing program.

In addition to the regression model, coefficients were further examined to ascertain the influence of each independent variable (IV) on the dependent or criterion variable (DV), which was the comfortability of educational technology use (knowing what educational technologies to

use and comfortable using them). The model was also conducted to examine the strength of the relationship between each IV and the DV. The outcome revealed that the use of more than three methods to teach one class session was statistically significant and positive towards knowing what educational technologies to use in the classroom and being comfortable using them (B = 0.557, t = 4.928, p <.001). The ability to select educational technologies to enhance student learning (B = -.006, t = -.043, p = .966) was insignificant. Getting the support participants need from nursing education administrators was insignificant (B = .285, t = 1.727, p = .099), and feeling confident teaching in the ADN program was not significant (B = .326, t = 1.735, p = .097). Table 46 presents a summary of the findings.

Table 46

Multiple regression result for comfortability of educational technology use

Variables	Unstandardized Coefficients		Standard Coefficients Beta	*t*	*p*
	B	Std. Error			
(Constant)	-.725	.683		-1.062	.300
I use more than three methods to teach one class session	.557	.113	.598	4.928***	<.001
I can select educational technologies to enhance students learning	-.006	.143	-.005	-.043	.966
I get the support I need from nursing education administrators	.285	.165	.209	1.727	.099
I feel confident teaching in Associate degree nursing program	.326	.188	.250	1.735	.097

* p = .05. ** p = .01. *** p <.001

Note: a. Dependent variables: I know what educational technologies to use in my classroom and I am comfortable using them

Regression equation: DV = β_0 + β .557 X_1 + β -.006 X_2 + β .285 X_3 + β .326 X_4

DV: Comfortability of educational technology use.

IV 1 (X_1): use of more than three teaching methods to teach one class session. IV 2 (X_2): ability to select educational technology to enhance students learning. IV 3 (X_3): support from nursing education administrators. IV 4 (X_4): teaching confident in the ADN program.

Summary

This chapter addressed each of the research questions and their findings. Descriptive and inferential statistics with parametric and non-parametric statistical tests were used to examine instruction strategies, the relationships between nurse educators' teaching preparation, and the choice of content delivery strategies to establish participants' teaching preparation. Nurse educators' choice of instruction strategies and the use of technology in the classroom were examined. The perception of nurse educators about the support they get from nursing education administrators and the extent of the challenges they experience as they transition from the clinical setting to the academic environment were identified. Confidence and support from nursing administrators were noted to have a positive influence on other variables in the study. Gender had no association with participants' responses, according to the data generated. A Regression model was created, and coefficients were examined to predict the influence of each independent variable on the dependent variable. Comfort with the use of technology was a determinant factor in participants knowing what educational technologies to use in their classroom. The selection of educational technologies depended on the participants' instruction comfort level.

CHAPTER V

SUMMARY AND CONCLUSION

This chapter discusses the summary of findings in a study that examined the teaching preparation, instruction strategies, and the transition experience of nurse educators in the ADN program in the RGV. Presented are the implications of the study findings on nursing education. The limitations of the study are addressed, and recommendations for nurse educators, nursing education administrators, and future researchers are included. Also recommended are teaching and learning theories and curriculum approach for nursing education, and the conclusion of the study are also discussed.

Summary of the Study

This study used a survey design methodology to examine the teaching preparation of nurse educators, instruction strategies, transition experience of nurse educators from the clinical setting to the academic environment, support from nursing education administrators, and the likelihood of recommending colleagues from the clinical areas to teach in the ADN program in the RGV. An online survey was sent to participants in four colleges that offer ADN programs in the RGV, and data was collected and analyzed using SPSS. The statistical tests selected to analyze the data included simple *t*-test, Spearman's correlation, ANOVA, simple regression,

multiple regression, and logistic regression. The three research questions the study attempted to address were:

1. What are the relationships between the teaching preparation of nurse educators and the choice of instruction methods in the ADN program?

2. What are the relationships between nurse educators' academic background and the use of different teaching methods in the ADN program?

3. How is the transition of nurse educators from the clinical setting to the academic environment?

Discussion

Teaching Preparation and Classroom Management

This study investigated the teaching preparation of nurse educators in the ADN program. One of the variables in the survey questionnaire was for participants to indicate their level of agreement on how prepared they were to teach the first semester they were hired. The rating was done using a five-point Likert scale that ranged from *strongly agree* to *strongly disagree.* Educators who indicated that they strongly agreed they were prepared to teach the first semester of hire was 17.2%, while 34.5% somewhat agreed, so a total of 51.7% participants agreed they felt prepared to teach the first semester they were hired. Participants (n = 10, 13.8%) strongly agreed that they knew the teaching methods to use the first semester they were hired, while 31% somewhat agreed, which meant that 44.8% of respondents knew what teaching methods to use when they were hired, while 55.2% did not. The response showed minimal readiness of educators to teach upon hire. Although 67.9% (M = 4.50, SD = .96) of respondents indicated that they felt prepared to teach in the ADN program, the data from this study shows that the preparation to teach was not in the first semester of hire (M = 3.13, SD = 1.35). Knowing

the teaching methods to use when they were hired (M = 3.00, SD = .33) did not equal feeling prepared to teach the first semester of hire. This result means that the 44.8% who indicated that they knew what teaching methods to use upon hire had no corresponding feeling of preparation to teach in their first semester. Teaching in the ADN program needs to be scholarly, which calls for the application of educational theories and research in teaching, and the teaching strategies chosen should be evidence-based. Having pedagogical knowledge and skills promotes effective teaching that births excellent learning outcomes (Bullin, 2018). Participants in this study were to indicate if they could manage their classroom without frustration; 69.0% strongly agreed, while 13.8% somewhat agreed that they could manage their classroom without frustration; this resulted in 82.8% agreement to being able to manage their classroom without frustration. Kumi-Yeboah, A., & James, W. (2012), in a study to investigate a novice teacher's transformational teaching experience, shared that novice teachers have difficulty in classroom management, technology use, and understanding students' cultures (p. 173). The finding from the above authors is not similar to this study's result because, in this study, 82.8% of participants indicated that they could manage their classroom without frustration. However, this study did not specify if participants who rated this variable favorably were novice or veteran educators.

Academic Preparation, and Readiness to Teach

The findings from this study showed that 62.5% of participants have a master's degree in nursing with a specialization in nursing education, 31.0% reported that they had a certificate in nursing education, while 52.0% reported that they did not have a certificate in nursing education. In the study conducted by (TCNWS, 2020) on faculty demographics for the pre-licensure professional nursing education program in Texas, a total of 68% of faculty member reported that they specialized in nursing education, though the study did not specify how many of the faculty

members who responded were in the ADN program. The percentage of participants in this study who reported that their specialization was in nursing education is close to 68% that was obtained by (TCNWS, 2020), there is still room for improvement in order to meet the American Association of Colleges of Nursing (AACN) recommendation, which states that nurse educators should have additional pedagogical, curriculum and assessment preparation. This study shows a 5.5% difference from the (TCNWS, 2020) report, which indicated a need for nurse educators in the ADN program in the RGV to consider getting academic preparation in education specialization.

Out of the total participants (n = 30) in this study, (n = 22) responded to the variable inquiring participants to indicate if they have a doctoral degree in education (Ed. D), 100% of (n = 22) reported no, while (n = 8, 26.7%) who participated in the study did not respond. No participant responded yes to this variable, meaning that none of the participants had an Ed.D. 21.7% of participants indicated that they had a Doctor of Nursing Practice (DNP), and 78.3% did not have a DNP. Participants responded to the variable inquiring if participants had a doctoral degree (Ph. D.) in a specialty other than nursing. Only 4.3% of the respondents indicated yes to having a Ph.D. in a specialty other than nursing, while 95.7% indicated no. Participant (n = 22) responded to the variable that asked if participants had a doctoral degree (Ph.D.) in nursing, n = 22 responded no, and they do not have a doctoral degree (Ph.D.) in nursing. Bullin (2018) reviewed the role of academic nurse educators and the academic requirement for teaching in higher education and shared that "there is a lack of evidence-based research and the need for studies to be undertaken regarding the most effective preparation for academic nurse educators" (p. 15). Scholarship of teaching, scholarship of integration, and scholarship of application surmount the scholarship of discovery in the ADN program. The difference in the scholarships

may be partially because the ADN program is offered in colleges, and colleges are not research institutions but teaching institutions. Findings from this study showed that 0% of participants had a Ph.D. in Nursing, and 0% of respondents had an Ed.D. The above-stated degrees are research degrees, and holders of such are concentrated in research institutions like universities. This study result conforms with Bullin (2018), who shared that "Ph.D. is generally research-focused" (p.15). Being that the ADN program is an entry-level program where learners should have a solid foundation in nursing, and literature has shown that curriculum in pre-licensure nursing programs are content saturated and overwhelming, it would be beneficial for educators in the ADN program to have Ed.D. as those educators who have specialization in curriculum and instructions could review and contribute to the betterment of the ADN program.

Preparation for First Semester Teaching

In conducting Spearman's correlation to check for an association between the variable on participants' feeling of preparedness to teach in their first semester of hire and participants who had nursing education certificate, the findings showed that participants who had certificate in nursing education (n = 9) felt more prepared to teach in their first semester than those who did not have the certificate. This result showed the need for academic preparation for nurse educators to include preparation in the area of nursing education specialty prior to engaging in teaching in the pre-licensure nursing program. However, since the relationship between participants who felt prepared to teach the first semester of hire and those who did not have nursing education certificate was weak, that indicated a probability that those who did not have nursing education certificate had professional development to compensate for the lack of certification, and those participants may also have had fewer teaching load, smoother transition, and mentorship in their first semester. Mokel, Behnke, Gatewood, Mihaly, Newberry, Lovence, Ro, Bellflower, Tabi,

and Kuster (2022) confirm the many advantages of mentorship, including workplace networking with veteran faculty. This advantage may narrow the gap between the teaching preparedness of nurse educators with certification and those without, as novice educators would learn from experienced nurse educators.

