

**FINALIST DIPLOMA NURSING EXTENSION STUDENTS' SELF-EFFICACY TO
USE THE NURSING PROCESS TO CARE FOR PATIENTS IN CENTRAL
UGANDA**

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**UGANDA CHRISTIAN
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Declaration

This is to declare that the work presented in this proposal is my personal work and that it has not been submitted to any other institution of higher learning or university for any academic award. Where other people’s work has been referred to, this has been acknowledged.

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List of Abbreviations

UNMC-Uganda Nurses and Midwives Council

UNMEB-Uganda Nurses and Midwives Examinations Board

WHO-World Health Organization

Abstract

Background: In order to improve skills and patient care outcomes, Ugandan nurses progress through higher education levels, including certificate, diploma, bachelors, masters, and doctoral programs. As nurses advance to higher levels, they are expected to use the nursing process to deliver quality, individualized patient care. It is not known whether diploma nursing extension students are confident in using the nursing process to care for patients.

Objectives: To assess final semester diploma nursing extension students' self-efficacy to use the nursing process during patient care and determine the self-efficacy processes that influenced their learning of the nursing process.

Methods: A quantitative approach using a cross-sectional descriptive design was used. A private, non-profit organization connected to a regional referral teaching hospital in Central Uganda served as the study's site. Forty-five final-semester diploma nursing extension students were chosen by means of consecutive sampling. Bandura's Self-Efficacy Theory served as the basis for the self-developed questionnaire. The instrument's reliability was confirmed by its Cronbach's alpha of 0.813.

Results: Descriptive statistics were the main emphasis for the SPSS software (20) used to examine the data. Eighty two percent of participants were identified as female, and 76% of them were between the ages of 20 and 29. Sixty-nine percent had one to four years' experience, working in hospitals. In this study, 80% reported moderate levels of self-efficacy, 16% reported low levels, and 4% reported no self-efficacy. In describing the processes that influenced their development of self-efficacy, participants predominately depended on performance accomplishments (mean 3.1) to develop their self-efficacy. Vicarious learning (mean 2.2), verbal encouragement (mean 2.0) and emotional states (mean 1.8) had less influence on them.

Conclusion: In general, Ugandan finalist diploma nursing extension students have a moderate level of self-efficacy when it comes to using the nursing process. The moderate mean score, however, suggests that there is potential for improvement. In order to guarantee efficient patient care and meet Uganda's changing healthcare needs, educational techniques should concentrate on building self-efficacy, especially through performance accomplishments, vicarious learning, verbal encouragement and emotional states.

Keywords: Nursing education advancement, self-efficacy, nursing process, Uganda, diploma nursing students, patient care.

Chapter 1: Introduction

Globally, the incentive for nurses transitioning to higher levels of education is to expand the skills needed to provide more effective and competent care (World Health Organization, 2020). Higher education for nurses is known to improve educational and patient care outcomes (Nashwan et al., 2021). To enhance health care standards in Uganda, there is a push for upgrading nurses to higher levels, to equip them with advanced skills and knowledge to meet the evolving demands and provide even more comprehensive patient care (Uganda Nurses and Midwives Council, 2022). Nursing has evolved significantly over the years, and one of the cornerstones of this evolution is the nursing process, a systematic framework that guides nurses in delivering patient centered care (Yoost & Crawford, 2016).

While nurses transit to advanced levels, the scope of practice differentiates level of practice for the nursing process where each level aligns with the unique needs and complexities of patient care (Joyce-McCoach, Ashworth, Park, Kellerman & McKenna, 2023). There is need to determine whether nursing students advancing their education from certificate to diploma have transitioned to the next level in practice with their utilisation of the nursing process. One of the ways to look at this is to determine nursing students' self-efficacy to use the nursing process and the learning processes that contributed to the development of their sense of efficacy. The study therefore seeks to determine nursing students' self-efficacy to use the nursing process to care for patients in Central Uganda.

Background

There is an ongoing professional advancement in nursing where the nursing workforce worldwide is being upgraded (WHO, 2020). Educational programs have moved nurses from low to higher levels with specialization throughout time (Nashwan, et al. 2021). The numerous

educational opportunities to becoming a nurse range from diploma through Bachelor's, master's, and doctorate programs where the scope of practice at the different levels differs (Yoost & Crawford, 2016). In Uganda, the educational programs move nurses from certificate to diploma through baccalaureate, master's, and doctorate degrees and these are called extension programs (Uganda Nurses and Midwives Council, 2022). A report from the Uganda Nurses and Midwives Examinations board (UNMEB, 2023) revealed that 46,618 nurses completed their first level of certificate training hoping to advance their career. Out of the 121 schools countrywide, 45 are training diploma students.

When nurses advance to higher levels, it is expected that the way nursing practice is performed should be different as measured by the quality and competent care provided (Htay & Whitehead, 2021). One of the ways in which quality care can be provided is through the nursing process (Mutshatshi, Mothiba & Mamogobo, 2020). ‘The nursing process is a systematic method of giving individualized nursing care that focuses on identifying and treating unique responses of individuals or groups to actual or potential alterations in health’ (Mutshatshi & Mothiba, 2020 para. 4). Before Florence Nightingale’s nursing reform and up to the early 1940s, nursing care was the same for patients in all circumstances (Osman, Ninnoni, & Anim, 2021). Concerns about raising the standard of nursing care resulted from the necessity to create a body of knowledge for nursing to fulfill its objective of being a true profession (Osman, Ninnoni, & Anim, 2021). To meet some of these concerns, the nursing process was developed from the deliberative nursing process theory by Ida Orlando in 1961 (Osman, Ninnoni, & Anim, 2021). The nursing process has then been in use since 1967 though Lydia Hall introduced it as a concept in 1955 to a group of nurses in New Jersey (Ardahan et al, 2019).

The nursing process has gone through multiple upgrades; initially, it was a concept of four steps then it evolved into five steps after the North American Nursing Diagnoses Association (NANDA) standardized nursing diagnoses in 1982 (Mousavinasa, et al. 2020). This standardization made it easier for educators to teach students how to assess and diagnose patient needs systematically (Mousavinasa, et al. 2020). The nursing process as a fundamental framework is used by nurses in all health care settings and addresses the needs of patients in an orderly manner (Mohammed, Wessam, Asmaa & Bahia, 2021). It is used to direct nursing activities through five steps: assessment, nursing diagnoses, planning, implementation, and evaluation (Mohammed, Wessam, Asmaa & Bahia, 2021). Each step plays a unique role in the provision of quality care and reflects the advancements in nursing. As a measure to improve the quality of care, the nursing process was included in the student's curriculum (Uganda Ministry of Education and Sports, 2018). This educational initiative aimed to equip future nurses with a structured and systematic approach to patient care, fostering critical thinking and enhancing their clinical decision-making abilities.

Integrating the nursing process into the students' education, they learn to assess patients comprehensively, identify the unique health care needs, and develop tailored care plans (Lofgren, Walivaara, Stromback, & Lindberg, 2023). This not only empowers students to deliver more effective, and patient centered care but also ensures that they are well prepared to meet the evolving demands of modern healthcare. As these students graduate and enter the workforce, they carry with them not only the knowledge and skills gained from their nursing education but also a commitment to following the established framework of the nursing process to continuously advance the standards of nursing practice. A critical step in ensuring that the provision of health care remains patient-centered and evidence-based is the integration of the

nursing process into the scope of practice (Uganda Nurses and Midwives Council, 2022). It is a framework that advances as a nurse progresses through the various stages of nursing school and practice.

Every type of nursing program has a different level of practice, reflecting the progression to more advanced levels of knowledge, skills, and responsibilities (UNMC, 2022). The emphasis in programs for certificate nurses is on the foundational steps. Students learn to conduct simple assessments and deliver basic care within their constrained scope by taking and recording patients' observations. They interpret data and take appropriate action if data deviates from normal ranges. Then, the diploma nurse takes patient's history, conducts a physical examination, prioritize nursing care needs for patients, develops, implements, and evaluates an individualised nursing care plan, and accurately documents patient progress to facilitate continuity of care.

In Uganda, diploma nursing extension students who are moving from certificate level of nursing practice upgrading their study, the scope of practice requires that they should apply the nursing process during patient care (UNMC, 2022). However, the students' ability to use the nursing process to care for patients is not fully known. One way to study the successful utilisation of the nursing process by the students is to look at the self-efficacy which is the confidence nurses and nursing students have to use the nursing process and the learning processes they used to attain it.

Self-efficacy is a concept rooted in psychology that pertains to an individual's belief in their ability to successfully accomplish specific tasks or achieve particular goals (Bandura, 1997). It represents a person's confidence in their capabilities to perform in various situations (Albagawi, Mahmoud, Alotaibi, Albougami, Fouad & Abdalkarem., et al., 2019). This belief isn't fixed; it can change in a variety of settings and contexts, from work and personal life to

academics and sports. Self-efficacy is closely linked to one's perception of his or her own competence (Pitre, Funmilayo & Kumardhas, 2022). High self-efficacy individuals are more likely to set goals, overcome obstacles, and eventually succeed. This belief in individual capabilities can be influenced by past experiences, and social support, for example, a student may have high self-efficacy in practice due to prior success in applying skills or from effective teaching methods.

Self-efficacy is a key component of an individual's thinking that influences their motivation and behavior (Clark & Lippe, 2022). It affects people's decisions as well as the amount of work they put into their pursuits. A person's behavior and emotional health are greatly influenced by their level of self-efficacy, since those who have a high level of self-efficacy are more likely to accept challenges, manage stress, and persevere in the face of failure (Clark & Lippe, 2022; Akgül-Gündogdu & Selcuk-Tosun, 2021). Low self-efficacy on the other hand might result in self-doubt, a fear of failing and a tendency to shy away from tasks (Akgül-Gündogdu & Selcuk-Tosun, 2021). Self-efficacy can be nurtured and developed by setting achievable goals, seeking support from mentors and peers, and gradually expanding one's comfort zone. Individuals can enhance their self-efficacy in various areas of life and positive reinforcement through successful experiences can further boost one's belief in their capabilities (Lugo et al. 2021).

As nursing education continues to evolve, incorporating these advancements enhances students' abilities and prepares them for successful nursing practice. If the students upgrading from certificate to diploma level demonstrate success, then those completing the extension program in Uganda should demonstrate self-efficacy and be able to describe the processes that helped them to attain the self-efficacy. There is a need to understand whether nursing students

have changed their level of practice by fully using the nursing process to care for patients. If the areas of concern around the nursing process are not determined, it is likely that students will not be able to use it in practice which affects the quality of patient care. This study, therefore, will seek to determine diploma nursing extension students' self-efficacy to use the nursing process to care for patients in Central Uganda.

Statement of the Problem

To prepare a professional nursing workforce that will be ready and able to meet health needs of individuals and families with high quality and competent care, Uganda is committed to improving the standards of nursing care by encouraging the advancement of nursing through upgrading. Upgrading from certificate to diploma is one of the common programs, with approximately 45 schools of nursing offering diploma training. According to the 2023 UNMEB newsletter, it is reported that 46,618 students completed their certificate level expected to upgrade their educational career. The nursing process as a guiding framework for nursing practice has been established in the Scope of Practice in Uganda. It includes assessment of patients, formulating nursing diagnoses, planning, implementation, and evaluation of the effectiveness of care.

According to the scope of practice by Uganda nurses and midwives council, the diploma nurse should be able to implement the nursing process at a higher level than that of the certificate nurse. Certificate nursing students who advance their education to diploma level should be able to demonstrate self-efficacy in their use of the nursing process to provide quality nursing care. It is important to know if their further studies resulted in the development of self-efficacy to fully use the nursing process to care for patients. The purpose of this study, therefore, is to determine

the self-efficacy of finalist diploma nursing extension students to use the nursing process to care for patients in central Uganda.

Purpose of the Study

The purpose of the study is to determine finalist diploma nursing extension students' self-efficacy to use the nursing process to care for patients in central Uganda.

Research Question

What is the self-efficacy of finalist diploma nursing extension students to use the nursing process to care for patients in central Uganda?