Moreso, only 44.8% of participants in this study reported that they knew what teaching methods to use the first semester they were hired, suggesting that 55.2% of newly hired nurse educators did not know what teaching methods to use in their first semester, and 48.3% of participants did not feel prepared to teach the first semester they were hired. These indicated a need for mentorship and professional development for newly hired nurse educators. Educators must be fully prepared to teach so that instructions can be delivered efficiently for learners to acquire the knowledge they need to succeed in NCLEX and clinical practice after getting initial licensure. The nursing curriculum is “content saturated” (Norris, 2019), and the ADN program is only a two-year program. Hence, this may make it very challenging for students to meet the set expectations when they have educators who are not prepared and ready to teach. Glanville (2004, as cited in Bullin, 2018) shared that nurse educators need pedagogical knowledge since it is critical to know how to present content to facilitate learning at a higher level, and the inability of educators to teach effectively jeopardizes their duties as educators. Having inexperienced educators take up a full teaching load in their first semester can compound the challenges students face in assimilating concepts if the concepts are not presented well, as that may be the case with novice educators. This study's findings call for nursing education administrators and institutions to organize effective and efficient transition processes for newly hired nurse educators. Let us reimagine an ADN program where newly hired educators would be gradually

oriented to the culture of teaching in an academic setting without "jumping right in" to take academic roles without prior teaching experience in higher education and nursing programs.

Having Background in the Courses Taught

Respondents who indicated that they had a strong background in the courses they teach were (M = 4.5, SD = .75, 58.6%). This study outcome speaks powerfully to why educators indicated that they have confidence teaching in the ADN program (69.2%). In the area of specialization, 62.5% of respondents chose nursing education as their area of specialty, while 37.5% did not specialize in nursing education. Participants who had a certificate in nursing education were 31.0%, and 52% did not have a certificate in nursing education. The difference indicated a gap between those who had an academic background in nursing education and those whose academic background was in other areas of specialty. Nursing faculty should be encouraged to get academic preparation in nursing education. Effective mentorship and professional development would play a vital role in compensating and narrowing the said gap. Mentorship was supported by many researchers, including (Smith et al. 2023; Pullen, 2023). In assessing nurse educators' preparation to teach, this study showed a positive correlation between feeling prepared to teach and the ability to select teaching methods, including using educational technology in the classroom. Educators who felt prepared to teach the first semester they were hired also felt prepared to teach in the ADN program.

Novice Educators and Transition to Academic Role

The third research question was to investigate the transition experience of participants from the clinical setting to the academic environment. The results from this study indicated that 62.0% of participants indicated that their transition experience from the clinical setting to the academic environment was challenging. This finding conformed with the study conducted by

Kumi-Yeboah and James (2012), in which participants in the study indicated that the most challenging and difficult time was the first year of teaching prior to when teachers develop teaching methods and style (p. 173). Brown and Sorrell (2017) also supported the fact that the transition from clinical to academia is challenging. The latter researchers conducted a qualitative study using the "Novice to Expert Framework," focused on an ADN program, and examined the transition experience of nurse educators in the ADN program. Participants in the study reported challenges and the struggles they experienced in various areas. Some of the struggles and challenges reported included the decision to accept a pay cut up to "$15,000", lack of formal training and preparation, which was unsafe, lack of communication, no guidance, lack or improper orientation, feeling overwhelmed, working from home outside work hours, going back to the basics focusing on general nursing, and troubleshooting without guidance (Brown & Sorrell, 2017, pp. 209-210). Also, Weidman (2013, as cited in Brown & Sorrell, 2017) noted that "it can be overwhelming for new faculty to "jump right in" the academic environment" (p. 210). Parks, Moore and Paris (2020) reviewed what novice nurse educators needed to know and stated some of the challenges that novice educators face. The challenges the authors mentioned included knowing and understanding teaching methods and knowing which and when each is appropriate to use, figuring out the educator-student relationship, balancing work and life, evaluating students, and assisting learners in differentiating "need-to-know" and "nice-to-know" materials (p. 52). The challenge of knowing the teaching method to use is reflected in this study's findings as only 44.8% of participants indicated that they knew what teaching methods to use, 44.5% of respondents indicated disagreement with knowing teaching methods to use, and 10.3% were neutral. Pullen (2023) added that the challenges novice educators face included difficulty preparing and understanding "syllabus, test blueprints, test questions using Bloom's

Taxonomy," institution's structure and policies, board of nursing and accrediting bodies regulations (p.1). The results from this study in the area of nurse educators experiencing challenges during transition generated similar findings from what was obtained by previous researchers since 62% of respondents in this study indicated that their transition experience was very challenging. In addition, this study also showed that the higher the age of participants, the more challenging it was to transition from the clinical environment to academic roles. Hence, the transition experience is even more challenging for older nurse educators.

Support and Nursing Education Administrators

Support from administrators is relevant in nursing education. 82.8% of respondents in this study strongly agreed to getting support from nursing education administrators, while 6.9% somewhat agreed, making a total number of agreements at 89.7%. The mean and standard deviation of participants who indicated whether they get the support that they need from nursing education administrators was (M = 4.65, SD = 0.85). This result indicated that many (89.7%) nurse educators who participated in this study felt that they do get support from nursing education administrators. The perceived support from nursing administrators could ease the challenges newly hired nurse educators faced during their transition process. The 6.9% of respondents who somewhat disagree with getting support may not be satisfied with teaching in the ADN program. Hence, they need support so they can remain in the program since nurse educators are in high demand to educate more students in an attempt to alleviate the nursing shortage. Brown et al. (2017) support that novice educators can leave their role if they lack support and feel insecure in performing their duties, and leaving their role would further worsen nurse educators' shortage issues (p. 207). Wells-Beede, Sharpnack, Gruben, Klenke-Borgmann, Goliat, and Yeager (2023) agree that "The consequences of this ongoing faculty shortage are a

heightened workload, job dissatisfaction, a lack of flexibility in scheduling, a work-life balance incongruent with a healthy lifestyle, and, ultimately, faculty turnover" (p. 2). Support from administrators played a significant role in faculty job satisfaction and retention. The findings from this study showed that getting support from nursing education correlated with many variables, such as participants' ability to select educational technology to enhance students learning, feeling confident teaching in the ADN program, use of more than three methods to teach one class session, ability to manage classroom without frustration, students liking when participants use educational technologies, participants familiarity with ADN curriculum, feeling prepared to teach in the ADN program, knowing what educational technologies to use in their classroom and their comfort using them. The magnitude of the association between nursing administrators' support and the other variables in the study called for reasons to reimagine all prelicensure nursing programs that would support its nurse educators in performing their expected duties.

Use of Educational Technology

The use of technology in modern nursing education is essential, and nursing educators need to keep up with advancing their knowledge of educational technology usage. 65.5% of respondents strongly agreed that they could select educational technology to enhance student's learning, and participants also agreed that technology use as a pedagogy was viewed positively towards learning. The higher the age of participants, the more the number of educational technology applications or software used, $r_s = .36$, $n = 29$, $p = .054$, which means that there was a moderate positive increase in technology use as educators age increased. Data from this study also showed that 58.6% of respondents indicated that they knew what educational technologies to use in their classroom and that they were comfortable using them. The ability and confidence

of these participants could mean that they attend professional development offered by their institution's educational technology department. The ability of the participants to choose educational technology for their class helped enhance their comfort level with the use of technology in the classroom. The use of technology in the classroom and the confidence of educators with technology had a positive influence on students' learning; this is indicated by (M = 4.3, SD = .90), and 55.2% of respondents indicated that their students like it when educational technology was used in the classroom. One of the core competencies for professional nursing education in the 21st century is informatics and technology (AACN). Nurse educators who are still not embracing educational technology as a teaching tool should consider adopting technology as a teaching strategy in their classroom. The nursing shortage calls for the use of educational technology and games as pedagogy strategies in the classroom to entice the younger generation to study nursing (Earle & Myrick, 2009). The use of technology is challenging for novice educators, and the learning curve can be narrowed through mentoring and professional development (Kumi-Yeboah et al., 2012).

Teaching Diverse Learners

The complexity of teaching a diverse student population requires the use of different teaching methods. The result of this study showed that 51.7% of respondents strongly agreed, and 31.0% somewhat agreed (a total of 82.7%) with using more than three methods to teach one class session. Among the methods used were educational technology software and applications. The findings that participants used different methods to teach agreed with some of the recommendations made by (Sommers & Bonnel, 2020). These authors conducted a qualitative study that examined how educators in the ADN program perceived the best teaching methods to implement when educating diverse student nurses. The challenges and benefits of those teaching

strategies were investigated in the study. The above authors recommended a “personalized approach” to identify each student's learning style and learning needs, as well as the use of different active teaching strategies when teaching diverse learners (Sommers et al., 2020, p. 131). Nursing students in the RGV are diverse culturally, socially, and economically. Judging from their geographic location, nurse educators' use of more than three teaching methods in a class session is an acceptable practice. Implementation of small group discussion sessions in didactic traditional classrooms and preceptorship models for clinical would attract millennial students as it creates opportunities for interaction and team building (Earle et al., 2009, pp. 628-629). Though 6.8% of participants in this study indicated that they disagreed with using more than three methods to teach one class session, and 10.3% were neutral, it should be noted that Earle et al. (2009) study did conclude that traditional pedagogy is no longer effective with the millennial generation. Hence, educators should make an effort to use different teaching strategies to teach nursing students to meet each learner’s unique learning style and learning needs.

According to the findings from this study, three educational technologies were used by 46.7% of participants, 13.3% of respondents used four types of software, 13.3% used five, 6.7% used six, and 3.3% used ten different software in a class session. The variation in the number of educational technology software used in class could be influenced by the length of time for a class session, as some nursing courses can run up to four hours straight. Participants who indicated using six and ten different types of technology applications or software either needed to understand the survey questions or understand the proper use of educational technology applications or software in class. The Spearman’s correlation computed the check for the relationship between the use of technology and other variables in this study showed that the use of technology correlated with many variables such as participants feeling prepared to teach the

first semester they were hired, confident teaching in the ADN program, student likeness for educational technology, selection of educational technology to enhance student learning, support from nursing administrators, and classroom management without frustration. In the event that educators do not understand what type of technology application to use and when and how to use it, attending professional development offered by the educational technology department of their institution would be beneficial.

Familiarity with Nursing Curriculum

The results of this study indicated that participants who are familiar with the nursing curriculum use different instruction approaches to teach, and they feel prepared to teach in the ADN program. Also, the students liked when different teaching methods were used to teach, including when educational technology applications or software were used in the class. Literature informs that the nursing curriculum is content-saturated (Hendricks & Wangerin, 2017; Norris, 2019); hence, familiarity with the curriculum is essential in planning and performing the role of teaching. This study reveals that when educators perform their duties comfortably, there is a corresponding increase in their level of confidence. The increase in confidence and job satisfaction would encourage educators to remain in academia, thereby combatting the problem institutions encounter in retaining nurse educators, especially in this era of nurse educator shortage.