Objectives

To identify finalist diploma nursing extension students' reported level of self-efficacy to use the nursing process to care for patients at a school of nursing in central Uganda.

To describe the self-efficacy learning processes reported by finalist diploma nursing extension students that influenced their use of the nursing process to care for patients at a school of nursing in central Uganda.

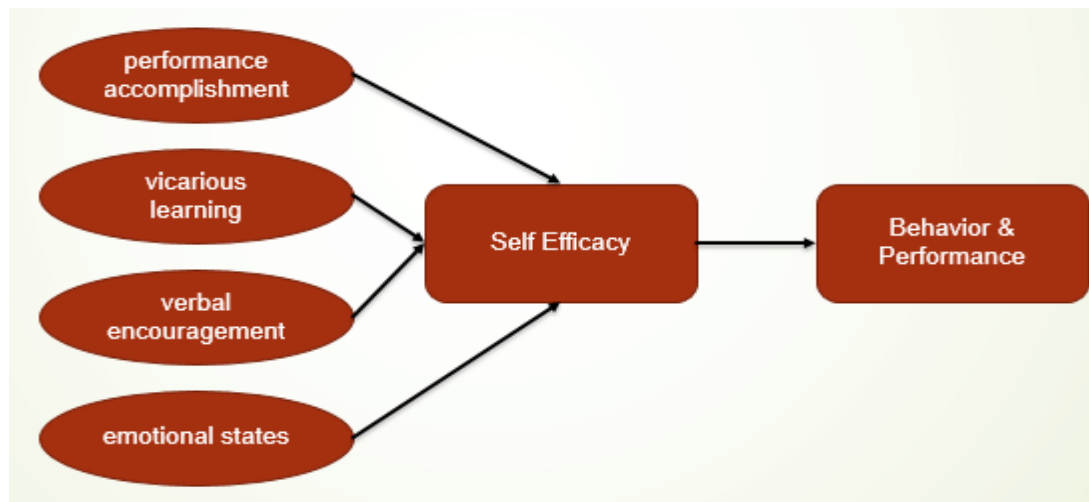
Significance of the Problem

Nurse educators may discover if the extension students have changed their level of practice of the nursing process as a result of their upgrading. The study may help to discover the strengths and weaknesses that this level of students have to design new learning experiences. The new learning experiences if designed may help to support nursing educators during instruction by developing strategies that can lead to increased self-efficacy among students. Additionally, the study may help nurse educators to become aware of the learning processes that contributed to students' current sense of self-efficacy to strengthen their use and identify more strategies that can be used to raise the levels of self-efficacy among nursing students.

Theoretical Framework

Bandura's (1977) theory of self-efficacy served as the foundation of my study. Bandura, a Canadian American psychologist, and a Stanford University professor derived the Self-efficacy Theory as a subjective assessment of how a person thinks and can therefore handle specific acts in hypothetical situations. According to his theory, emotional, cognitive, behavioral, and social factors constantly interact with one another to explain the human experience. According to Bandura, self-efficacy is a key idea in positive psychology and a necessary condition for behavioural change. It promotes people's beliefs about their capacities to produce designated levels of performance.

Figure 1



FigureError! No text of specified style in document.-1:Components of Self-Efficacy (Bandura, 1995)

Self-efficacy.

Self-efficacy was identified by social cognitive theorists as one of the primary motivating factors that students use to decide whether to engage in a behavior or not. Self-efficacy, according to Bandura (1997) is “a belief in one's capacity to arrange and carry out the courses of action required to manage tasks”. Self-efficacy is frequently associated with academic settings,

but Bandura's work expanded this concept to encompass psychomotor task performance as well. Bandura demonstrated that when students are given a task, regardless of whether they are making calculations or doing a head-to-toe patient assessment, if they have strong self-efficacy or confidence in their abilities, they will put out their best effort and persevere through failure.

Processes Supporting Self-Efficacy.

According to Bandura (1997), there are four main processes that help to support self-efficacy namely: performance accomplishment, vicarious experiences, verbal persuasion, and physiological arousal (emotional states). Each of these were explained as follows:

Performance Accomplishment.

Bandura (1997) described performance accomplishment as one's previous experiences in accomplishing similar tasks or activities. According to his theory, people are more likely to feel competent and confident when completing similar tasks in the present if they have completed them in the past. Additionally, he claimed that prior failures at tasks had a negative effect on current task performance, particularly if those failures occurred before a sense of efficacy was firmly formed.

Vicarious Experiences.

Bandura (1997) stated that individuals not only learn from their personal experiences, but they also learn from experiences of other individuals by observing how things work out. He claimed that people gain vicarious experiences by witnessing the experiences of others in like circumstances. Bandura (1997) asserts that this is a result of an individual's role models, including peers, staff, and instructors. People are more likely to acquire good self-beliefs if these role models are more positive.

Verbal persuasion.

Bandura (1997) referred to how encouragement and discouragement from others influenced the individual's self-efficacy regarding specific situations. In this element, Bandura postulated that feedback and compliments were critical in building self-efficacy. While positive verbal feedback could reinforce an individual's confidence levels, negative feedback could lower his or her confidence. He also suggested that the more trustworthy the source of verbal persuasion is, the more impact it would have on one's level of self-efficacy.

The Physiologic (emotional) States.

Bandura (1997) explained that physiologic state represents an individual's well-being, a condition which can influence their feelings about their own capabilities. Bandura (1997) postulated that individuals only feel good about themselves when they are mentally, physically, and psychologically healthy and positive. He summed it thus: "People who had a high sense of efficacy were likely to view their state of affective arousal as an energising facilitator of performance, whereas those who are beset by self-doubt regarded their arousal as a debilitator." (Bandura, 1986, p.394). Cowie and Cornelius (2003) described emotional states as terms that relate to physical and bodily states corresponding roughly to arousal where some have a significant cognitive component and others have an affective or behavioral component. Emotional states are attributed to the complexity that emotional words carry (Cowie & Cornelius, 2003). Attitude in this sense is a state attributed to a person's judgment of his or her appraisal of a situation.

Operationalizing Theoretical Framework.

Bandura's self-efficacy theory is used to inform my study on nursing students reported self-efficacy to use the nursing process to care for patients. Secondly, it is used to determine the learning processes that contributed to the students' development of their efficacy.

Self-efficacy in using the Nursing Process.

For the purpose of this study, self-efficacy is the confidence that nursing students have to fully use the nursing process to care for patients. Reported self-efficacy will be determined by students' success in feeling confident to perform patient assessment, formulate appropriate nursing diagnoses, identify appropriate interventions and evaluate the care provided.

Self-Efficacy Processes.

Self-efficacy is developed typically through a combination of gaining relevant experience, receiving positive feedback and reinforcement for one's efforts for the student to feel confident that he or she can fully use the nursing process. There are four processes identified to support self-efficacy which may contribute to developing a sense of efficacy to use the nursing process.

Performance Accomplishment.

In this study, performance accomplishment is attributed to the students' previous experiences in the use of the nursing process. The opportunities students have to use the nursing process will be described as positive or negative experiences that contribute to their learning. If they had positive experiences, did they feel confident to use the nursing process? If the experience was negative, how did they feel it affected their confidence in the use of the nursing process?

Vicarious Experiences.

In this study, vicarious experiences are described by what students will learn from watching peers, faculty, and clinical staff when using the nursing process in patient care. Students spend time in class or the skills lab and then go to the clinical setting (such as the hospital). Students at a clinical site observe the nursing staff or a faculty member as they provide care for one or more patients while applying the nursing process. With such an experience, it may positively or negatively impact students' ability to apply the nursing process. Therefore, students describe the learning obtained from watching faculty, staff, or peers apply the nursing process as they are caring for patients.

Verbal Persuasion.

Verbal persuasion is attributed to the kind of feedback students receive from faculty, staff and peers that impact their learning around the use of the nursing process. When people receive positive, supportive, and convincing messages from others, it can boost their self-efficacy. An example is when a mentor offers words of encouragement and expresses confidence in a person's capabilities, it can enhance their belief in their own skills and increase their motivation to achieve their goals. Conversely, negative or discouraging verbal persuasion can undermine self-efficacy.

Physiological or Emotional states.

In this study, emotional states refer to whether nursing students felt emotional when trying to use the nursing process or do they feel comfortable, fearful and or anxious about using the nursing process to care for patients? Emotional states also refers to whether the faculty, staff

or peers create an environment where students feel safe to use the nursing process. They also describe states that hinder them from using the nursing process.

Variables in this Study

The independent variables are demographic factors which included: Age, Gender, Years of work experience, Place of nursing practice experience, specialized training in the nursing process. The dependent variables include self-efficacy in using the nursing process.

Additional Operational Definitions

Nursing process is an organized systematic method of performing patient assessment through history taking, physical examination then identifying potential alterations in health and formulate appropriate nursing diagnoses, planning care, implementation, and evaluation of care.

Finalist Diploma Nursing Extension Students are a group of students in the nursing program extending their study for one year and half moving from certificate level of education to diploma in their last semester of the training program.

Summary

Chapter one presented an introduction to the study, the background of the problem, states the research question and specific objectives. The significance of the study to nursing education and faculty was outlined. The chapter further described the theoretical framework underpinning the study. Chapter two will present the literature review in relation to the study objectives. Chapter three will describe the methodology.

Chapter 2: Review of Literature

Introduction

Chapter two will describe literature related to advancement in nursing to higher levels of education including traditional levels in the past. Literature explains expanding opportunities for nurses' education from certificate to PhD and how higher education in nursing improved the quality of nursing care. This advancement included the critical element of utilizing the nursing process in patient care. Additionally, literature on how the use of the nursing process resulted in quality nursing care is discussed and the difficulties on the adoption of the nursing process included. Further explanation is given concerning the use of self-efficacy in nursing studies to measure confidence in various aspects of patient care. Finally, the chapter explores nursing students' self-efficacy to use the nursing process in patient care.

Globally the Nursing Profession is Being Advanced to Higher Levels of Education

Globally, the profession of nursing is being advanced to higher levels of education (National Academies of Sciences, Engineering, and Medicine, 2021). Literature has provided evidence that nurses with higher educational levels are associated with better outcomes, improved critical thinking skills, and enhanced leadership abilities (Koy et al., 2023). This investment in education ultimately benefits both patients and the health care system by producing highly skilled and adaptable nurses who can meet the challenges of modern health care (National Academies of Sciences, Engineering, and Medicine, 2021). In the past decades, those who provided nursing care did it as volunteers and worked under primitive conditions (Cherry & Jacob, 2017). Nursing in ancient civilizations like Egypt, Greece and Rome was often performed by family members or slaves (Elhabashy & Abdelgawad, 2019).

In Europe, religious institutions played a significant role in providing care through monastic orders (Jamroziak, 2021). At the end of the American Civil war in 1865, there was proof of the need of more nurses to be formally trained and the need for the number of training schools to increase (Klainberg, Holzemer, Leonard, & Arnold, 1998). Florence Nightingale's work during the Crimean War laid the foundation for modern nursing and emphasised the importance of education and sanitation (Cherry & Jacob, 2017; Mathews, Whitehead, Ward & Kyna, 2020). In the 19th century, the development of formal nursing education began, with the establishment of the first nursing schools in Europe and North America (Silva & Ferreira, 2021). In the 20th century, the nursing profession continued to evolve, with the introduction of registered nursing programs and diversification of nursing roles such as nurse practitioners and nurse anesthetists (Lewis, 2022). Nursing organizations were founded to advocate for the profession and set standards of practice (Silva & Ferreira, 2021).

During the colonial period, nursing in many African countries was heavily influenced by European colonial powers (Dolamo & Olubiyi, 2020). Colonial administrations established nursing schools to train local personnel to provide basic health care services in hospitals and clinics (Dolamo & Olubiyi, 2020). Early 20th century, nursing education in Africa began to expand with the establishment of more nursing schools (Nyoni, 2020). These schools were often affiliated with mission hospitals and were primarily aimed at training nurses to serve within their communities. After gaining independence, many African countries sought to strengthen their health care systems, including nursing education. In the later half of the 20th century and into the 21st century, there was a greater emphasis on professionalizing nursing in Africa. National nursing councils and regulatory bodies were established to set standards for education and practice. In response to health care needs and challenges, African countries have diversified

nursing roles, including the introduction of midwifery programs, community health nursing and specialized nursing roles (Nyoni, 2020).