Age, Years of Teaching and Clinical Experiences

The results from this study showed the median age of participants as 45.0, with an average age of 46.79, *SD* = 11.64. The participants' ages were below the national average for nurse educators, which signifies a decrease in the age of nurse educators in the RGV when compared to the national average. Though there was a gap in participants' age, the gap is narrow

compared to nurse educators' median age of "53.5 years," reported by (Brown et al., 2017, p. 207), and the median age of 49 years reported by (TCNWS, 2020). This study has shown that participants have more clinical experience than teaching experience (*SD* = 11.06), indicating a big gap between the above two variables of clinical and teaching experiences. The gap in clinical and teaching experiences showed why participants indicated that they felt prepared to teach the first semester participants were hired when they taught courses within their clinical background. Participants with more clinical experience were more confident in teaching the courses that they had a strong background in. This result indicated that despite lengthy years of clinical experience, nurse educators are not prepared to teach any course if they do not have a clinical background, possibly due to pedagogical inexperience.

Wells-Beede et al. (2023), in a study that examined nurse educators' role in assisting students transition to practice and the competencies of nurse educators argued that "Although a nurse may be an expert in the clinical realm, they are unprepared in pedagogical strategies, unaware of the responsibilities of the role of the professoriate, and lack an understanding of the needs of today's learners" (p. 4). Equipping nurse educators with pedagogical skills would make it easier to teach any nursing course when the need arises, and not only the courses educators that fall within their clinical background. The outcome of this study indicates that age and transition experience from clinical setting to academic environment correlate, $rs = .51$, $n = 29$, $p = .005$. The older the participant, the more challenging it was to transition from a clinical setting to an academic setting. The use of more than three teaching methods to teach one class session has no correlation with participants' age, $rs = .33$, $n = 29$, $p = .082$. Familiarity with the ADN curriculum did show a positive association with age $rs. = .42$, $n = 28$, $p = .025$. The ability to manage the classroom without frustration had no significant correlation with participants'

age, *rs* = -.06, *n* = 29, *p* = .742. To know the teaching methods to use upon hire does not significantly correlate with participants' age, *rs* = -.02, *n* = 29, *p* = .919. Also, knowing what educational technologies to use in the classroom and being comfortable using them did not correlate with participants' age, *rs* = -.01, *n* = 29, *p* = .968.

Recommending Colleagues to Join the Academic Environment

Nursing is more of a doing profession than a talking profession. Considering the financial compensation that nurse educators get in academia when compared to what their counterparts make in clinical settings, it is challenging to transition from clinical practice to teaching in an academic environment. Despite the extensive gap in financial compensation for clinical practice, many nurse educators have job satisfaction. This study showed that 56.7% (10:10 rating) of nurse educators are highly likely to recommend qualified nurses in the clinical settings to teach in the ADN program, 23.3% rated their likeliness to recommend at an eight out of ten (8:10) on a zero to ten rating scale, 13.3% rated it at nine out of ten (9:10), while 3.3% rated a seven out of ten (7:10) on a zero to ten rating scale. These findings show that despite all odds, nurse educators are still satisfied in the academic environment. This study agreed with Parks, Moore and Paris (2020), who indicated that "A career as an educator is challenging, but it's also extremely satisfying." Educators should not neglect their personal needs and should consider taking a vacation or "staycation" (p. 55). Nursing education is rewarding and satisfying, with some level of autonomy and academic freedom.

Implications

This study revealed that confidence is a strong driving force in nursing education. The results of this study have shown that confidence has a positive influence on many variables. Nurse education administrators should create an atmosphere that generates confidence among

nurse educators. The outcome of this study implies that nursing education administrators should appreciate that the transition from a clinical setting to an academic environment is challenging. Hence, administrators should investigate means to counter and address the challenges faced by novice nurse educators.

Moreover, the transition experience was challenging not only to novice nurse educators but also to educators with extended years of clinical experience. It is worth noting that irrespective of years of clinical experience, this study's result suggested that administrators should not assume that because an educator is a veteran clinical nurse, he or she is immune to experiencing challenges as he or she transitions to an academic role. The likelihood of success and job satisfaction could greatly depend on the smoothness of the transition experience. The transition experience should be such that it would enable nurse educators to gain some level of confidence in their teaching abilities. As shown in this study, confidence influences the choice of teaching method, the use of educational technology in the classroom, and the student's appreciation of technology in the classroom. The positive effects of confidence, according to this study's report, are enormous. Addressing the factors that could negatively impact nurse educators' morale and confidence could lead to a valuable turnaround in boosting educators' confidence.

The nursing education certificate well prepares novice nurse educators to teach the first semester of their hire. Educators need to attempt to acquire "additional knowledge in pedagogy, assessment and curriculum" to meet (AACN, 2022) recommendations. The National League for Nursing (NLN), after examining the seven competencies for novice nurse educators, NLN concluded that competencies define nurse educators' roles. The validation of these competencies would be an added support to the roles of novice nurse educators. It would also be a helpful tool

to utilize performance evaluation criteria for novice nurses (Simmon, 2021). To help novice nurse educators, nursing administrators should guide newly hired nurse educators in understanding the nurse educators' competencies and expectations.

Support from nursing education administrators correlated with many variables in the study. The added support from administrators positively affected educators' decisions on what teaching strategies to use. Participants knowing what educational technology applications to use in class correlated with getting administrators' support. Technology software and applications should be made available to nurse educators, and they should be trained on how to use them because it would be meaningless to provide software and applications to educators when they cannot use them. It is worth investing in educational technologies so that student's learning needs can be met and so that they can succeed on NCLEX-RN in the first sitting.

The academic qualifications of nurse educators matter. As the success of nursing programs is based on the pass rate of first-time NCLEX test takers, nurse educators need to get extra training in the curriculum. According to the result of this study, none of the participants had a higher degree in curriculum and instruction, such as an (Ed.D.), and none had a Ph.D. in nursing. Many of the participants had a DNP, which is a degree designed for clinical practice—not for academic roles. With the rigor of nursing education and the volatile and dynamic healthcare setting, nursing education needs nurse educators who have a specialization in curriculum and instruction, as their expertise would be beneficial in periodically evaluating nursing curricula to match up with the changes in the healthcare atmosphere.

Limitations of the Study

The limitations of this study included a limited sample size due to the limited number of qualified participants in the population selected for the study and also due to the failure of

participants to complete the survey in its entirety. Additionally, the refusal of qualified participants to participate in the study was a challenge, as only 88.2% of qualified participants responded to the online survey. The time for the study was limited. Hence, an extension of time for data collection was not possible. The survey research design that was used for this study may have limitations, which included the fact that participants may give dishonest responses and may need help understanding the questions on the survey. The questionnaire dealt with more than one concept; some participants gave incomplete responses, while some omitted answering some questions. Some participants tend to understand some questions differently and, hence, may respond with answers that do not reflect their true intention. Some respondents may be biased and may have struggled with emotion about responding deceitfully. Some respondents may have needed to read the questions in their entirety before responding, and this could lead to incorrect responses. Some respondents chose not to cooperate; hence, the percentage of completion and participation was different from what was expected, and this probably had a negative impact on the study outcome. Another limitation was that some questions were difficult to classify on the questionnaire. Due to the busy schedule of participants, they may have felt fatigued when seeing the number of questions or while doing the survey, and this may have led to incomplete responses and failure to respond. Participants may not have been motivated to complete the survey since there was no financial compensation. Also, some of the responses to the questions were different from what the investigator had expected. The lack of previous studies on the topic and the selected population will call for future additional studies. The study is not conclusive, and its findings may not be generalized due to the limited sample size.

Recommendations

Nursing education administrators should find ways to boost educators' confidence, as this study's findings showed a positive correlation between the effects of confidence on other variables. How to assist educators in gaining confidence is a task nursing education administrators should look into, and an individualized approach should be considered based on each educator's need. Nursing education administrators should create opportunities for educators to be familiar with the nursing curriculum. This study has revealed a positive influence on teaching when faculty are familiar with the curriculum. One of the things to consider is to recommend that newly hired educators join the curriculum committee during the first semester of hire. Nurse educators who do not have nursing education certificate should have an opportunity to get certification within the first year of hire. While pending the certification, only clinical courses in the area of their specialty should be assigned. Institutions should amend policies to favor nurse educators to enable them to seek certification in nursing education, as being equipped with knowledge and gaining confidence in teaching would promote self-confidence and increase job satisfaction, which would lead to a decreased number of educators leaving the job due to frustration. Some of the ways institutions can help include tuition assistance, flexible schedules, and reduced workload by not requiring newly hired educators to teach the required fifteen credit hours expected of full-time college faculty.

In the area of new nurse educators transitioning from the clinical setting to an academic role, this study supports the idea that "a more structured plan or path to guide the novice faculty" should be put in place, as stated by (Brown et al., 2017, p. 210). Effective mentoring and professional development can narrow the learning curve experienced by novice nurse educators (Pullen, 2023). Smith (2023) discussed the experiences of a novice faculty and recommended

culture immersion, mentorship, self-evaluation and reflection, utilization of resources, acceptance of constructive criticism, active involvement socially and professionally, and learning with students using resources recommended for students (pp. 1-2). The ADN program in the RGV should consider these recommendations. In training nurse educators, practicum in an academic setting should be part of the curriculum to enhance teaching and learning competencies to encourage effective transition to academic roles (Wells-Beede et al., 2023, p. 4). This recommendation is due to changing the standard NCLEX-RN to the Next Generation NCLEX (NGN) that started on April 1st, 2023. Student nurses are the beneficiaries of nurse educator's services, and since students are the nucleus of teaching and learning, the following recommendations that would favor the students, nurse educators, the ADN program, and the community that students would serve are made:

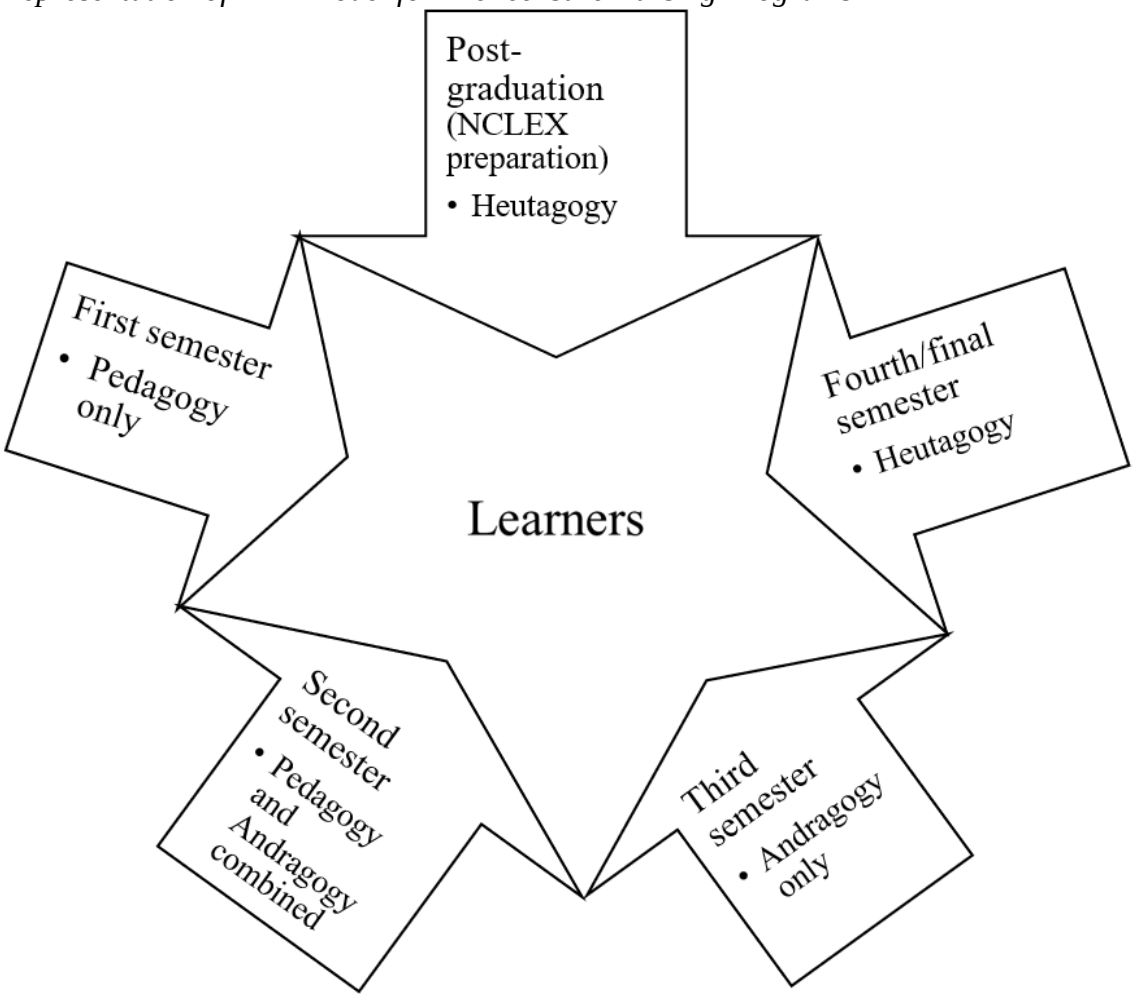
1. Case-based and problem-based teaching methods and curriculum approaches are recommended based on the literature reviewed in the course of this study, as this would be best suited for the Next-Gen NCLEX-RN. The research conducted by (Zhao et al., 2020) informed that case-based learning focuses on analysis and utilizing actual clinical scenarios to discover new learning sections. At the same time, problem-based learning is a learner-centered teaching approach that allows learners to work in small groups to reflect on possible real-life scenarios that they may experience in natural work environments (p. 2). With case-based and problem-based pedagogy and curriculum, students would have real-life scenarios. As they tackle the scenarios, they would identify, synthesize, analyze, and think critically to apply suitable nursing interventions. The study conducted by Zhao et al. (2020) concluded that when problem-based learning was combined with case-based learning, learners' performance improved, and their clinical

skills were enhanced. Based on evidence from previous studies on medical students, this study believes that the application of case-based and problem-based pedagogy would enhance student nurses' critical thinking and analysis skills that are needed to be successful in Next-Gen NCLEX-RN and clinical practice after their initial licensure to practice professional nursing.

2. Upon extensive literature review on teaching and learning best practices for professional programs and what promotes higher levels of learning based on Bloom's taxonomy, this study advised nurse educators to adopt a teaching or instructional approach that starts with pedagogy methodology in the first semester, then transitions to a combination of pedagogy and andragogy methods in the second semester, and then progress to andragogy in the third semester, and in the fourth or final semester heutagogy concepts should be applied. After the students graduate, they should continue with Heutagogy, which they had already mastered in their final semester. Like the pedagogy-andragogy-heutagogy (PAH) continuum narrated by (Agonács et al., 2019), the pedagogy, andragogy, heutagogy model of instruction sequence recommended in this study would enable students to progress slowly from being guided learners to independent purposeful learners. Figure 49 presents the visual representation of the PAH model for prelicensure nursing programs.

Figure 49

Visual representation of PAH Model for Prelicensure Nursing Programs



3. The AACN discussed the nurse residency program as a program designed for new graduate nurses with less than twelve months of clinical experience, as a means to bridge the gap between student nurses' educational preparation and clinical practice as recommended by the Institute of Medicine (Commission on Collegiate Nursing Education, 2021). This study agrees, based on the literature, that a nurse residency program should be instituted post-graduation to give new graduates the opportunity to review further and strengthen the nursing skills they learned while in school. This

learning experience can be guided by nurse educators practicing in the clinical setting in collaboration with nurse educators in academia. The residency program would also strengthen the confidence of new graduates and make them and their patients safe when they start to practice independently. This study recommends that the arrangement for the residency program be initiated in the final semester of the nursing program, and nursing programs should work with clinical facilities to arrange so students can transition smoothly immediately after they graduate, even prior to taking NCLEX-RN.

Understanding Curriculum, Differentiated Instructions, and Educational Theories

This study identified differentiated teaching methods as part of the contemporary issues that posed challenges to novice nursing educators in the ADN program due to the complexity of the ADN curriculum. This study drew contemporary theories of curriculum and instruction in relevant literature to speak to the educational challenges of differentiated instruction, the educational possibilities of utilizing differentiated instruction, and the significance of the issue of differentiated instruction to pre-licensure ADN education programs. In an attempt to address the educational possibilities of differentiated instruction in pre-licensure nursing education, this study drew concepts from Boyer's principles of scholarship, How People Learn (HPL) framework, Vygotsky's concept of learning, the theory of "Zone of Proximal Development (ZPD), autobiography, the content attainment model, and the spiral curriculum by Jerome Bruner, to advise and inform how educators should utilize these concepts and theories in remediating teaching strategies discourse in the ADN program.

Understanding how Learners Learn. The challenges facing nursing education are enormous. Despite the nursing faculty shortage and the global critical nurse shortage imposed by the Coronavirus pandemic, the standards set by the Board of Nursing (BON) remain unaltered in

terms of nursing faculty academic qualification requirements. The BON only approves nurses who have a minimum of master's degree academic preparation to teach in the ADN program, and full-time faculty are to prepare for the role of teaching and curriculum development (American Association of College of Nursing, 2022). When nursing faculty member are faced with issues of teaching a diverse population, as shown in the statistics from (USAFACTS, 2022), using differentiated instruction strategies, understanding, and applying the How People Learn (HPL) framework becomes imperative. In a specialized, caring profession such as nursing, nurse educators need to master the art and science of teaching and learning, knowing that nursing is a caring profession, not a teaching profession. Instead, the contrary is the case as literature, and this researcher's personal experience has shown that many nurse educators join the academic environment from a caring environment with minimal to no preparation in teaching and learning. This unprepared transition poses challenges in the areas of teaching and curriculum.

Despite the challenges novice nurse educators face in the use of differentiated instructional methods to disseminate clinical and content knowledge to nursing students, there are educational possibilities that understanding and the application of contemporary theories of curriculum and instructions can alleviate the challenges that novice educators face. The diverse demographic of the nursing student population necessitates that nurse educators or nursing faculty be vested with differentiated instruction strategies to face the challenges of disseminating knowledge to nursing students. To teach effectively and efficiently, nurse educators must first understand how people learn. Many scholars believe that in teaching and learning, the concepts of the "How People Learn (HPL) framework" should be used (Darling-Hammond & Bransford, 2007, p. 41). In the HPL framework, the above authors addressed four components of learning by stating that:

> The learner and his or her strengths, interests, and preconceptions; The knowledge, skills, and attitudes we want people to acquire and how they may be able to do so in order to transfer what they have learned; The assessment of learning that both makes students' thinking visible and, through feedback, guides further learning; and The community within which learning occurs, both within and outside the classroom. (p. 32)

For effective learning to occur, teachers need to teach efficiently by balancing the four components of the framework mentioned above. Nursing is a health-related program, and its curriculum is complex and content-saturated considering that students only have two years to complete the curriculum. Since the ADN pre-licensure nursing program curriculum is complex, nurse educators' understanding of HPL principles and utilization of the Spiral curriculum would be beneficial in teaching nursing courses.

Practicing Spiral Curriculum. The spiral curriculum is a teaching and learning model believed to be effective in teaching complex subjects and in health-related programs. According to Harden (1999), the concept was invented by a cognitive theorist, Jerome Bruner, in 1960, and it involves a process of introducing students to concepts starting with the least complex and moving to complex in an upward spiral fashion. With this framework or model, there is revisiting of topics based on previous knowledge without repetition, and "What is learned about a topic in early loops of the spiral is linked to what is learned in later loops" (Harden, 1999, p. 141). The difficulty levels of the topic are increased sequentially as students progress, and each revisiting of the topics goes with increased proficiencies and a new set of objectives until the final objectives are met. Nurse educators in the ADN program should consider the concepts of spiral curriculum to teach or disseminate their clinical knowledge to the pre-licensure nursing

students, as clinical experience and academic qualification are not synonymous with curriculum and instruction expertise.

Vygotsky's Concept of Learning. Eun (2019) discussed the role of Vygotsky's concept of learning, the theory of "zone of proximal development (ZPD), --- as -- principles of effective learning in both formal and informal contexts in various domains of human functioning" (p. 18). Vygotsky viewed learning in terms of cognitive and social aspects and emphasized the influence of socialization on mental activities and that "individual cognitive and affective processes originate in actual human interaction" (p. 18). The concept is made clear by the definition of ZPD, which is "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under guidance or in collaboration with more capable peers," Vygotsky (1978, as cited in Eun, 2019, p. 20). In educating nursing students, educators should, first of all, seek to know the level of the student's ZPD to be able to assist students in learning new concepts. It is even more essential to use ZPD when teaching diverse learners.