Early nursing education in Uganda traces its origin to early 20th century when mission hospitals and colonial authorities established nursing training programs (Nursing and Midwifery Council of Uganda, 2022). After Uganda gained independence in 1962, there was a concerted effort to develop nursing education and create more standardized and regulated systems. Enrolled nursing programs were one of the key components of this initiative. The government of Uganda established institutions like Mulago School of Nursing to train nurses.

Uganda's nursing profession has evolved over the years, with greater emphasis on formal education and training (Ministry of Health Uganda, 2019). The country has expanded nursing programs to include various levels such as the diploma nursing which began to gain prominence in the late 1960s and early 1970s. During this period, various nursing training institutions were established to provide diploma level nursing education. In recent years, there has been a push for more advanced nursing education and Uganda has seen an increase in the number of nursing schools and universities offering nursing programs (Uganda Nurses and Midwives Council, 2022). Bachelor of Science (BSN) in nursing began in the late 1990s and early 2000s; the introduction of Master of Science in nursing followed the establishment of BSN programs. In the 21st century, nursing has become highly specialized; practical nurses, registered nurses and advanced practice nurses are now crucial members of the health care teams with expanded roles in patient care (UNMC, 2024).

The roles and educational requirements for nurses vary globally, but there is a growing emphasis on standardized education and practice to ensure quality care (Baker, Cary & Bento, 2021). The first level is the certified nursing assistant who provides basic patient care, such as

bathing, feeding, and taking vital signs. Their scope is limited to assisting patients with activities of daily living. The second level includes practical nurses, but they work under the supervision of registered nurses. The third level of nursing (Registered nursing), assesses patients, develop care plans, administer treatments, and educate patients and families (Campbell, Layne & Scott, 2021). They have a broader scope, including leadership in care coordination and decision making. The advanced practice registered nurse represents the highest level of nursing. These are highly trained and often specialize in areas such as nurse practitioners, nurse anesthetists, nurse midwives or clinical nurse specialists. Their scope includes diagnosing, prescribing medication, and managing complex patient cases (Mathews, Whitehead, Ward, Kyner & Crowder, 2020).

In Uganda, the first level is the certificate nurse who undertakes and records patients' observations, interprets data and takes appropriate action if data deviates from normal ranges (UNMC, 2022). The second level which is the diploma nurse, take patient's history, conduct a physical examination, prioritize nursing care needs for patients, develop, implement, and evaluate an individualized nursing care plan and accurately document patient progress to facilitate continuity of care (UNMC, 2022). The third level, which is the Bachelor of Nursing, provides more comprehensive assessment of patients and use critical thinking skills to evaluate nursing care and make necessary changes in the plan of care. The fourth level is the master's degree in nursing and fifth is the doctoral degree in nursing (PhD); these hold more of administrative and leadership roles in nursing.

Progression to higher levels is a contributing factor for improving on the way nursing is practiced (Cao et al. 2023). Results from a study done in Oman, Hong Kong, and China to expand the role of nurses in care delivery by developing advanced practice, pointed to advanced nursing practice as a successful strategy to provide better health care services (Hassmiller &

Pulcini, 2020). Nurses can increase their effectiveness as members of healthcare teams and speed up change by learning more about quality competencies through advancement in nursing education and taking part in improvement initiatives (Tracy, O' Grady & Phillips, 2023). The nursing profession's enhancement and advancement are desirable goals (Isik & Jallad, 2019). Nurses can contribute to these goals by practicing at the fullest extent of their education and training which requires them to pursue higher levels (Isik & Jallad, 2019).

There is a notable trend towards advancing the nursing profession to higher levels of education. This evolution is marked by an increased emphasis on academic qualifications, with many countries promoting and implementing initiatives to elevate the educational standards for nursing professionals. The move towards higher education in nursing is driven by a recognition of the complex health care system and the need for nurses to possess advanced knowledge and skills. The global movement towards higher levels of education for nurses signifies a commitment to enhancing the overall quality of health care delivery and acknowledging the valuable contributions that well educated nursing professionals can make to the health and well-being of individuals and communities worldwide.

Globally the Nursing Process is the Standard of Quality Care for the Profession of Nursing and Has Been Used in Practice for Decades

Globally and in Uganda, the nursing process is the standard of quality care for the profession of nursing and has been used in practice for decades. Using the nursing process results in recording and reviewing nursing care activities in a comprehensive manner (Mutshatshi & Mothiba, 2020). This allows the nurse to communicate with patients positively, with sound knowledge, and apply a systematic approach to care that enhances quality. The nursing process contributes to quality care by providing a structured framework for nurses to assess, diagnose,

plan, implement and evaluate patient care (Carpenito, 2013). Thoroughly assessing a patient's health status allows nurses to identify the needs, potential risks, and strengths (Mutshatshi & Mothiba, 2020). Thus, comprehensive understanding of the patient's status forms the foundation for effective care planning (Mutshatshi & Mothiba, 2020).

The nursing diagnosis helps to identify actual or potential health problems (Carpenito, 2013). This step enables nurses to prioritize and individualize care based on the specific needs of each patient (Carpenito, 2013). Developing a care plan involves setting goals and creating strategies to address the identified issues (Carpenito, 2013). This step ensures that care is tailored to meet the patient's unique requirements, promoting efficiency and effectiveness (Carpenito, 2013). Implementation involves the actual delivery of care where the nursing process ensures that interventions are evidence based, patient centered and consistent with the care plan. The evaluation step ensures regular assessment of the patient's response to interventions (Mousavinasa, Kalhori, Zarifsanaiey, Rakhshan, & Ghazisaeedi, 2020). Regularly assessing the patient's response to interventions allows nurses to determine the effectiveness of the care provided. If goals are not met, adjustments can be made to optimize outcomes. In essence, the nursing process is essential for improving patient outcomes and enhancing care quality, as it enables nurses to make well-informed clinical decisions (Yilak et al., 2022). Additionally, the study also highlights the need for adequate institutional support and continuing education to empower nurses with the skills and confidence necessary for consistently applying the nursing process in patient care.

Globally, studies report that the nursing process is poorly used in patient care, despite the professional standards and high-quality care it seeks to maintain. A study on the systematization of care and nursing process by Caveião, Oliveira, Schnitzler, Waldrigues and Silva (2020) in

Curitiba, Paraná State, Brazil, 109 participants were surveyed about their knowledge of the nursing process. Of these, 45 (41.3%) stated that they lacked the necessary knowledge to elaborate on the nursing process. Among the nursing process steps, students found the following very challenging to develop; nursing assessment (13.8%), nursing history (18.5%), nursing diagnosis (33.9%), nursing prescription (46.2%), and nursing implementation (43.1%). Based on the study findings, it can be concluded that there is both recognition of the importance of the nursing process and a perceived knowledge gap, with certain steps presenting greater challenges to students.

According to a study on the challenges faced by Turkish students using Diagnoses in care management as part of the nursing process, 43.2% of them had trouble with the data collecting stage (Ardahan et al., 2019). This step is crucial for gathering relevant information necessary for developing the correct nursing diagnosis. Therefore, the challenges faced by students in this stage of the nursing process had a direct impact on their ability to gather pertinent information for forming accurate nursing diagnoses, subsequently affecting the quality of care they provided to patients. Maniago, et al. (2021) conducted a study at Majmaah University, Kingdom of Saudi Arabia. The research focused on nursing students and revealed that patient assessments have historically posed challenges for the nursing profession (Maniago, et al.,2021). Currently, nursing students face anxiety, doubt, and confusion, primarily stemming from the noticeable gap between theory-based learning and their practice experiences in clinical settings. Furthermore, findings from the study indicate that students exhibit fewer positive attitudes towards conducting patient assessments when working night shifts compared to the day shifts.

Another study conducted by Byermoen, et al. (2022) at the University of Southeast Norway focused on nursing students' development in using physical assessment during clinical

rotations. The findings of this study highlighted that students considered patient conversations to be an important component of their assessments, indicating a person-centered approach to care. However, language barriers were identified as a factor that influenced how students perceived patient assessments. These language barriers caused some students to overlook important factors during the assessment process (Byermoen, et al. 2022). Consequently, the data from this study suggested that students' beliefs about the importance of patient conversations, coupled with the impact of language barriers, had a detrimental effect on their ability to conduct thorough and effective patient assessment.

In an exploratory study carried out in Norway by Egilsdottir, Byermoen, Moen, and Eide (2019) on students' physical examination performance, the results indicated that most students did not utilize all the skills they had acquired. Instead, they tended to focus on assessing the symptoms and complaints of their patients. Additionally, students displayed varying levels of their competence in their completion of physical assessment reflecting their individual perceptions of what was essential to fulfil the assignment. This suggests a potential gap between the skills acquired and their practical application in the context of physical examinations.

In a descriptive study carried out in Macao, nursing students demonstrated the ability to conduct assessments specific to patients' conditions (Yuan, 2021). The students were able to effectively communicate with patients about pertinent information and precautions to be taken, students scored highly in conducting oxygen saturation, cardiac, and lung auscultation but poorly in assessments for vomiting and diarrhea (Yuan, 2021). The results of this descriptive study suggest that nursing students possess strong clinical assessment skills, particularly in areas related to oxygen saturation, cardiac health, and lung auscultation. However, there was a need for further improvement in their ability to conduct assessments related to vomiting and diarrhea.

This highlights the importance of targeted education and training in specific areas to ensure comprehensive patient care.

An integrative study conducted in Saudi Arabia about health assessment barriers, it was observed that nursing students' performance was negatively affected due to a lack of nursing role models and a disconnect between theoretical knowledge and practical application. This gap in performance was found to be closely associated with ineffective clinical teaching processes (Maniago, et al. 2021). Though the nursing process is used extensively in clinical practice, there isn't much study on how nursing students are taught about it (Tadzong-Awasum, & Dufashwenayesu, 2021). The use of the nursing process is a critical element of advancing education. It is therefore critical that graduates of nursing programs should be confident in their practice of the nursing process.

Nursing students who have advanced to higher levels of education should have confidence in using the nursing process to provide quality care to patients. Confidence in utilizing the nursing process is important for nursing students as they progress to higher levels of education and professional practice. Mastering this foundational framework equips nurses with the essential skills and critical thinking abilities necessary to deliver comprehensive and effective patient care across diverse healthcare settings (Korkut, Sahin, Ulker & Cidem, 2021). As students advance in their nursing education, cultivating proficiency in the nursing process empowers them to direct complex patient scenarios, make informed clinical decisions, and advocate for optimal patient outcomes with competence and compassion (Munangatire & Nambuli, 2022). Embracing the nursing process not only enhances the quality of care but also fosters a deeper understanding of the holistic nature of nursing practice, reinforcing the student's

role as a proficient and empathetic healthcare provider (Lofgren, Walivaara, Stromback & Lindberg,2023).

A study of nursing students' opinions and experiences using the nursing process at a university teaching hospital in Namibia was conducted by Munangatire and Nambuli (2022). Examining and characterizing nursing students' perceptions and usage of the nursing process was the aim of the study. According to the study's findings, despite the students' theoretical understanding of the nursing process, their clinical learning experience exposed a gap between theory and practice as well as a lack of encouragement for experiential learning. Finally, the students' experiences showed that some practical learning about the nursing process took place, depending on each student's effort or else students would become frustrated and unable to learn.

In another study, Kausar, Hussain, Afzal, and Gilani (2020) examined the challenges students face when completing physical assessments in Pakistan. Numerous factors were identified by the research findings. The idea that physical evaluation takes a lot of time was one of the contributing factors. Another problem was the belief among some students that a nurse's duties did not include conducting physical examinations. Physical assessment was further hampered by ward culture, technology, dependence on others, and a lack of control over patient care. According to the study's findings, boosting one's self-confidence is essential to accurately evaluate a patient's condition.

In order to better understand what nursing students learn during clinical education regarding the nursing process, Lofgren, Walivaara, Stromback, and Lindberg (2023) conducted a study with twelve nursing students from six universities in Sweden. The results showed that students found it challenging to meet a practice that aligned with their theoretical knowledge. They felt that they had not learnt enough about the model prior to clinical education and that the

learning environment was not prepared to apply the model during clinical education (Lofgren, Walivaara, Stromback & Lindberg, 2023). The study's participants believed that care plans enhanced learning by providing greater context for concepts; however, they also stated that this was not the case in the workplace and asked that current work models be adjusted to better accommodate their learning requirements. The statements made by the students that learning was task-oriented and that nursing was not emphasized suggest that there is a gap between theory and practice.

Evidence on the significance of the nursing process in global and Ugandan healthcare has been provided, emphasizing its role in providing comprehensive and quality patient care. The nursing process involves assessing, diagnosing, planning, implementing, and evaluating patient care, contributing to effective communication, evidence-based practice, and patient-centered care. However, despite its importance, studies globally, including those conducted in Brazil, Turkey, Saudi Arabia, Pakistan, Norway, and Macao, reveal challenges faced by nursing students in applying the nursing process. These challenges include knowledge gaps, difficulties in data collection, language barriers, varying perceptions of the importance of certain assessments, and a potential gap between acquired skills and their practical application.

Furthermore, a study conducted in Saudi Arabia by Maniago et al. (2021) shows that nursing students' performance in health assessment is negatively impacted by a lack of nursing role models and a gap between theoretical knowledge and practical application. The results emphasize the need for focused education, training, and enhanced clinical teaching procedures to guarantee the successful application of the nursing process and confidence in nursing practice. Nursing students who have progressed to higher education levels should feel comfortable using the nursing process to deliver high-quality patient care.

Self-Efficacy Has Been Used in Nursing Studies to Measure Confidence in Various Aspects of Nursing Care

The advancement of nursing students in their education and professional practice depends on their ability to use the nursing process with confidence. According to Korkut, Sahin, Ulker, and Cidem (2021), mastery gives nurses the essential abilities they need to provide patients with comprehensive care. However, research by Lofgren, Walivaara, Stromback, and Lindberg (2023) in Sweden and Munangatire & Nambuli (2022) in Namibia highlights gaps between theory and practical learning experiences and highlights difficulties in converting theoretical knowledge into clinical practice. Furthermore, the research conducted in Pakistan by Kausar, Hussain, Afzal, and Gilani (2020) highlights the challenges associated with conducting physical examinations and highlights the significance of self-efficacy in accurately determining patients' health state. These results highlight how nursing education must close the knowledge gap between theory and practice, giving students the abilities and self-efficacy they need to provide the best possible care for patients.

In nursing, self-efficacy has been used to measure confidence in a number of areas. Because it has a favorable effect on nursing experience and career growth, self-efficacy development is essential in the nursing field (Mohamed, 2019). Students' confidence in their ability to apply their knowledge and skills correctly is a prerequisite for skill competency. By promoting stress management, compatibility, self-control, and concentration, self-efficacy boosts nursing students' self-esteem and eventually results in successful performance (Lugo et al. 2021). Furthermore, nursing students' resilience is fostered by self-efficacy, which is the most significant predictor of professional identity and a determinant of career preferences (Kupcewicz et al. 2022).

Kim and Kyung (2019) state that nurse educators are in charge of educating students to become more effective. Students will put out their best effort in various circumstances if they have confidence in their ability. For both nurses and nursing students, self-efficacy is essential and nurses with low self-efficacy would not act on their patients' behalf (Kim & Kyung, 2019). According to a study by Sajidin, Azizah, Mugianti, and Martiningsih (2021), nursing students need to have high levels of self-efficacy in order to learn effectively, especially when participating in clinical practice, which is assisted by clinical instructors. For learning to be successful, considerable levels of freedom are also required.

According to Fertelli and Tuncay's (2020) research, nursing students' self-efficacy and their capacity to use the nursing process when providing patient care are positively correlated. Peer evaluation helps students gain confidence in their abilities while also reinforcing their knowledge of nursing diagnoses. This enhanced self-efficacy is crucial because it increases students' confidence in their capacity to use the nursing process effectively when providing patient care. Students who believe they can plan and execute interventions, analyze patient needs, and assess results—all major elements in the nursing process—are more likely to have greater levels of self-efficacy in this area. Therefore, encouraging self-efficacy through methods such as peer evaluation equips students to perform the nursing process competently and autonomously in clinical situations.

Self-efficacy, perceived academic accomplishment, and grade point average were found to be significantly correlated in a study conducted by Sajidin, Azizah, Mugianti, and Martiningsih (2021) with one hundred nursing students in Indonesia's East Java Province. According to the findings of another study on learning self-efficacy by Alosaimi (2021), students' performance on clinical skills was not significantly predicted by self-efficacy. Nursing

students' clinical skill performance was significantly predicted by demographic parameters such as age, gender, and academic status, but not by learning self-efficacy.

Albagawi, Mahmoud, Alotaibi, Albougami and Fouad et al. (2021) looked at the level of clinical competence, self-efficacy, and its relationship with students' demographic characteristics in 73 fourth year nursing undergraduates. The study's conclusions showed that fourth-year nursing students had a good degree of clinical competence overall. According to the students' self-evaluation, they appeared to have a lot of trust at the time of graduation, in terms of their degree of proficiency with a strong sense of self-efficacy. Additionally, another study by Pitre, Funmilayo and Kumardhas (2022) on self-efficacy among nursing students at RAK Medical and Health Sciences University, United Arab Emirates, the proportion of first-year students who demonstrated a high level of self-efficacy was low (45.26%) compared to second year (62.50%), fourth year (60%) and third year (58.92%) students. The study suggested that as students advance through their course of study, they are getting the right opportunities and advice to strengthen their confidence and belief in their own skills.

According to a study by Kim and Kyung (2019), which involved 205 undergraduate nursing students, the largest influences on nursing students' clinical performance were their problem-solving skills and sense of self-efficacy. The way that others appraised, managed, and utilized their emotions had an indirect effect on clinical performance. Self-efficacy had a direct effect on clinical performance. Clinical effectiveness increases and patients received quality nursing care more efficiently when self-efficacy increases. According to the emotional evaluation of others, self-efficacy was directly impacted by the variables of emotion evaluation and management.

A study on nursing students' concerns about their clinical experience and self-efficacy was carried out by Georgea, DeCristofarob, and Murphy (2020). Students were asked to score their level of confidence in their physical assessment skills in both the pre- and post-surveys. In the pre-survey, students' mean confidence in their capacity to do physical evaluations was 7.49 (n = 112). According to the same study, clinical experiences gave students more confidence in their ability to demonstrate clinical skills and behaviors and gave teachers the opportunity to create lesson plans that would support this growth. Students' self-efficacy may be improved by clinical experiences that wrap up the course and involve both preclinical and post clinical activities.

Only a few studies have looked at the nursing process and self-efficacy as independent variables. In a study by Khajehpoor, et al. (2018), a total of 24, fifth semester nursing students were examined to assess the impact of clinical education based on self-efficacy to use the nursing process. The study demonstrated that students' self-efficacy rises as a result of nursing process education. The difference in mean self-efficacy scores in the intervention group was substantial, according to the results. Thus, students' self-efficacy is raised because of nursing process education (Khajehpoor, et al. 2018).

Akgul-Gundogdu and Selcuk-Tosun (2021) in their study, assessed nursing students' levels of self-efficacy and ability to think creatively as well as to identify the factors influencing each of these variables and their relationships. The study provided evidence that a key aspect influencing the delivery of optimal nursing care is subjective information about the patients and poor communication skills by the nursing students (Akgul-Gundogdu & Selcuk-Tosun, 2021). Assessing self-efficacy is important in determining a nurse's confidence in effectively applying the nursing process. This evaluation, rooted in Bandura's social cognitive theory, recognizes the

interconnected influences of behavior, individual factors, and the environment. It provides a comprehensive understanding of a nurse's readiness to navigate and excel in the details of patient care. Therefore, this study will determine finalist diploma nursing extension students' self-efficacy to use the nursing process to care for patients in central Uganda.

Little is known about addressing self-efficacy in implementing the nursing process, especially with finalist diploma nursing extension students, despite the fact that several studies have looked at nursing students' knowledge, attitudes, and difficulties in doing so. There is a knowledge gap about how extension students, gain confidence in applying the nursing process because the majority of previous research has focused on baccalaureate students. There isn't much information available about how this group in Uganda views their ability to effectively plan, organize, carry out, and assess patients using the nursing process.

Summary

This chapter described literature related to the advancement of nursing to higher levels of education, use of the nursing process in practice as the standard of care for the nursing profession, how nurses advancing to higher levels of education should have confidence to use the nursing process to provide quality care to patients and use of self-efficacy in nursing to measure confidence in various aspects. Chapter three will describe the methodology of the study where a detailed description of the study design, setting, population and data collection procedures were done.

Chapter 3: Methodology

Chapter three outlines the methodology to achieve the study's objectives, describing the research design, study setting, population, variables, and sampling plan, including the sample size and criteria for inclusion and exclusion. It also addresses the research instruments, data collection procedures, validity, reliability, and ethical considerations,

Study Design

A cross-sectional descriptive study design using a quantitative approach was applied to determine finalist diploma nursing extension students' self-efficacy to use the nursing process to care for patients. A cross-sectional research design involves identifying a population at a specific period, assessing a variety of factors on an individual basis, and measuring the desired outcome all at once (Polit & Beck, 2012). The study is suitable in situations that involve individual behavior or routines, beliefs, or ideas that could be used to explain population behavior or events about the use of the nursing process in patient care.

Population

The study population consisted of all finalist diploma nursing extension students in central Uganda expected to use the nursing process. The target population for this study consisted of all diploma nursing students in Uganda who are in their final semester of training and were upgrading from the certificate level of nursing. These students represented a group of the nursing workforce transitioning from basic nursing qualifications to a more advanced professional level. Their experiences, knowledge, and preparedness at this stage of their education are vital for understanding the effectiveness of the nursing education system in Uganda, particularly in equipping them with the skills necessary for patients' case management.

Setting

The setting of the accessible population was in a private not for profit institution located in Central Uganda. It was purposefully selected because it is an educational institution within a designated regional referral teaching hospital with a 300 bed capacity where students can access patient care practices easily and are able to apply the nursing process effectively. Additionally, it has specialized departments that expose students to different patient conditions to support diverse learning of various case scenarios. With the institution's mission to provide quality, holistic, patient centered, evidence-based health care services, it is important that a high standard of nursing care is practiced and taught to students. Additionally, the institution was chosen because of its commitment to quality education and patient-centered training. Its mission emphasizes the delivery of holistic, evidence-based, and compassionate health care, making it an ideal site to assess how well nursing students are prepared to apply the nursing process in line with national and global standards. The institution enrolls approximately 100 diploma nursing extension students, with an average of 50 students in the finalist class.

Sample

The sample for this study was drawn from diploma nursing students in the final semester of training specifically those upgrading from certificate level. Using a consecutive sampling, students were selected from the nursing educational institution chosen as the setting. These students have a foundational understanding of the nursing process which allows them to provide relevant responses in the study. Studying the population provides an insight into the effectiveness of the upgrading program, preparedness of the work force and any gaps in the knowledge that might exist.

Sampling Plan.

Consecutive sampling framework was used in the study. Unlike random sampling methods, which require larger and more dispersed populations to be effective, consecutive sampling allowed the researcher to include all eligible students who were available during the study period, thereby maximizing participation and minimizing the risk of excluding key perspectives. This approach was particularly appropriate given the relatively small size of the study population and the logistical constraints of conducting research within a single institution.