Content Attainment, the Way to Go. Nursing students are adult learners who need to learn at a higher level of cognition. Hence, the "Content attainment model" should be considered. An extensively admissible paradigm is the content attainment model. According to Bruner (1977, as cited in Jones & Hilaire, 2014), the content attainment model was developed by Jerome Bruner in the "mid-1990's". The author defined the model as "a process of structured inquiry that requires students to make generalizations and draw conclusions from examples (and non-examples) of a particular concept toward developing new insights, hypotheses, and associations regarding what they have previously learned." Success is expected when concepts are scaffolded by educators (p. 65). Barr and Tagg; Svinici; Svinicki and McKeachie (1995,

2004, 2010, as cited in Jones & Hilaire, 2014) declared that an undergraduate degree does not "solely indicate the successful memorization of facts, but also the capacity to problem-solve, think critically, and behave with desired social and emotional skills" (p. 65). The development of "intellectual, social and emotional dispositions of undergraduate students require the use of learner-centered instructional techniques and a shift from traditional paradigms to a focus on student learning" Bain; Barkley (2004, 2009, as cited in Jones & Hilaire, 2014, p. 65). This model cultivates "concept based learning. ---- Bruner himself called the Concept Attainment Model an instructional strategy that is not context- or age-specific, but rather congruent with how all humans learn" (Jones & Hilaire, 2014, p. 66). The content attainment model supports the concept-based curriculum used in nursing education.

Autobiography and Hidden Curriculum. Nurse educators could use reflective thinking through autobiography. Autobiography is a teaching and learning praxis to consider, since application of autobiography theory in ADN program curriculum and its use as a teaching method will likely ease the burden of learning for pre-licensure nursing students. The significance of effective teaching skills in the field of education cannot be underestimated. The use of differentiated instruction strategies and nurse educators' teaching preparation for acquisition of adequate, efficacious pedagogical, andragogical, and heutagogical teaching strategies are various ways that are significant to nursing education, as well as the broader field of education. Fawaz, Hamdan-Mansour, and Tassi (2018), in discussing the challenges facing nursing education, mentioned that it is challenging to meet the learning needs of diverse students. To meet the needs of these students, nurse educators should be well vested with different teaching approach and should think "out of the box", because it is difficult to contain the needs of diverse students, since "Nursing education has a significant impact on the knowledge and

competencies of nurses" (p. 105). This is why it is relevant that educators have adequate teaching preparation, and should be able to use differentiated instruction strategies in the ADN program.

Concept-based Curriculum and Learning. Many nursing scholars have discussed concept-based curriculum and how classrooms can be flipped using differentiated pedagogy to meet students' learning styles. Wells-Beede (2020), in a study that explored the experiences of nursing faculty with students with the use of flipped classrooms in the ADN program stated that "flipped classroom is student centered and interactive in teaching and learning" --- achieved by using "constructivist ideology and behaviorist principles", and professional development via pedagogical webinars was helpful to faculty in implementing the curriculum, see Hawks; Shin et al. (2014; 2015, as cited in Wells-Beede, 2020, pp. 169-170). Deane (2017), in a study on ADN faculty experience who switched from a traditional teaching approach to a concept-based curriculum (CBC), stated that students critical thinking was enhanced with the initiation of CBC and many faculty support "concept-based teaching and learning pedagogy and agreed that innovative teaching strategies moved the student away from rote memorization of facts to a point of deeper learning" (Deane, 2017, p. 240), this progression to deeper learning aligns with the concept of content attainment model and the delivery of content via CBC aligns with spiral curriculum discussed earlier.

BON Expectations. The ADN program is an entry-level, two-year pre-licensure nursing program offered in community colleges that prepares nursing students for eligibility to take the National Council Licensure Examination for Registered Nurses (NCLEX -RN) post-graduation. When candidates complete the examination successfully, they are issued eligible to get the initial licensure by the state Board of Nursing (BON) to practice professional nursing. The NCLEX-RN examination is set by the National Council of State Boards of Nursing (NCSBN), an independent

non-profit organization. This examination is competitive, and one of the criteria for evaluating the effectiveness of prelicensure nursing programs is the first-time NCLEX test takers pass rate, which is expected to be 80% (Otu & Otu, 2023). Czekanski, Hoerst, & Kurz (2018), in a study describing strategies employed by a prelicensure program to develop and implement evidence-based strategies to arrest the decline in the first-time NCLEX-RN test takers, pass rate encompassed curriculum revision and faculty development. According to the above author, the first-time pass rate is vital to the nursing program's reputation, viability, and existence, and it is the main index of a program's rigor and quality. Part of the recommendations by Czekanski et al. (2018), which this study agrees with, is the provision of resources for faculty development, which should include the provision of resources to learn effective teaching pedagogy, completion of NCSBN item writing courses and continuing education on concept-based teaching. These recommendations support the discussion in this study about the need for nurse educators to adopt differentiated instruction strategies when educating learners, and they also show the significance of effective teaching strategies to nursing education. Although Czekanski et al. (2018) should have included learning theories to help educators understand how to implement effective teaching methods and the importance of doing so, the discussion in this study has addressed that gap.

Transformational Learning in Nursing. Harker (2017), in a study addressing Montag's work titled "The Education of Nursing Technicians," mentioned the provision of education that fosters a transformational experience for learners. The provision of transformational learning requires a differentiated instruction approach. Nursing education molds students to become good future practitioners after licensure, and educators must instruct learners by focusing on individual learners' learning styles and using differentiated instruction methodology for positive outcomes.

Benner et al. (2010, as cited in Harker, 2017; Wells-Beede, 2020) confirm the above fact by stating that "For nursing students to form habits and dispositions for use of their knowledge and skills, educators must understand that students are formed by all they do, all they perceive and interpret, and all models of practice" (p. 296). Instructing students and helping them assimilate the learning concept are paramount to students' success. It is also crucial that the ADN program uphold the BON standards.

It is relevant that nursing educators master differentiated instruction methods to educate students so students can pass NCLEX-RN on the first attempt since the failure of the program to meet the passing standard, which is an 80% pass rate for three consecutive times as set by BON would result in the closure of the pre-licensure nursing program (Otu & Otu, 2023). The BON has standards expected of an ADN program. The BON evaluates nursing programs' effectiveness and outcome-based primarily on first-time NCLEX test takers' pass rate, and BON has the authority to terminate any nursing program that fails to meet the required standards (Czekanski et al., 2018; Denman & Cohn, 2022). According to Norris (2019), "the student most likely to be disadvantaged by the inherent and unavoidable attribute of test item flaw/bias is the learned learner" since this test is a standardized test that requires candidates to choose only one correct response (p. 40). Since BON also determines the qualification of faculty teaching in the nursing programs, it is evident that only nurses who belong to the category accepted by BON can educate nursing students; hence, these educators must acquire the teaching skills needed to share their clinical and professional experiences and expertise with their students.

Theories and Curriculum in a Nutshell. Briefly, this study identified the use of differentiated instruction aspects of teaching and learning as a contemporary issue and also the transition from a clinical setting to an academic environment as challenges in nursing education.

The educational possibilities of overcoming these challenges through mentorship, professional development, the use of differentiated instruction methods, and the integration of learning theories and concepts in nursing education have been discussed, as well as the significance of the identified issue to nursing education. This paper identified the HPL framework, Boyer's principles, ZPD, autobiography, the concept attainment model, and spiral curriculum as theories and principles that can help curtail instruction issues in nursing education. The concepts of HPL and the theory of ZPD are similar in that they relate to cognitive and social aspects of learning. Both frameworks are helpful in discussing the need for nurse educators to have an understanding of the methods and approaches to educating diverse learners. It is not an overstatement to say that these theories and concepts would provide a variety of options for nursing faculty to choose from when disseminating knowledge to diverse beneficiaries of their instructions. Since the ADN program curriculum is content-saturated, which necessitates the use of a concept-based curriculum, and many ADN programs are adopting this curriculum (Deane, 2017; Denman et al., 2022; Norris, 2019), these concepts and theories will help nursing educators apply the concept-based curriculum in a meaningful way that would yield good student learning outcomes. Wells-Beede (2020) discussed faculty experience with the flipped classroom model and noted that frequently, "new pedagogical models are introduced in nursing education without fully understanding how the model will impact learning and what the workload will entail for faculty" (p. 167). The frameworks of differentiated teaching strategies and the learning theories discussed in this paper are expected to help educators effectively apply the concept-based curriculum and the flipped classroom model advocated in nursing education.

Educational Technology as a Differentiated Instruction Strategy

Historically, pre-licensure nursing programs have been utilizing face-to-face modality since "a small hospital and training school was opened by Theodor Fliedner in Kaiserworth, Germany, where Florence Nightingale, the founder of modern nursing" received her nursing education in 1836 (Craven, Hirnle, & Henshaw, 2021, p. 3). There have been advancements in nursing science and evidence of technology use in nursing practice. Today, nurses are expected to be very proficient and up to par with the use of advanced technology and technological advances in clinical settings (Craven et al., 2021). Despite the spike in technology use in clinical settings, trends in nursing education do not show a corresponding increase in embracing distance learning. Prelicensure nursing programs are still not all there with e-learning such that though "e-learning has been studied in general education, there is a lack of literature that investigated e-learning in nursing specifically" (Abuatiq, Fike, Davis, Boren, & Menke, 2017, p. 82). E-learning, internet-based learning, distance learning, and computer-assisted instruction are all synonymous, while blended learning is a combination of face-to-face and virtual modality. These mentioned modalities use technological means to communicate and share instruction contents and materials with learners at remote locations (Abuatiq et al., 2017). This study attempted to speak to the question of what differentiated instruction strategies nurse educators use in the ADN program at the Rio Grande Valley (RGV), and it identified virtual education as a contemporary educational technology issue in nursing education and as a means to aid in providing differentiated instruction. The significance of virtual learning in terms of this study and its importance in the 21st century educational technology practice in nursing education, specifically in the ADN program, is discussed. Piaget's cognitive learning theory is used as a theoretical

framework to support the idea that distance or virtual learning is achievable and would be beneficial in the ADN program.

Diverse Adult Learners in Prelicensure Nursing Program. Norris (2019), in a position paper, explored the problematic assessment dilemma of adult learners with prior career(s), which she referred to as "learned learners," the unnecessary trouble nursing faculty face for not addressing the problems, and also the unwarranted strain placed on nursing programs which could be solved by faculty predictions (p. 35). Teaching effectively and efficiently is difficult when educators have no options. Virtual learning is significant and would provide a better option for both learners and faculty in the ADN program in the RGV. There are documented pieces of evidence that their enrolling in virtual education shows many students like virtual learning. The Texas Higher Education Data (THED) for fiscal year 2001 to 2021 statewide report showed a significant rise in the number of distance education enrollments. The statewide longitudinal data for public community and technical colleges (CTCs) showed that enrollment for distance education in Fall 2017 was 36.66%. In Fall 2018, it was 39.18%. In Fall 2019, enrollment was 41.59%, and in Fall 2020, it increased to 82.53%. This data showed an exponential increase in distance education enrollment from Fall 2017 to Fall 2020, indicating a shift from traditional face-to-face instruction to virtual learning modality; this change is possible due to advances in educational technology and the perceived numerous advantages virtual learning has over face-to-face modality. One of the advantages of virtual instructions and educational technology is their use in adult and diverse learner populations.