The use of consecutive sampling also reduced the risk of selection bias by offering a practical way of selecting all participants at once and allowing every participant's voice to be heard to obtain information that is more representative of the participants' characteristics and behaviors (Polit & Beck, 2012). This method ensures that every student meeting the inclusion criteria during the study timeframe was invited to participate. In this way, it captured a comprehensive picture of the accessible population and allowed each participant's voice to contribute to the findings.

Sample Size.

The sample size was obtained by applying Krejcie and Morgan, (1970.) formula.

Formula for determining size.

$$S = \frac{X^2 NP (1-P) + d^2 (N-1) + X^2 P (1-P)}{d^2}$$

S = required sample size

X² = the table value of chi-square for 1 degree of freedom at the desired confidence level

(3.841).

N = the population size

P = the population proportion (assumed to be 0.5 since this would provide the maximum sample).

d = the degree of accuracy expressed as a proportion (0.05).

$$S = \frac{3.841 * 45 * 0.5 (1-0.5) + (0.05)^2 (45-1) + 3.841 (1-0.5)}{(0.05)^2}$$

$$S = 43.21 + 0.11 + 1.9205$$

$$S = 45.2405 \quad S = 45$$

Inclusion Criteria.

All male and female finalist diploma nursing extension students were invited for the study. There were no exclusion criteria.

Description of the Tool

The tool was self-developed using information obtained from literature and Bandura's Theoretical Framework. The tool seeks to determine diploma nursing students' self-efficacy to use the nursing process in patient care. The tool was designed to measure nursing students' reported level of self-efficacy to use the nursing process, and which self-efficacy processes influenced their learning of the nursing process. The questionnaire is comprised of three sections.

Item analysis.

The tool had 54 questions within the three sections. The first section focused on demographics. The second section assessed students' reported levels of self-efficacy in applying the five phases of the nursing process with items guided by Bandura's self-efficacy theory. The third section assessed reported self-efficacy learning processes that influenced students' learning of the nursing process generated from Bandura's self-efficacy theory.

Demographics.

There were five items in this section which aimed to gather background information from the participants, that is participants' age in years, gender, the year they completed their certificate course, their place of nursing practice experience, and any special training they received in the nursing process after school.

Level of self-efficacy with using the nursing process.

This section had 15 items (6-21) around the nursing process: 5 for assessment, 2 for diagnosis, 3 for planning, 4 for implementation, and 1 for evaluation. Literature has a variety of ways for measuring levels of self-efficacy. Some authors use a self-efficacy scale from zero to 4, 5, or ten etc., others use a variety of questions and ask for a response that ranges from strongly disagree to strongly agree. In this study the researcher chose to use a scale of 1 to 5 with 1 meaning low self-efficacy and 5 meaning high self-efficacy. The participants chose from numbers 1 to 5, a number that will represent their level of self-efficacy.

For each participant, the overall mean and standard deviation was calculated to determine their level of self-efficacy in using the nursing process. The level of self-efficacy for each participant was then grouped to demonstrate the percentage of participants in each of the 5 categories of self-efficacy.

Reported self-efficacy processes that influenced students' learning of the nursing process.

This section consisted of 34 statements (22-56) under four main categories of Bandura's framework: 5 for performance accomplishment, 13 for vicarious experience, 11 for verbal persuasion and 5 for physiologic or affective source. These are Likert scale statements with 0 being (never), 1 (rarely), and 2 (sometimes), 3 (often), and 4 (always). The mean and standard deviation for all four categories of Bandura's framework as well as each individual category was calculated to determine the overall and specific influences of the learning processes on students' use of the nursing process.

Categories for the mean were interpreted by the recommendations from Mahfouz, Almutairi & Eldesouky (2019) with their method of calculation. Categories of the means were interpreted as follows 3.26-4 (high influence) 2.6-3.25 (moderate influence), and 1.75-2.5 (low influence).

Pilot Plan.

After a thorough review of the tool from the content experts and approval by the research supervisors, the tool was evaluated via a pilot study of 10 students in one of the nursing institutions in Central Uganda with similar characteristics to participants in my study. During the pilot study, I explained that I wanted them to fill in the tool to get feedback on clarity, readability, and length of time for filling in the questionnaire. I asked the participants to tell whether the questionnaire met those criteria. After obtaining feedback from the group and reading the results, the researcher then adjusted the tool accordingly and submitted it to the supervisor to approve the changes made. I entered the pilot data into the SPSS software as another way to test that the tool was ready for use.

Validity.

The content for the questionnaire was developed from detailed analysis of current literature followed by a review from 3 experts who were knowledgeable on the nursing process. Each section was analyzed for its direct relation to the construct on issues concerning relevance, comprehensiveness and readability (Polit & Beck, 2012). Questions were confirmed to be appropriately distributed, and minor adjustments were made after approval from the supervisor to enhance each item clarity and difficulty balance.

Reliability.

The tool was pretested on a sample of 10 participants in the pilot study before its use during the study. The data was used to determine the Cronbach alpha (α). According to the pilot data from the 10 participants, the Cronbach's alpha had a value of 0.813. This showed good reliability and internal consistency of the questionnaire that was designed. An alpha value of 0.8 and above can confirm that the data and research to be conducted using the questionnaire has satisfactory reliability (Polit & Beck, 2017).

Data Collection

Once permission was granted, I began data collection. Participants were invited to their classroom all at once through their class leader during an appropriate time in between lectures and other school programs. The scope and objectives of the study were explained in words that were meaningful and reassuring to them. After a thorough explanation, being their teacher, I explained to them that she had a trained research assistant who issued the consent forms and the questionnaires. Participants were informed that completion of the consent was voluntary and refusal to participate was not punishable.

I then left the room, and the research assistant asked those willing to be in the study to remain. Participants were given an opportunity to read and understand the information and instructions on the form. When they agreed, they signed and dated the consent. They were allowed time to complete the consent form. On completion, the research assistant collected the filled consent forms, placed them in a sealed envelope. Questionnaires were then distributed to the participants by the research assistant and given time to fill them in. On completion, the research assistant placed the questionnaires in a sealed envelope. Both envelopes were then handed over to the researcher. They were kept safely under lock and key.

Data Analysis

The purpose of data analysis aimed to determine the levels of self-efficacy nursing students have to use the nursing process in patient care and the self-efficacy processes that influenced their learning of the nursing process. Data was checked for any missing information, outliers and errors. I ensured that all variables were appropriately coded numerically. I entered data using the statistical package of social sciences (SPSS.) version 20

Demographics.

The section on demographics provided a detailed overview of characteristics of the sample in the study. Key demographic variables included age in years, gender, and work experience in years, and any special training had in the nursing process. The age and years of work experience were placed into categories that were appropriate. The sample was analyzed using frequencies and percentages that were represented in tables.

Reported levels of self-efficacy.

In the section on reported self-efficacy levels, each individual participant's answer was calculated to find the mean, standard deviation and category. The overall group scores were looked at for the overall mean for each group and the frequency distribution in categories. Each individual item on the questionnaire was analyzed to find out the group's reported self-efficacy. Categories for the means were interpreted using a ranking as 4.3-5 (very high level of self-efficacy), 3.5-4.2 (high level of self-efficacy), 2.7-3.4 (moderate level of self-efficacy), 1.9-2.60 (low level of self-efficacy), and 1.0-1.80 (no self-efficacy).

Reported self-efficacy learning processes.

In the section, data was analyzed to find the mean, and standard deviation of the self-efficacy learning processes that influenced students' use of the nursing process. The overall group scores were looked at for the overall mean of each category and the frequency distribution in categories. Each of the four areas of self-efficacy processes (performance accomplishment, vicarious experiences, verbal persuasion and physiological responses) were analysed. The means and standard deviation for each item were calculated. Each individual item on the questionnaire was used to find out which self-efficacy learning processes highly influenced students' learning of the nursing process and that which least influenced them.

Ethical Considerations

This section discussed the ethical considerations that ensured the protection and respect of the participants which included written ethical approval from relevant authorities, the informed consent, privacy, confidentiality, benefits, and risks, use of incentives, social cultural issues and conflict of interest.

Ethical approval.

Authorities at the study site were contacted to discuss the research proposal to seek for administrative clearance. After seeking permission from the study site, all required documents were compiled and submitted to the Research ethics committee (REC) at Uganda Christian University (UCU). The REC reviewed the researcher's submission to ensure that the study adhered to ethical standards and guidelines. The researcher promptly addressed the feedback or requests for additional information from REC to facilitate the approval process. With REC approval in hand the researcher proceeded to obtain the final approval from the study site.

Informed consent.

As a researcher, permission was obtained from the participants after fully informing them about the study including the study objectives, risks, and benefits. The participants were informed that participation is voluntary, and they were not be penalized if they don't participate in the study. Every participant was informed that the data shared was to be kept private by using codes and access to the collected data was to be restricted to only the authorized personnel.

Privacy.

To ensure privacy, ethical practices were reviewed by the researcher and research assistant before administering questionnaires to participants. Each participant was assigned a unique identification code at the outset of the study using sequential numbers. The researcher ensured that participants understood their rights, answered any questions that were asked for clarification. Then the researcher left the room. Those who did not wish to be in the study had the opportunity to decide if they didn't wish to participate.

Confidentiality.

The following measures were implemented to ensure data confidentiality: all data collected was anonymized and stored in a secure locked cabinet and a computer with a password. Data was presented in aggregate form in all reports, presentations, and publications. No information can be traced back to any individual in the study. Data was retained between the time of data collection until the research was completed and for publication which was approximated to one year. Access to data was limited to the principal investigator, supervisor, and statisticians who are directly involved in the study. After the retention period, all data will be securely destroyed. Paper documents will be shredded, and electronic files will be permanently deleted using data destruction software to ensure they cannot be recovered.

Benefits.

There is no direct benefit to students for participating in the study, but their responses may contribute to improving on the way the nursing process is being taught, which may benefit future nursing students and the quality of patient care.

Risks.

There were no anticipated risks in this study. However, part of the participants' time was spent in the study as it was indicated but assumed that there was no cause of undue tension on the normal routine of the participants.

Use of incentives.

The researcher provided ten thousand shillings to each participant and a snack for the time they gave to the participate in the study.

Social or Cultural Issues.

There may be potential discomfort that the participants might have because the researcher was their tutor who gives them marks and is a part of their successful progression. Therefore, they might have had fear that the researcher could associate their answers with them, thus influence her thoughts about them as a student. They could get concerned about their academic progress if the researcher was to remember how they responded in the study. Therefore, to mitigate this risk the researcher explained the purpose of the study and answered any questions or concerns. The researcher then left and invited the research assistant to help maintain confidentiality so that she may never know which student was willing to participate in the study or not. After the data collection, the research assistant sealed each envelope, one with the consent form and another with the questionnaires and hand to the researcher. All data was stored under lock and key, and soft data was only accessed by authorized persons.

Secondly, being a master's student and the participants were diploma completion students, the researcher acknowledged that there are differences in the academic background. This may have caused concern that the researcher might use terms that they did not understand. Therefore, to mitigate this risk straight forward language was used and being open to feedback when explaining the tool.

Conflicts of Interest.

There were no conflicts of interest in this study as the study was self-funded.

Summary

This chapter outlined the methodology that was employed to achieve the study's objectives, and describes the research design, study setting, population, variables, and sample. It

also addressed the research instruments, data collection procedures, and ethical considerations.

Chapter four discussed the findings and analysis of the study.

Chapter Four: Presentation of Results

This chapter presents findings and analysis of this study on finalist diploma nursing students' self-efficacy to use the nursing process to care for patients. Findings are presented under the following sub-headings: demographic characteristics of the participants, the findings of students' reported levels of self-efficacy and self-efficacy processes that influenced their learning of the nursing process use in patient care.

Demographic Data

Table 1

Demographic Distribution of Study Participants (N=45)

Category	Frequency (F)	Percentage (%)
Age (years)		
20-29	34	76
30 +	11	24
Gender		
Female	37	82
Male	8	18
Experience(years)		
1-4 years	31	69
5 years +	14	31
Nursing Practice		
Hospitals	31	69
Health Centers	12	27
Pharmacies	1	2
None	1	2
Special Training		
Yes	28	62
No	17	3

A total of 45 finalist diploma nursing students participated in the study. The majority (76%) of the study participants were in age group of 20-29 years and 24% in the age group of 30 years plus. Eighty- two percent (82%) of them were female. Sixty-nine percent had 1-4 years of

working experience. The majority (69%) of the participants had their nursing practice in hospitals with 62% having special training in the nursing process.

Levels of Self-Efficacy

This section will present findings of the combined group mean of self-efficacy, and self-efficacy levels by category. Additionally, the performance of each part of the nursing process will be discussed showing the mean and self-efficacy levels of each part by category.

Combined mean of self-efficacy level and category.

Table 2

Combined Group Mean Self-Efficacy of the Study Participants.

Measure	Mean	SD	Category
Combined Self-Efficacy level	3.28	0.35	Moderate level of self-efficacy

A moderate level of self-efficacy was indicated by the study participants' combined group mean self-efficacy score of 3.28 with a standard deviation of 0.35. This implies that participants generally had a moderate level of confidence in their ability to use the nursing process during patient care. Additionally, the low standard deviation suggests that participants' self-efficacy levels varied little, indicating a generally consistent group image of self-efficacy.

Levels of self-efficacy by categories.

From the study, no participant reported a very high level of self-efficacy to use the nursing process, and only 16% reported a high level. The majority (78%) were at a moderate level, 4% reported a low level, and 2% had no self-efficacy.

Table 3*Self-Efficacy Levels by Categories*

Level	Frequency (F)	Percentage (%)
Very high (4.3-5)	-	-
High (3.5-4.2)	7	16
Moderate (2.7-3.4)	35	78
Low (1.9-2.60)	2	4
No (1.0-1.80)	1	2

Performance for each part of the nursing process.

The findings showed that the participants were strong in the evaluation part of the nursing process with a high level of self-efficacy. The participants reported a moderate level of self-efficacy in the other parts of the nursing process with their weakest areas in planning and diagnosis. The distribution of the performance of each part is elaborated in Appendix E.

Table 4*Levels of self-efficacy by each part of the nursing process*

Part of the nursing process	Mean	Level of Self-Efficacy
Assessment	3.4	Moderate
Diagnosis	2.9	Moderate
Planning	2.7	Moderate
Implementation	3.1	Moderate
Evaluation	4.2	High

Levels of Self-Efficacy of the Processes that Influenced Students' Learning of the Nursing Process

This section will present findings of the combined mean of the levels of self-efficacy processes that influenced students' learning of the nursing process. A frequency distribution and percentages of the self-efficacy learning processes by category will be discussed. Lastly, students' performance in each of the self-efficacy learning process will be presented.

Combined mean of the self-efficacy levels of the learning processes.

The reported group mean score of the self-efficacy learning processes was 3.2 with a standard deviation of 0.35, indicating that the self-efficacy processes moderately influenced participants' learning of the nursing process. A low standard deviation is suggestive of a little variance in the self-efficacy levels, indicating a generally consistent group image of self-efficacy.

Table 5

Combined Group Mean of Self-Efficacy Learning Processes

Measure	Mean	SD	Category
Self-efficacy learning process	2.2	0.35	Low level

According to the results, participants' learning process self-efficacy mean score was 2.2 (SD = 0.376). This finding suggests a low level of influence by the self-efficacy processes which indicated less impact in helping the students learn how to apply the nursing process when caring for patients.

Table 6

A Frequency Distribution Showing the Learning Process Levels of Self-Efficacy by Category

Level	Frequency (F)	Percentage (%)
High (3.26-4)	-	-
Moderate (2.6-3.25)	8	18
Low (1.75-2.5)	37	82

The majority (82%) of the study's finalist students were influenced to a low degree by the learning process and only 18% had a moderate efficacy level. None of the study participants reported a high efficacy level for the self-efficacy processes supporting their learning of the nursing process.

Performance in each of the learning processes and the level of self-efficacy.

Table 7

A Distribution Showing Each Learning Process Self-Efficacy Level (N=45)

Learning Processes	Mean	Level of Self-Efficacy
Performance Accomplishment	3.1	Moderate
Vicarious Experiences	2.2	Low
Verbal Persuasion	2.0	Low
Physiological States	1.8	Low

Table 7 presents findings that indicate *performance accomplishments* (Mean = 3.1) having a moderate influence on the finalist students learning of the nursing process implying that participants relied mostly on performance accomplishments to build their confidence.

physiological states had the least impact on the study finalist students' learning of the nursing process (Mean= 1.8). Details for the performance of each participant are shown in Appendix F.

Summary

This chapter has presented results of the study outlining the levels of self-efficacy that nursing students had in using the nursing process and the self-efficacy learning processes that influenced their use of the nursing processes to care for patients. Chapter five will discuss the findings of the results.

Chapter Five: Discussion of Results

This chapter discusses the study's key findings on nursing students' self-efficacy and self-efficacy learning processes, which affected how they used the nursing process to care for patients in a not for profit institution in Central Uganda. The chapter also includes a discussion on the demographics of the participants, recommendations, limitations of the study, areas for further study, conclusions and dissemination of findings. The objectives that guided the discussion were; to identify finalist diploma nursing extension students' reported levels of self-efficacy to use the nursing process and to describe the self-efficacy learning processes reported by finalist diploma nursing extension students that influenced their use of the nursing process to care for patients at a school of nursing in Central Uganda.

Demographics

Forty-five finalist diploma nursing extension students in Central Uganda participated in the study. Sixty-nine percent had 1-4 years of nursing experience before returning for their extension program, the majority (82%) were female, and the majority (76%) were in the 20–29 year age range. Most of the participants (69%) were employed in hospitals, and 62% had specific practice training in the nursing process.

From the existing literature on the demographics of nursing education and workforce in Uganda and elsewhere, there is support for the study's findings. According to the WHO (2020), the majority of the nurses (82%) are female. This is consistent with national and international trends showing that nursing is still a profession dominated by women. According to research by Seruwagi (2021), many diploma extension students in Uganda are young professionals returning to school to upgrade their qualifications after gaining initial work experience. This is consistent with the majority of participants' age range of 20–29 years and their prior clinical experience of

1–4 years, which was reported by 69% of participants. A view that this past experience improves nurses' competency and preparedness for further instruction is supported by Benner's (1984) theory on skill acquisition.

Additionally, the Uganda Nurses and Midwives Council (2022) and the Ministry of Education and Sports (2018), which both stress hospital-based clinical practice and nursing process competencies as crucial elements of nursing education, support the finding that the majority of participants were employed in hospitals (69%) and had specialized training in the nursing process (62%). More so, hospital-based continuing education is a common practice with the current trend in nursing education. These correlations between the study's findings and existing literature support the validity and applicability of the participants' feedback in light of Ugandan nursing practice and education.

Nursing Students' Self-Efficacy Levels to Use the Nursing Process to Care for Patients

Based on the study's findings, the nursing extension students showed only a moderate level of overall self-efficacy in applying the nursing process. This means that although students generally believe they can perform nursing tasks, their confidence is not particularly strong or consistent; most students thought they were capable to some extent, but few felt truly assured in their ability to practice independently and effectively at the level expected of a diploma nurse.

According to research by Chu, Pham, and Tran (2024) and Eren and Turkmen (2020), nursing students demonstrated a modest degree of self-efficacy when completing clinical tasks during clinical practice. Even though the earlier research did not evaluate self-efficacy in using the nursing process directly, it did indicate a modest degree of planning for patient care, which may have an impact on how well individuals learn to apply the nursing process. The current study's low number of students with high self-efficacy and lack of students with very high self-

efficacy point to a worrying lack of confidence that might keep students from being ready to meet the Uganda Nurses and Midwives Council's (UNMC) professional standards. This is consistent with Chu, Pham and Tran's (2021) study which reported very few students having high or very high levels of self-efficacy in applying the nursing process which could hinder meeting the professional standards of practice.

The self-efficacy of nursing extension students in this study was only moderate. This suggests that they may not yet fully believe in the nursing process as a means of developing clinical abilities, which may affect their readiness for autonomous professional practice. According to the findings of a study by Tong et al. (2024), nurses transitioning from one level of practice to another often experience fear due in large part to low self-efficacy. The study found that because self-efficacy reduces fear of transition, nurses with higher levels of self-efficacy are better able to manage the demands of practice.

The results of this study indicate a discrepancy between the professional expectations of a diploma-level nurse and the perceived readiness of nursing extension students, who demonstrated only moderate levels of self-efficacy which may restrict the standard of nursing care given. Neumbe et al. (2023) noted that many students' self-efficacy remained moderate despite academic progress and that confidence did not always correspond with the necessary degree of clinical competence. In another study by Momeni, Asadi, Shadin, Noorian, and Senmar (2025) that evaluated 237 undergraduate nursing students' self-efficacy of clinical performance, moderate self-efficacy was viewed as a starting point rather than a destination for students pursuing diplomas or about to graduate.

Self-Efficacy for each part of the nursing process.

Examining the phases of the nursing process, the participants in this study showed a moderate level of self-efficacy in the assessment phase meaning that they have a reasonable level of confidence to obtain patient data through history taking and physical examination. This level also suggests that there are still certain gaps, especially in more complex abilities like identifying indicators of illness, ranking relevant data, and combining information for clinical decision-making. George, DeCristofaro, and Murphy's (2020) study found that nursing students had a modest level of self-efficacy when they began their clinical experiences. In particular, they lacked confidence in their ability to connect with patients, do physical examinations, and document care. In a different study, Şanlıalp and Fidan (2023) assessed senior nursing students' self-efficacy in doing physical examinations. On the other hand, the study revealed that although students' levels of self-efficacy varied, they were typically confident in their ability to be assessed. According to Chu, Pham, and Tran's (2021) study, students exhibited a reasonable degree of confidence in their capacity to assess patients initially, even if many of them felt unsure when interpreting signs and symptoms or when they had to make nursing judgments based on patient data.

In this study, the diagnosis phase showed moderately low levels of self-efficacy where nurses are least confident in their ability to appropriately make a nursing diagnosis of their patients, which is a critical step in providing effective treatment. The moderately low self-efficacy in nursing diagnosis may indicate a lack of critical thinking and clinical reasoning abilities, which are required to evaluate assessment results and translate them into standardized nursing diagnoses. A study by Ardahan, et al., (2020) supports the present study's findings by pointing out that nursing students have a lot of trouble using NANDA nursing diagnoses during

care management, especially in the areas of diagnosis and planning. Similarly, in a study on self-efficacy of intensive care unit nurses in handling delirium, particularly during diagnosis was examined by Nie, Li, and Jiang (2024). Although this study concentrates on a particular illness (delirium), it highlights the same general problem that this study found: the challenge of accurately diagnosing patients based on assessment data, particularly when under real clinical experience.

In the findings of the present study, the planning phase also showed a moderately low self-efficacy level. This implies that nurses struggle to establish quantifiable objectives, establish clear priorities, and choose nursing interventions that are suitable for each patient's needs. According to the study by Abu Sharour et al. (2021), nurses who cared for patients with COVID-19 had moderate levels of self-efficacy in planning for patients' care. This similarity with the current study suggests that, although in different situations, planning for patient care can provide difficulties for both students and experienced nurses. These research reports show that nurses' ability to plan and provide safe, patient-centered care depended on a high level of self-efficacy.

In the present study, participants demonstrated a moderate level of self-efficacy in carrying out nursing interventions which points to some hesitancy regarding the initiative in performing treatment plans in actual clinical settings. Participants' confidence may vary based on the complexity of care, patient conditions, or projected level of autonomy, even though they may seem competent of doing simple clinical activities. A study by Kankaya, Keskin and Akyol (2021) involving one hundred thirty-four final-year nursing students reports that when faced with clinical uncertainty or the requirement for independent judgment, the students in their study frequently felt uncertain about starting nursing actions without supervision. According to both studies, the moderate self-efficacy pointed to students' hesitancy when asked to complete

interventions on their own. Contrarily, Abudu-Birresborn et al.'s (2022) mixed-method study from Ghana investigated nursing students' self-efficacy in providing acute care for elderly patients. According to the results, students indicated high levels of self-efficacy, attributing their confidence to their perceived competence in performing routine care tasks.