Technology, a Add on to Adult Learning. Nursing students are adult learners with varying learning styles, and learners have diverse life and educational experiences. An essential factor in addressing the learning needs of diverse learners is the use of multiple teaching

methods, including educational technology, in the delivery of content. Virtual learning is significant to nursing education because it has many advantages that would provide an opportunity for nursing educators to use differentiated instructions through the use of educational technology. With the advancement in nursing science, nursing evolution has shown trends in the use of technology in nursing practice; hence, "Today's nurse must be highly skilled and up-to-date with technological advances, be computer literate" (Craven et al., 2021, p. 3). Although increased use of technology is evident in clinical settings, trends in nursing education do not show an equivalent increase in the utilization of virtual learning in prelicensure nursing programs. The modality of instruction in nursing education is a discourse not yet resolved. Some researchers support the idea that nursing practice is changing. The approach to teaching nursing students has changed because new technology is incorporated into the classroom, laboratories, and clinical areas to enhance learning (Jeffries, 2005).

However, the rate of change and use of distance learning in the ADN program in the RGV could be more impressive, as minimal to no distance learning is used in the pre-licensure programs. According to (Lowery & Spector, 2014), the use of virtual learning and educational technology as a teaching pedagogy continues to be the evolving strategy in the nursing curriculum. It is becoming the bulwark of many nursing education programs that have allowed nursing programs to extend their tentacles to make education accessible to a broader population via remote settings. Despite this advantage, some ADN programs in the RGV have yet to adopt virtual learning. Computer-assisted pedagogy is growing exponentially in medical and nursing education and "has been shown to be promising in medicine to improve knowledge among learners" (Lahti, Hätönen & Välimäki, 2014, p.136; Abuatiq et al., 2017, p. 82). The fact that there is knowledge improvement when computer-assisted pedagogy is used in medical education

should prompt the ADN program to adopt the same teaching strategy and virtual education. Knowing that the nursing curriculum is content-saturated, using differentiated instruction by adopting virtual learning through educational technology is relevant. With the generational disparity that occurs between nursing educators and nursing students, the use of educational technology in ADN programs is significant, and virtual learning should not be just an option but a necessity.

Looking at the advantages of educational technology, cited in Williams (2019), this study agrees that there is a need for nursing educators to adapt, embrace, and have a passion for Online learning via the use of educational technology and to utilize storytelling during synchronous sessions to foster student engagement. Virtual learning would not only narrow the generational gap between educators and learners, but it would also make differentiated instruction possible, especially for 21st century nurses whose expectation is to be proficient in technology.

Virtual Learning in 21st century Nursing. The use of differentiated instruction and virtual learning is significant in the 21st century educational technology practice. This study agrees with the AACN's position on the inclusion of informatics and technology as an essential part of nursing education. There are many positives about educational technology and virtual and blended learning when used with adult learners. The blended modality of instruction combines virtual learning and face-to-face instruction. Virtual learning is known for its self-directed and independent learning capabilities. According to Montin and Koivisto (2014), when self-directed learning was compared with the traditional method of learning, there was moderate evidence that showed that self-directed learning was associated with many benefits. It had an average increase in knowledge acquisition as compared to traditional methods of learning. Hence, virtual pedagogy is advocated for training nursing students (p. 2). The proponents of educational

technology and virtual learning argued that nursing students embrace self-directed learning since they know that they will be independent career nurses after they graduate. Hence, the online teaching environment needs to be student-centered as opposed to the instructor's center, as seen in face-to-face learning, and faculty are facilitators of learning in order to encourage self-directed learning (Kim, Jeong, Kim & Jeong, 2022, p. 13). The added advantages of online learning, as discussed by Shovein, Huston, Fox, and Damazo (2005), included the provision of career opportunities for those with multiple responsibilities who would not have been able to commute to school and who are on a fixed schedule. Virtual learning creates an online community where learners engage and share experiences thoughtfully and reflectively, encouraging one another, unlike traditional classrooms. Also, educators' roles change from that of gatekeeper of knowledge to that of a facilitator and of shared responsibility with the learners (Shovein et al., 2005, p. 342). Abuatiq et al. (2017) narrative on the historical review that focused on e-learning in nursing depicted e-learning in nursing and concluded that e-learning, which is made possible through educational technology, was influential in pre-licensure nursing education as it complemented learning experience, knowledge, and performance of learners (pp. 82-83). This study has discussed educational technology as a contemporary issue in nursing education that is relevant to today's learners and nursing education. Educational technology is an emerging pedagogy of the 21st century whose usage is continuing to grow exponentially; hence, this study recommends virtual education for the ADN program.

Technology and Piaget's Theory. The next concern may be knowing the theory that can help educators understand the application of technology in nursing education and the theory that supports educational technology. Piaget's cognitive learning theory would aid nurse educators in applying educational technology and virtual learning to its diverse population of learners,

especially in this age of technological advancement in healthcare settings. Educational technology and virtual learning in the ADN program are encouraged through the use of Piaget's theory. Piaget's cognitive learning theory is a suitable framework to use to demonstrate how to use educational technology, and it could be effective with adult and diverse learners. Many scholars and schools of thought have developed, addressed, and used various teaching and learning frameworks. Piaget's cognitive learning theory is utilized as a theoretical framework in viewing nurse educators' teaching preparation and content delivery via educational technology in the ADN program in the RGV. Piaget, an educational psychologist, viewed learning as a mental phenomenon, and he formulated a learning theory that reflected learning as a mental process with environmental influences. Piaget's theory has been used in many studies by scholars to substantiate the cognitive aspect of learning and how people learn (Orr, 1991; Huitt & Hummel, 2003; Shayer, 2003; Hanfstingl & Zhang, 2019). In the research conducted by Huitt et al. (2003), the authors discussed Piaget's theory of cognitive development and attempted to describe the four stages of cognitive development. The four stages described were the sensorimotor, pre-operational, concrete operational, and formal operational. These stages were listed and explained as stages of cognitive development. The two processes individuals adopt to adapt are assimilation and accommodation. Individuals use these processes in their existence to manage their complex environments. The above authors explained assimilation as a means of changing the environment to recede the previous cognitive framework, and accommodation is the process of transforming the cognitive framework to adapt to the environment. Both assimilation and accommodation are utilized concurrently for effective schema and to improve previously acquired schema. According to Piaget, learning is a sequential process that involves assimilation and accommodation.

Assimilation demands mental processes of comprehension, while accommodation involves adaptation to environmental influences. Both assimilation and accommodation are necessary for learning to occur. Learners mentally process and decode information received externally from the environment and use the mentally processed information to influence the environment. These mental processes are complex and effective when they happen simultaneously. The fourth stage, which Piaget called the "Formal operational stage," is what was more impactful in my study and adult learners. In the formal operational stage, Piaget's view was that the logical use of symbols to relate abstract concepts was a demonstration of intelligence, and this stage is exhibited in adolescence and adults (Huitt et al., 2003, p. 2). Piaget's theory has ignited provoking thoughts in teaching and learning such that scholars argue the concept of cognitive development. Orr (1991) narrated the importance of Piaget's theory of cognitive development and argued the relevance of the theory to adult learners. Piaget's theory is relevant in the academic context of educating nursing students. Focus is placed on providing learning environments that encourage students to use and practice already acquired schemas to gain opportunities and chances to improve on those schemas, and educators pinpoint areas to reinforce. Orr (1991) further argues that "Schema is motivation in itself," and the environment is only vital insofar as it should be geared to 'match' the experiences with the learner's ability to respond to them. The theory also helps educators decide on what and how to teach (p. 67). With Piaget's theory, the "andragogical approach must be discursive, open plan and assessment of progress must not be exclusively by written or practical examinations" (Orr, 1991, pp. 68-69). The environment is an essential factor in learning and may influence learning progress and assessment outcomes.

For this study, the environment included but was not limited to the classroom, which could be physical or virtual, the Learning Management System (LMS), learners' prior learning and life experiences, health care facilities, and society. Learners in the ADN program are adult learners with varying levels of experience who are studying to work in society and different areas of healthcare institutions of their choice. Piaget's theory of cognitive development applies to the population in this study by encouraging nurse educators to present information or nursing concepts to learners in a sequential manner, considering learners' previously acquired schema because if the concepts are misrepresented, learners may process it differently and wrongly, and subsequently reproduce the wrong information during examinations. Also, if the learners manage to make it through nursing school and succeed in the NCLEX-RN to gain licensure to practice, then they may render unsafe care to clients, and this may have a negative impact on healthcare delivery and society as a whole. The responsibilities of nurse educators make it necessary to assess nurse educators' preparation in the areas of teaching and technology usage.

Piaget's cognitive learning theory could be used in assessing nursing educators' teaching and technological preparation for virtual instructions and content delivery. Hanfstingl, Benke, and Zhang (2019) conducted a study comparing Piaget's theory of cognitive development and Marton's variation theory, which is a teaching theory that "emphasizes the use of variation patterns as a structural scaffolding approach to create more viable conditions for learning" (p. 524). Hanfstingl et al. (2019) examined the correlation between Marton's variation theory and Piaget's concept of cognitive development and its grouping into four sequences of sensorimotor, pre-operational, concrete operational, and formal operational stages. According to the above authors, Marton's variation theory focuses on the application of "phenomenographic principles in learning and teaching situations" (Hanfstingl et al., 2019, p. 511) but also references Piaget.

Advocates of variation theory delimit their view from constructivist learning theory but stress constructivism as a philosophical framework as opposed to a learning theory. The phenomenographic concept accentuates the relevance of Piaget's theory of cognitive development. The above authors further argued that Piaget's cognitive learning theory and the concept of schema development, as well as what variation theory offers about learning, are firmly comparable. Hence, the merger of "both approaches would be fruitful for the ongoing theoretical development of how learning takes place" (Hanfstingl et al., 2019, p. 511). Piaget's cognitive development learning theory continues to be considered by other theorists for its many strengths.

The strength of Piaget's theory includes the use of already acquired schema by learners and its effectiveness with adult learners. McLeod (2022) discussed how children construct understanding by experience. With this concept, learners who use educational technology or participate in virtual learning are able to differentiate already-acquired knowledge from what they learn when taking courses in a virtual environment. Piaget's theory applies to the virtual environment in the ADN program because some students may not be technology savvy or may not have taken courses virtually or be familiar with LMS, educational technology devices, or software before joining the learning community, so they would have to go through the process of adaptation as in Piaget's theory which involves adjustment to virtual learning environment and educational technology environment through the process of assimilation which is getting information into existing schema or knowledge, and accommodation which is rearranging existing information to create room for new information, and then equilibration which is knowing and making meaning of information assimilated. Learners need to be active since being active is required in the assimilation and accommodation phase of Piaget's theory. Piaget's

theory is by discovery, and it is student-centered, just as what is expected of adult learners in the ADN program, as they use high-level cognitive learning to apply and analyze nursing concepts, and nurse educators are facilitators of learning who would also scaffold concepts for better understanding by students. In Piaget's learning theory, the focus is on the learning process, which is the means to learning but not the end. Educational technologies are valuable tools for collaboration via discussions and group work (McLeod, 2022). Piaget's theory has many application advantages, but despite these benefits, some downsides do exist. Educators need to be aware of the downside of Piaget's theory to apply it suitably in designing virtual education.

Piaget's theory has some weaknesses, which include the fact that passive learners may have difficulty learning since the assimilation and accommodation phase requires learners to be active since problem-solving skills are discovered but not by teaching. Individual activities may not yield good outcomes based on Piaget's theory, and educators must go through the task of frequently evaluating the students to assess how well the students learned (Mcleod, 2022). These concerns can be eliminated when educators are available to facilitate and scaffold the learning experience. Valsiner (2005) argued that "Piaget's work was mostly inductive -- moving from collected specimens of children's thinking to their classification into stages, ordering the stages along the lines of ontogenetic progression" (p. 58). When learners fail to understand information or when there is no equilibrium or balancing of information received, learners may get frustrated, and this may negatively affect learning. When considering these weaknesses, nurse educators would understand and modify their instruction strategies to provide effective and efficient instruction with the support of the nursing education administrators.

Online Education and Pre-licensure Nursing. To adopt online education in the ADN program, nursing education administrators have considerable responsibilities in making online

education successful for both the learners and the facilitators of learning. Nursing education administrators should consider virtual learning to provide educational technology resources to nurse educators and students, as well as professional development opportunities to equip nurse educators to meet the teaching and learning needs of Gen Z and adult learners. Course design should be user-friendly, and instructional designers should collaborate with subject matter experts when designing courses so that the product can meet the needs of both the learners and the educators. Educators should design "learning activities that promote becoming a nurse" (Shovein et al., 2005, p. 343) and activities that meet the concept of differentiated teaching methodology.

In a nutshell, this study identified virtual learning as a contemporary issue in nursing education and addressed the concerns of instruction that suits differentiating instructions. The significance of differentiating instruction and virtual learning was discussed, as well as their importance in 21st-century educational technology practices. Piaget's cognitive learning theory was used as a framework to show how meaningful it would be for the ADN program to adopt virtual education. Findings in this study showed that there is an exponential increase in student enrollment for virtual learning, and virtual learning is made possible by advances in educational technology. The ADN program in the RGV has a diverse student population that requires a differentiated teaching approach to meet the student's learning needs. The generational differences between nurse educators and students in the ADN programs call for changes in the nursing curriculum and instruction approach. Teaching diverse students is challenging, and nurse educators need to accept and incorporate educational technology as an instruction modality to assist students in meeting their learning outcomes. Piaget's cognitive learning theory can be applied in the nursing curriculum to create understanding for nurse educators when adopting

educational technology and when modifying their pedagogical and andragogical approaches. The involvement of nursing education administrators is necessary to provide the necessary educational and technological software and devices for nurse educators and students, as well as the training needed for effective use of the software and devices. Technology is an area nurse educators need to master, and educators need to be super users of technology so they can be effective in teaching diverse learners who may be technology savvy. Adoption and continual use of educational technology in the ADN program in the RGV is not an option but a necessity, and virtual education in the ADN program is encouraged.

Recommendation for Future Research

Based on the outcome of this quantitative study, performing another study using a mixed-method approach is recommended. With a mixed methodology approach, interviewing participants and observing how they deliver instruction would give a clearer picture of their approach to instruction, and their choice of teaching methods could be closely examined. Through interviews, interviewees would be given the opportunity to share personal experiences of transition from the clinical setting to the academic environment. Also, classroom observation would reveal class tempo and student interaction in the learning community. A comparative study of the ADN program in the RGV and another region in Texas would be helpful in determining similarities or differences that might exist among nurse educators' preparation to teach and transition experiences in those areas. The sample size should also be increased for possible generalization of the study result.

Another recommendation would be to involve nursing education administrators in the study as this may reveal administrators’ perceptions of nurse educators' transition experiences and how they can help ensure a smooth transition from the clinical setting to an academic role.

This study showed that there was a lot to improve in nursing education. 51.7% of respondents indicated this. Future studies should consider investigating which areas in nursing education need improvements and what improvements are needed. It is recommended that future research should request educators to mention the type of educational technology software or platform they use; this would add more clarity and also show any variation in the choice of technology used. Future research should also indicate the reasons nurse educators would recommend their nursing colleagues in clinical settings to join nursing education and teach in the ADN program.

Conclusion

The findings in this study showed that the transition from the clinical setting to an academic role was very challenging. The teaching preparation and readiness of newly hired nurse educators needed to be increased, as shown in the data from this study. Novice nurse educators need support to help them transition smoothly to the expected teaching role. The higher the participant's age, the more challenging it was to transition from the clinical setting to an academic role. There was a significant age gap among participants, and participants' age influenced the use of technology as there was a moderate positive correlation between participants' use of technology and age. There was a significant relationship between educators' academic preparation and the use of different teaching methods in the classroom. The findings from this study also revealed that there were no gender differences in participants' responses to pedagogy questions, use of technology, teaching preparation, transition experience, and curriculum knowledge. The study is not conclusive but is open for more investigation.

Summary

Summary of Findings

The study yielded findings that indicated that many nurse educators use more than three teaching methods to teach one class session. The transition from clinical settings to academic

roles is challenging. Participants expressed that they get support from nursing education administrators. Despite the challenges nurse educators face during transition, 51.7% of participants responded that they felt prepared to teach the first semester of their hire, and 44.8% indicated that they knew what teaching methods to use upon hire. There was a positive correlation between confidence and classroom management. Participants who indicated that they knew what technology to use in class were 58.6%, and 55.2% indicated that students appreciated when technology was used in the classroom. Having a background in the courses participants taught had a positive association with knowing what teaching methods to use upon hire, as those who taught the courses they had a strong background in knew what teaching methods to use upon hire. Participant's likelihood to recommend colleagues to leave the clinical settings to teach in an ADN program was rated high on a scale of zero to ten.

The relationship between age and overall confidence was not significant. How participants felt prepared to teach the first semester of hire and participants' age was not statistically significant. There was a moderate correlation between participants' age, the use of more than three teaching methods in one class session, and familiarity with the ADN curriculum. The ability to manage the classroom without frustration had no relationship with participants' age, and knowing the teaching methods to use upon hire did not correlate with participants' age. Also, knowing what educational technology to use in the classroom and the comfort of using it had no relationship with age, according to the findings from this study.

Summary of the Study

This study discussed the findings from a study that investigated the teaching preparation and transition experiences of nursing educators in the RGV. Only nurse educators in the ADN program participated in the study. Newly hired nurse educators experience a great deal of

challenges during their first semester of hire. Literature has shown that professional development and effective mentoring are helpful in easing the challenges that newly hired nurse educators experience as they transition from clinical settings to academic roles. The percentage of participants who have specialization in nursing education is less than that obtained from (TCNWS, 2020). Support from nursing education administrators added positively to the satisfaction of nurse educators in performing their roles. Nurse educators in this study indicated that they use technology in their classrooms, and students like it when educational technology is utilized as a teaching strategy. Teaching diverse learners is challenging and requires adequate teaching skills that would address and meet each learner's unique learning needs. Despite the many challenges that nurse educators experience, they still like their roles and responsibilities and would recommend colleagues from the clinical settings to join the academic environment. The limitations of the study included but were not limited to a small sample size and limited time for the study. Some of the recommendations based on this study's findings and literature include but are not limited to the fact that nurse educators should be familiar with learning theories and apply the theories effectively in teaching to promote learning. The concepts and framework of the spiral curriculum, how people learn concepts, ZPD, and autobiography are encouraged. Differentiated instruction strategies are a continuing discourse in nursing education. Familiarizing oneself with and utilizing learning theories would promote efficient and effective teaching in nursing education. Virtual learning is a relevant instruction modality to consider due to its many advantages. Some of the recommendations for future research include increasing the sample size to cover a wider geographical region and using a mixed-study research methodology. This study is inconclusive but is open to future research.

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APPENDICES

APPENDIX A

APPENDIX A

CONSENT FORMS

Research Title: Reimagining Associate Degree Nursing Education: An Insider's View

This survey is being conducted by Ntiense E. Otu, a doctoral student at the College of Education and P-16 Integration, at The University of Texas Rio Grande Valley. The purpose of this study is to examine the teaching preparation of nursing faculty in the Associate Degree Nursing (ADN) program and its association with instruction and content delivery. The relationship between faculty teaching preparation and content delivery will be examined to establish if faculty transition from clinical setting to academic environment supports their readiness to teach. This survey should take about 10 minutes to complete. Participation in this research is completely voluntary. If there is any question which you are uncomfortable with answering, feel free to skip that question and leave the answer blank. Also, please be aware that you are entitled to withdraw from the study and terminate your participation at any time without question or comment. You must be a Nurse educator teaching in the ADN program to participate. If you are not a Nurse educator teaching in the ADN program, please do not participate. All survey responses received will be treated confidentially and stored on a secure server. However, given that the surveys can be completed from any computer (e.g., personal, work, school), there is no guarantee of the security of the computer on which you choose to enter your responses. As a participant in this study, please be aware that certain technologies exist that can be used to monitor or record data

and/or websites that are visited. Any individually identifiable responses will be securely stored and will only be available to those directly involved in this study. The identified data may be shared with other researchers in the future, but will not contain information about any specific individual identity. This research has been reviewed and approved by the Institutional Review Board for Human Subjects Protection (IRB). If you have any questions about your rights as a participant, or if you feel that your rights as a participant were not adequately met by the researcher, please contact the IRB at (956) 665-2889 or irb@utrgv.edu.

By clicking the next button you are freely accepting to participate in this study.