Evaluation was the nursing process phase with the highest score indicating that participants have a high degree of confidence in their ability to evaluate the success of nursing interventions and determine if patient care goals have been met. As the last and frequently reflective stage of the nursing process, evaluation enables students to reflect on their actions, observe outcomes, and receive positive reinforcement—all of which are essential elements in the development of self-efficacy. Since evaluation follows other stages, students are probably more comfortable with it because they have already performed easier or more structured parts (like implementation or assessment). Bandura's theory that task mastery fosters the development of self-efficacy is supported by this trend (Bandura, 1997).

Extensive literature search did not yield exact references to support my specific findings but a study by Moreno-Cámara, da-Silva Domingues, Parra-Anguita and Gutiérrez-Sánchez (2024) gives some highlights on the evaluation phase. For instance, students' self-confidence and satisfaction levels were highest in situations that centered on evaluating results (such as assessing the effectiveness of an intervention). As a result, the high assessment score could be explained by students' dependence on their own practical achievements, which gave them more confidence to assess the quality of care. This result is in line with other research that has demonstrated that nursing students' confidence in using the nursing process—particularly in evaluation—tends to increase when they are given opportunities to succeed in practice and are exposed to meaningful clinical experiences (Eren & Turkmen, 2020)

In summary, this section has discussed nursing students' self-efficacy finding that students had a moderate overall degree of self-efficacy in using the nursing process. Few students indicated high or extremely low confidence levels. Notably, the nursing process's evaluation phase had the highest level of self-efficacy, but the phases that require higher-order clinical reasoning—diagnosis and planning—were shown to be the weakest. These results indicate that although the extension program has given students a certain amount of self-efficacy, it has not adequately equipped them to perform skills of the nursing process phases on their own.

Self-Efficacy Learning Processes that Influenced Students' Self-Efficacy in the Use of the Nursing Process

According Bandura's theory of self-efficacy, there are four learning processes that influence development of self-efficacy: performance accomplishment, vicarious experiences, verbal persuasion and physiological/emotional states. These processes offer the foundations around which people construct their confidence in their own ability to complete a task effectively. The results of this study demonstrated that these learning processes did not have a significant overall impact on students' self-efficacy in using the nursing process. Performance accomplishment had a moderate impact (mean = 3.1), whereas physiological states (mean = 1.8), verbal persuasion (mean = 2.0), and vicarious experiences (mean = 2.2) all had a low impact. This implies that while students' own practical experiences gave them some confidence, vicarious experiences, verbal persuasion and physiological states provided limited support in building the students' confidence to use the nursing process effectively.

Students' overall self-efficacy in applying the nursing process did not achieve the required high level, which may be explained by the relatively low overall influence of the four processes. Eren and Turkmen (2020) shared a similar experience where nursing students had

similarly low levels of self-efficacy. These results also correspond with a cross-sectional study by Chu et al. (2021) on self-efficacy among nursing students during clinical practice in Ho Chi Minh City. The study found that the low levels of self-efficacy were linked to lack of clinical exposure, inadequate mentorship and a lack of adequate feedback factors closely linked to the self-efficacy learning process (performance accomplishments, vicarious experiences, verbal persuasion and physiological states).

Performance Accomplishment.

In this study, performance accomplishment had the most impact on the students' understanding of the nursing process out of the four learning processes that contribute to efficacy according to Bandura. This implies that students' self-efficacy was largely developed through personal experience, such as completing assignments successfully or putting nursing tasks into practice which helped them to master the skills. Additionally, with the participants' highest score in the evaluation phase of the nursing process, there is a fundamental connection between these two domains. As the last phase of the nursing process, evaluation calls on students to consider the results of their actions and assess if the objectives have been met. Because students gain confidence from their past successes, evaluation phase heavily relies on past experiences. Since performance accomplishment offers concrete proof of competence, Bandura (1997) highlighted that they are the most potent source of self-efficacy. A longitudinal study by Song (2023) reported increased self-efficacy levels of nursing students through mastery of the nursing process. This aligns with the current study's findings that support the strength of previous experiences in mastering skills. Students reported increased confidence in using the nursing process through their personal experiences. The moderate influence suggests that there was some opportunity for hands-on learning and practical exposure, though perhaps not enough to

significantly increase self-efficacy. Similarly, in a study by Alavi and Okhovat (2024) students demonstrated an increased self-efficacy after active engagement in practice experiences. These results are similar to the current study as it reported that increased confidence is seen when students get opportunity to perform tasks and observe successful results.

Vicarious Experiences.

Students' self-efficacy was low in vicarious experiences demonstrating that the confidence was not significantly increased by watching peers or mentors do clinical tasks. This may mean that there aren't many opportunities for students to watch knowledgeable role models or gain knowledge through organized peer observation in simulation or clinical settings. Peer observation has little effect on students' self-efficacy unless combined with other tactics like discussion, according to the findings of a study by Shen, Jiang, Xu, and Liu (2020) on the effect of peer learning on nursing students' self-efficacy during clinical placements. In a different study by Zhu, Zhang, Wang, and Yu (2021) on nursing students' self-efficacy during clinical placement. students stated that seeing mentors was insufficient and that peer observation did not considerably increase their confidence. Furthermore, the lack of impact on self-efficacy may indicate that, even in situations when these chances were present, they were not effectively integrated into the educational process to promote development.

Verbal Persuasion.

In this study, verbal persuasion also had a low influence on the students' learning of the nursing process. This is a reference to the support, criticism, or inspiration that peers, mentors, or faculty offer. The low influence suggests that verbal reinforcement may not have been given to students consistently or effectively during their instruction. The limited influence of instructors' constructive criticism and affirmation, which are known to be essential in boosting students'

confidence, points to a possible lack of supportive communication in the classroom. A study on the role of feedback in building nursing students' clinical skills and self-efficacy indicated that students reported needing more specific, timely and encouraging feedback to gain confidence (Burgess, van Diggele, Roberts, & Mellis, 2020; Nuuyoma, 2021). Bandura (1997) further states that verbal persuasion works best when it is given by dependable, encouraging people and connected to actual accomplishments. However, verbal persuasion did not have any impact on enhancing students' self-efficacy when it was delayed and abstract (Gong, Chen & Li, 2022).

Physiological/Emotional States.

Students' understanding of the nursing process was least impacted by physiological /emotional states. Stress, anxiety, and fear are examples of emotional and physical reactions that can either promote or undermine self-efficacy. This study relates to my findings with the fact that participants not getting enough supervision and feedback from faculty, they were likely to get stressed and develop anxiety. In one study by George, Decristofaro, and Murph (2020), results demonstrated that anxiety is a common aspect experienced by nursing students particularly regarding their clinical competence and expectations and patient encounters but after exposure to a situation, there may be a significant improvement. Due to the fact that the students had a previous exposure to using the nursing process, this could have lessened their fear or anxiety.

In summary, the study discovered that the four self-efficacy learning processes— performance accomplishments, vicarious experiences, verbal persuasion, and physiological states—generally had a minimal impact on students' understanding and application of the nursing process. Participants' total self-efficacy was consistently poor, maybe as a result of common experiences like little clinical exposure, and insufficient supervision. Performance accomplishments were the most influential of the four sources, and students gained confidence

through practical experience. Vicarious experiences had little effect, suggesting that seeing peers or mentors alone was insufficient to build confidence unless paired with other strategies. Similar to this, verbal persuasion had minimal effect, maybe as a result of inconsistent or poor feedback. Finally, physiological states had the least impact perhaps as a result of previous exposure. In order to improve nursing students' self-efficacy, the study emphasizes the necessity of more organized clinical experiences, more vigorous mentoring, and improved communication between student and mentors or instructors.

Application of the Theory to the Study

The theory provided guidance on how to develop my study objectives and create items for the questionnaire that appropriately reflected the constructs being studied. Furthermore, in relation to the study objectives, the theory was applied in interpreting the results of the data analysis.

Recommendations

As participants had a moderate level of self-efficacy to use the nursing process, this demonstrated that they are not very good at applying the framework during patient care. Therefore, faculty teaching this group need to have more regular and organised clinical experiences that provide direct supervision from mentors and clinical instructors.

With their moderate self-efficacy level, existing opportunities for the participants to incorporate the nursing process in patient care may not have been there. Therefore, faculty should ensure opportunities such as clinical observation and feedback are not only provided but should be integrated into the teaching-learning process deliberately, aligning them with clear objectives and providing support with guided reflection.

Students' moderate level of self-efficacy throughout the evaluation phase suggested that they still require additional assistance in gaining the confidence necessary to utilize this phase. Therefore, by combining theoretical knowledge with real-world application, promoting reflective journaling, implementing case studies, and using problem-based learning, faculty members can give students more opportunities to practice data gathering and interpretation.

The moderate level of self-efficacy in diagnosis and planning phases demonstrated a lack of critical thinking and clinical reasoning abilities among participants. Therefore, faculty should offer guided opportunities where students engage actively in formulating nursing diagnoses and planning for appropriate care.

With the low influence of the vicarious learning, faculty should select tasks relevant to the students' goals and their stage of learning the nursing process. By focusing on the relevance of the task, the vicarious experience can more actively engage, motivate students and contribute to social outcomes of their learning such as building a sense of belonging and commitment to use the nursing process in patient care.

Faculty should provide more opportunities for students to repeatedly perform skills both in the lab and real clinical settings until mastery and confidence are achieved. Additionally, faculty should start with simpler nursing tasks and progressively move to more complex techniques in applying the nursing process and build confidence step by step. During clinical placement, students should be assigned patients where they will be required to apply the nursing process under close supervision with timely and constructive feedback given.

The low influence of verbal persuasion demonstrated inconsistent or ineffective reinforcement to the participants. Faculty should therefore ensure consistent, timely, and constructive reinforcement to students that is provided in supportive and encouraging ways. This

will help students to recognize their strengths and weaknesses. Faculty should also foster a positive attitude by using encouraging words that are linked directly to the students' actual performance in carrying out patient assessments, diagnosis, planning, implementation and evaluation rather than generalizing feedback. Students' strengths should be recognized as they are being guided on how to improve their weak areas such that feedback becomes more constructive and motivating.

Limitations

The use of a researcher developed questionnaire that has not been statistically validated by other researchers limits this study's findings. Even though the instrument was thoughtfully created to represent the study's goals, reviewed by experts and pre-tested the results' reliability and generalizability may be constrained by the absence of external validation.

Focusing on data at a single point in time which did not allow monitoring for changes in self-efficacy throughout the training program is another limitation. Self-efficacy is a dynamic concept that may change as students encounter new difficulties, acquire experience, or get feedback. Additionally, given the fact that self-efficacy can vary, findings should be interpreted with caution, due to the limitations in both internal and external validity.

It is acknowledged that the use of consecutive sampling may limit the generalizability of the findings beyond the study setting, as the sample was not randomly drawn from the entire national population of diploma nursing extension students. Secondly, there is a potential for random error due to the small sample size.

There is a possibility of selection bias since not all potential sites or participants had an equal chance of being included having relied on only one institution increasing challenges of generalizability and external validity.

Areas of Further Study

A longitudinal study could be conducted measuring students at the beginning of the program and at the end looking at the various learning processes utilized. This might further the understanding of teaching this level of students.

A study could be conducted to assess whether improving nursing students' self-efficacy in the nursing process transforms into better patient care outcomes. Although self-efficacy is known to affect performance, there is little concrete evidence that increased confidence is associated with quantifiable gains in clinical decision-making, patient safety, and treatment quality. Research that monitors patient care indicators and student self-efficacy may offer important new perspectives on the real-world effects of educational interventions.