APPENDIX B

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL

The University of Texas
Rio Grande Valley
Institutional Review Board

January 5, 2022

Ntiense Otu, Principal Investigator
Department: College of Education
Via Electronic Routing System

Dear Principal Investigator:

RE: EXEMPT DETRMINATION FOR IRB 21-0472, *"Nurse Educators Readiness to Teach: How wide, how narrow is the Gap?"*

The study in reference has been determined 'Exempt' under the Basic HHS Policy for Protection of Human Research Subjects, 45 CFR 46.104(d). The determination is effective as of the date of this letter within the exempt category of:

> *"(2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) and*
>
> *(ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or*
>
> *(iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7). "*

Research that is determined to be 'Exempt' under the Basic HHS Policy for Protection of Human Research Subjects is not exempt from ensuring protection of human subjects. The Principal Investigator (PI) is responsible for the following through the conduct of the research study:

1. Assuring that all investigators and co-principal investigators are trained in the ethical principles, relevant federal regulations, and institutional policies governing human subjects' research.
2. Disclosing to the subjects that the activities involve research, and that participation is voluntary during the informed consent process.
3. Providing subjects with pertinent information (e.g., risks and benefits, contact information for investigators, and IRB/ORC) and ensuring that human subjects will voluntarily consent to participate in the research when appropriate (e.g., surveys, interviews).
4. Assuring the subjects will be selected equitably, so that the risks and benefits of the research are justly distributed.
5. Assuring that the privacy of subjects and confidentiality of the research data will be maintained appropriately to ensure minimal risk to subjects.

Exempt research is subject to the ethical principles articulated in The Belmont Report, found at the Office of Human Research Protections (OHRP) Website:
www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

Unanticipated Problems: Any unanticipated problems or complaints must be reported to the IRB promptly. Further information concerning unanticipated problems can be found in the IRB procedures manual.

Continuing Review: research deemed 'Exempt' is not subject to annual review by the IRB.

Modifications: Any change to your protocol requires a Modification Request (Amendment) for review and approval prior to implementation. The IRB may review the 'Exempt' status at that time and request an application for approval as non-Exempt research.

Closure: Please notify the IRB when your study is complete through submission of a final report. Upon notification, we will close our files pertaining to your study.

If you have any questions, please contact the Human Subjects Protection Program/IRB by phone at (956) 665-3598 or via email at irb@utrgv.edu.

Sincerely,

Institutional Review Board
for the Protection of Human Subjects
in Research

orc/cr

The University of Texas Rio Grande Valley
Institutional Review Board

February 27, 2023

Ntiense Otu, Principal Investigator
Department: College of Education
Via Electronic Routing System

Dear Investigator:

Re: Amendment for Protocol Number IRB-21-0472 "Reimagining Associate Degree Nursing Education: An Insider's View"

Your Request for Amendment to change the study title and update the survey questions has been approved.

This study continues to meet the Exemption requirements under DHHS 45 CFR 46.104(d).

Research that is determined to be Exempt from IRB review is not exempt from ensuring protection of human subjects. The Principal Investigator (PI) continues to be responsible for the following through the conduct of the research study:

1. Assuring that all investigators and co-principal investigators are trained in the ethical principles, relevant federal regulations, and institutional policies governing human subjects research.
2. Disclosing to the subjects that the activities involve research and that participation is voluntary during the informed consent process.
3. Providing subjects with pertinent information (e.g. risks and benefits, contact information for investigators, and IRB/ORC) and ensuring that human subjects will voluntarily consent to participate in the research when appropriate (e.g. surveys, interviews).
4. Assuring the subjects will be selected equitably, so that the risks and benefits of the research are justly distributed.
5. Assuring that the privacy of subjects and confidentiality of the research data will be maintained appropriately to ensure minimal risk to subjects.

Exempt research is subject to the ethical principles articulated in The Belmont Report, found at the Office of Human Research Protections (OHRP) Website:
www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

Unanticipated Problems: Any unanticipated problems or complaints must be reported to the IRB/ORC promptly. Further information concerning unanticipated problems can be found in the IRB procedures manual.

Continuing Review: Exempt research is not subject to annual review by the IRB.

Modifications: Any further changes to your protocol require a request for amendment be submitted and approval secured prior to implementation. The IRB may review the Exempt status at that time and request an application for approval as non-Exempt research.

Closure: Please notify the IRB when your study is complete through submission of a final report. Upon notification, we will close our files pertaining to your study.

If you have any questions, please contact the Office of Research Compliance by phone at (956) 665-3598 or via email at irb@utrgv.edu.

Sincerely,

Institutional Review Board for the
Protection of Human Subjects in
Research

orc/cr

APPENDIX C

APPENDIX C

SURVEY QUESTIONS

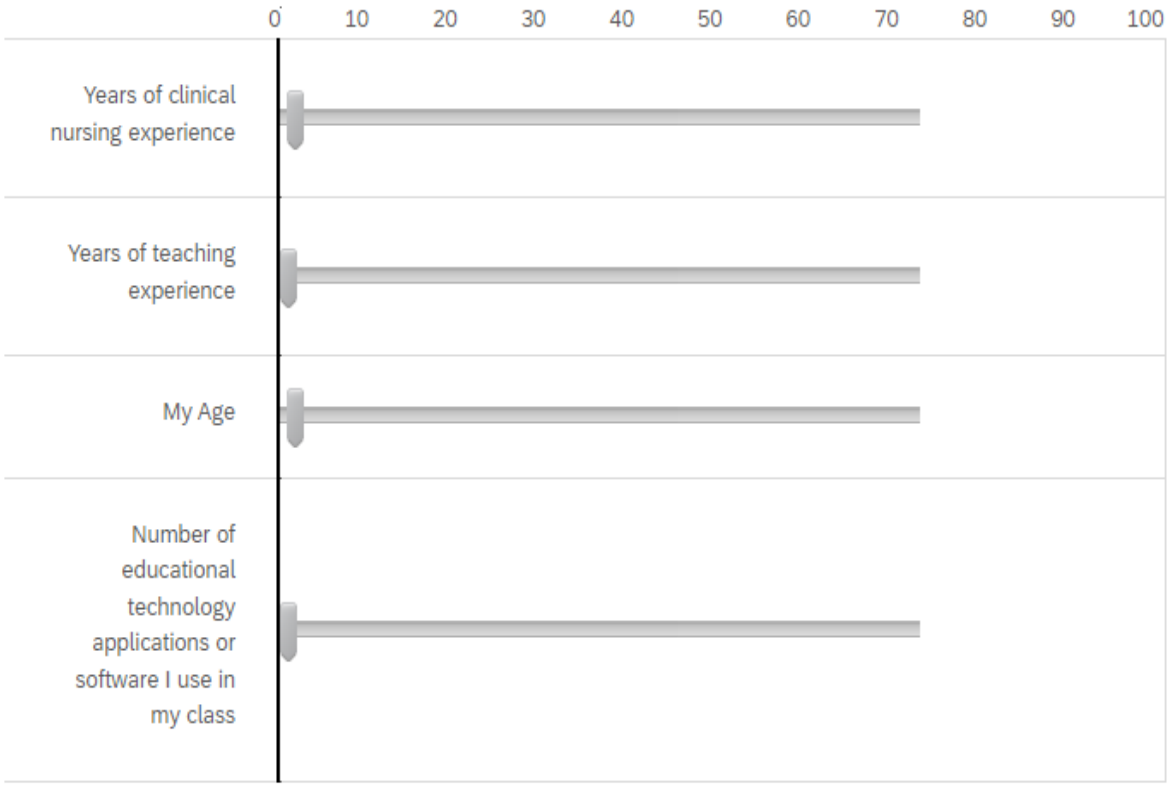
Instructions: Read each statement or phrase. Please rate the following in terms of how much you agree or disagree with each statement.

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
My transition from clinical to teaching was very challenging.	○	○	○	○	○
I felt prepared to teach the first semester I was hired.	○	○	○	○	○
When I was hired, I knew the teaching methods I would use.	○	○	○	○	○
I feel prepared to teach in Associate degree nursing program.	○	○	○	○	○
I have a strong background in the course or courses I teach.	○	○	○	○	○
I feel confident teaching in Associate degree nursing program.	○	○	○	○	○
I get the support I need from nursing education administrators.	○	○	○	○	○
I have a CERTIFICATE IN NURSING EDUCATION.	○	○	○	○	○
There is a lot to improve in nursing education.	○	○	○	○	○
I can select educational technologies to enhance students learning.	○	○	○	○	○
I use more than three methods to teach one class session.	○	○	○	○	○
I can manage my classroom without frustration.	○	○	○	○	○
I know what educational technologies to use in my classroom and I am comfortable using them.	○	○	○	○	○
My students like it when I use educational technologies in class.	○	○	○	○	○
I am very familiar with Associate Degree Nursing Curriculum.	○	○	○	○	○

Select your qualification(s). You can select more than one.

	Select Yes or No
Master of Science in Nursing (Education specialization)	
Master of Science in Nursing (Other Specialty)	
Doctoral degree (Ph.D.) Nursing	
Doctoral degree (Ph.D.) other specialty	
Doctoral degree (DNP)	
Doctoral degree (Ed.D)	
Masters degree in areas other than Nursing	

Slide to respond to the following questions



Gender

- ○ Female
- ○ Male
- ○ Non-binary/third gender
- ○ Prefers not to say

Q11

How likely are you to recommend a colleague from clinical area to teach in Associate Degree Nursing program?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○	○

End of Survey

We thank you for your time spent taking this survey.

Your response has been recorded.

BIOGRAPHICAL SKETCH

Ntiense Etokeren Otu is originally from Nigeria. In March 1999, she migrated to Salem, Massachusetts, United States of America. In August 2001, she relocated to Brownsville. Ntiense is blessed with four wonderful sons, which, if asked, she would not want to trade for others. She earned a Bachelor of Science in Nursing, Cum Laude in 2005. In 2008, she earned a Master of Science in Nursing, and a Nursing education certificate (GPA 3.8), all from the University of Texas at Brownsville (UTB), now The University of Texas, Rio Grande Valley (UTRGV).

Ntiense is a Registered Nurse, and she has used her nursing experience to touch many lives. As a practicing nurse, she has worked in different capacities in many areas of the healthcare industry. Ntiense is very passionate about her profession. In Spring 2016, to satisfy her passion for both nursing and teaching, she started a teaching career at Texas Southmost College (TSC), where she taught in both the Vocational Nursing (VN) program and the Associate Degree Nursing (ADN) program. In Fall 2019, Ntiense joined South Texas College (STC) in McAllen, where she is presently serving as a full-time faculty member in the ADN program. In the Fall of 2020, during the COVID-19 pandemic, Ntiense got accepted to the College of Education and P-16 Integration, UTRGV, where she studied Curriculum and Instruction with a specialization in Educational Technology. She earned a Doctor of Education (Ed. D.) with a 4.0 GPA in Fall 2023. Ntiense plans to continue her call as a practicing Registered nurse and a Nurse educator to keep sharing her knowledge with the next generation of nurses and the community. Her contact email is: kokontie@gmail.com.