A study may be conducted to explore how the clinical learning environment, quality of mentorship and feedback influence nursing students' confidence in applying the nursing process. Faculty can create strategies that strengthen students' learning and clinical practice preparedness by understanding the importance of structured feedback, supportive supervision, and guided practice opportunities.

Another study may be conducted to examine how each of the self-efficacy learning processes contribute to development of self-efficacy in using the nursing process. Such studies would make it clear for which effectiveness sources have the greatest influence and enable more focused approaches to reinforce students' self-efficacy and clinical decision-making skills.

Dissemination of Findings

The findings of the study will be disseminated through presentations at academic conferences, seminars, and workshops attended by nursing educators and students will also be engaged. For future scholars' use, copies of the completed dissertation will be placed in the

institutional library. To reach a larger scholarly audience and encourage more research in the area of self-efficacy and the nursing process, the findings will also be submitted for publication in peer-reviewed nursing education publications.

Conclusions

The study sought to determine the level of self-efficacy that final year diploma nursing extension students had in applying the nursing process and to examine the ways in which each of the four self-efficacy learning processes—physiological states, verbal persuasion, performance accomplishments, and vicarious experiences—influenced their understanding and application of the nursing process. The research objectives were achieved, and the chosen methods were sufficient to address the research problem. The results showed that students' overall self-efficacy was generally moderate, with performance accomplishments making up the largest portion of influence and the other three sources having little effect. This shows that even though students gained some confidence from practical experiences, their capacity to develop the higher levels of self-efficacy required for autonomous, capable nursing practice may have been hindered by a lack of vicarious learning and verbal persuasion. The scope of practice requires that the diploma nurse should fully utilize the nursing process during patient care however, the participants only demonstrated a moderate level. The findings therefore highlight the need to strengthen clinical practice to ensure that these students meet the expected standards of practice.

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Appendix A: Informed Consent

Title of research study: Finalist Diploma Nursing students' self-efficacy to use the nursing process in patient care

Principle investigator, contact information and affiliation: I am Nagadya Irene. I am completing a masters of nursing science degree from Uganda Christian University. My email address is: nagadyai8@gmail.com. My telephone number is: 0772934830

Introduction and purpose of study The purpose of this study is to evaluate the self-efficacy levels of final-year Diploma nursing students to use the nursing process in patient care. Self-efficacy refers to the confidence in one's ability to perform specific tasks and is crucial for effective nursing practice. This study aims to understand how confident nursing students feel about their ability to perform the various steps of the nursing process

Description of the research: This is a descriptive study.

Subject participation: All diploma completion students are being invited to participate in this study. You will be asked to complete a questionnaire. The questionnaire consists of a series of statements about your confidence in performing different aspects of the nursing process. It will take approximately 30 minutes to complete the questionnaire.

Potential Benefits: There is no direct benefit to students for participating in the study, but their responses may contribute to improving on the way the nursing process is being taught, which may benefit future nursing students and the quality of patient care.

Potential Risks and Discomforts: There are no foreseeable risks associated with participating in this study.

Confidentiality: All information collected in this study will be kept confidential. Your responses will be anonymized, and no identifying information will be linked to your questionnaire answers. Data will be stored securely and will only be accessible to the research team.

Rights of participants: Your participation in this study is entirely voluntary. You may choose not to participate or to withdraw from the study at any time without any penalty or loss of benefits to which you are otherwise entitled.

Contact information for ethical concerns or to withdraw consent: This study has been approved by the Uganda Christian University REC. If you have any concerns you may contact the Head of the Nursing Department Ms Elizabeth Situma. Email: ensituma@UCU.ac.ug. Phone: +256 789 830754

Authorization statement:

I have read this consent form and I agree to be a participant in this study. I have been given the opportunity to ask questions regarding the study, and I have received answers to my questions. I acknowledge that I am aware of what this study involves, that I am at least 18 years old, and that I have received a copy of this Informed Consent form.

Participant:

Signature: _____
Name: _____ Date: _____

Researcher:

Signature: _____
Name: _____
Date: _____



Appendix B: Questionnaire

Name: NAGADYA IRENE

Course: Masters of Science in Nursing

Title: Finalist Diploma Nursing Students' Self-Efficacy to use the Nursing Process in patient Care

Date:

Dear respondent,

Please read the sections and carefully answer the questions by responding or ticking the appropriate answer

Section One: Demographic information

In this section, the questions are intended to collect information about you. Please indicate the option that best describes you by ticking or responding.

1. Age in years.....
2. Gender: Female Male
3. Work experience in years
4. Where did you have your nursing practice experience?
 - Never before.....
 - Hospital.....
 - Health centres
 - Other (specify).....
5. Have you had any special training concerning the nursing process other than in school?

Yes No



Section Two: Reported levels of self-efficacy.

The purpose of this questionnaire is to learn more about your thoughts and feelings related to your ability in using the nursing process to care for patients while in your nursing program. This tool is designed to measure the development of your levels of self-efficacy this semester.

Rate the extent to which you feel confident with the following statements by ticking the appropriate number after each statement with “1” indicating strongly disagree to “5” indicating strongly agree. Tick the most appropriate response.

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
	1	2	3	4	5
Assessment					
1. I'm confident in taking the necessary patient's history.					
2. I find it difficult to know what assessment data to gather.					
3. I'm confident in knowing when to do a more focused patient assessment.					
4. I am not able to perform some parts of the physical assessment.					
5. I'm confident in knowing what assessment data to document					
DIAGNOSIS					
1. I'm confident in knowing how to identify patient's nursing diagnoses from assessment findings.					
2. I am not able to identify potential nursing diagnoses from patient's assessment findings					
PLANNING					
1. I'm confident in knowing how to develop short term goals for the patient's care plan.					
2. I find difficulty in knowing how to set long term goals for patient's care plan.					



	3. I'm not able to identify patients' priority nursing concern.					
	IMPLEMENTATION					
	1. I'm confident in identifying the independent nursing actions.					
	2. I find difficulty in identifying dependent nursing actions.					
	3. I am not able to identify collaborative nursing actions.					
	4. I'm confident in writing the rationale for different nursing actions applied.					
	EVALUATION					
	1. I'm confident in recommending the next step after evaluating the patient's response to nursing interventions.					

Section Three: Reported self-efficacy learning processes.

In this section, rate the extent to which you feel that the learning processes influenced you to develop the ability to use the nursing process to care for patients with the following statements.

Tick the appropriate number after each statement with "1" indicating never to "5" indicating always.

	Never	Rarely	Sometimes	Often	Always
	0	1	2	3	4
Assessment					
1. I have had positive experiences in conducting assessments during clinical practice					
2. I have learnt from observing faculty members conduct patient assessments					
3. I have not observed experienced clinical staff conduct patient assessments.					



4. I have not received constructive feedback and encouragement from faculty regarding my assessment skills.					
5. I have learnt from watching my peers perform patient assessments					

6. I have not had anxiety/fear when performing patient assessments					
Nursing Diagnosis					
1. I have had positive experiences in formulating nursing diagnoses					
2. I have learnt from faculty as they formulate nursing diagnoses					
3. I have not received positive feedback from faculty on my ability to formulate nursing diagnoses.					
4. I have observed peers identify nursing diagnoses					
5. I have not had encouraging words and support from peers on my ability to formulate nursing diagnoses					
6. I have had anxiety/fear which hindered my ability to formulate nursing diagnoses.					
Planning					
1. I have had positive experiences in planning patient care					
2. I have not observed faculty members develop patient care plans.					
3. I have observed clinical staff develop care plans					



4. I have not observed peers as they plan patient care					
5. I have received positive feedback and support from faculty regarding my care planning skills					
6. I have not had support from clinical staff.					

7. I have had support from peers to create effective care plans that address the holistic needs of patients.					
8. I experienced anxiety/ discomfort about care planning processes					
Implementation					
1. I have had positive experiences in implementing nursing interventions					
2. I have not learnt from faculty as they implemented nursing interventions					
3. I learnt from clinical staff as they implemented nursing interventions					
4. I observed peers perform nursing interventions					
5. I have not received positive reinforcement and support from faculty regarding nursing interventions					
6. I received words of encouragement from peers regarding execution of nursing interventions.					
7. I have not had anxiety and fear during the implementation of nursing interventions					



Evaluation					
1. I had positive encounters in evaluating patient responses to interventions					
2. I have not watched clinical staff evaluate patient responses to interventions					
3. I watched peers evaluate patient responses to interventions					
4. I have not received constructive feedback and support from faculty regarding my evaluation skills					
5. I received constructive feedback and support from clinical staff regarding my evaluation skills					
6. I have not received words of encouragement from peers regarding evaluation of patient care					
7. I have not had anxiety/fear about evaluating patient outcomes					



Appendix C: Approval Notice



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Office of the Vice Chancellor
Research Ethics Committee UG-026



26th November, 2024

IRENE NAGADYA
Uganda Christian University
0772934830
Email: irene.nagadya@mengohospital.org

UG-REC-026 APPROVAL NOTICE

To: Irene Nagadya, Principal Investigator

Re: UCU-REC Application titled: *Finalist Diploma Nursing students' self-efficacy to use the nursing process in patient care*

Application Number: **UCUREC-2024-949-4**

Version: 4.1

Type: INITIAL REVIEW
 Protocol Amendment
 Letter of Amendment (Loa)
 Continuing Review
 Material Transfer Agreement
 Other, Specify:



I am pleased to inform you that the **UG-REC-026**; UCUREC approved the above referenced application.

Approval of the research is for the period from **26th November, 2024**, to **26th November, 2025**

This research is considered minimal risk category.

As Principal Investigator of the research, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and additions to the protocol or the consent form must be submitted to the REC for re-review and approval prior to the activation of the changes. The REC application number assigned to the research should be cited in any correspondence.

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Research Ethics Committee UG-026



3. Reports of unanticipated problems involving risks to participants or other must be submitted to the REC. New information that becomes available which could change the risk: benefit ratio must be submitted promptly for REC review.
4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by subjects and/or witnesses should be retained on file. The REC may conduct audits of all study records, and consent documentation may be part of such audits.
5. Regulations require review of an approved study not less than once per 12-month period. Therefore, a continuing review application must be submitted to the REC **eight weeks** prior to the above expiration date of 26th November, 2025 in order to continue the study beyond the approved period. Failure to submit a continuing review application in a timely fashion may result in suspension or termination of the study, at which point new participants may not be enrolled and currently enrolled participants must be taken off the study.
6. The REC application number assigned to the research should be cited in any correspondence with the REC of record.
7. Your research details have been shared with the Executive secretary of Uganda National Council for Science and Technology (UNCST) and you are not required to get clearance since you are a Master's Degree research. Refer to UNCST Research registration and clearance Policy and guidelines (July 2016) in Uganda section 6(e).

The following is the list of all documents approved in this application by UG-REC _026:

	Document Title	Language	Version	Version Date
1.	Protocol	English	1.0	2024-11-18
2	Informed consent form	English	1.0	2024-11-18
3	Questionnaire	English	1.0	2024-11-18

Signed and Stamped


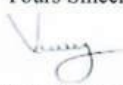

Prof. Peter Waiswa.
UCUREC Chairperson,
pwaiswa@musph.ac.ug



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Research and Ethics

Appendix D: Approval Letter

	<p>MENGO HOSPITAL</p> <p>FOUNDED ON 22 FEBRUARY 1897</p>	<p>P.O.Box 7161, Kampala, Uganda Tel: +256-414-270222/3 Direct: +256-312-367106 Fax: 256-41-340466 Email: medicaldirector@mengo-hospital.org Website: www.mengo-hospital.org</p>
Our Ref:	Your Ref:	
RESEARCH ETHICS COMMITTEE		
		January 29, 2025
<p>To: Irene Nagadya Uganda Christian University</p> <p>Re: <u>MHREC Administrative Approval of Proposal Titled: "Finalist Diploma Nursing Students' Self- Efficacy to use the Nursing Process in Patient Care." (UCU-REC REF: 2024-949-4)</u></p>		
<p>This is to acknowledge receipt of your proposal, introduction letter and approval letter. Since this protocol has been approved by the Uganda Christian University Research Ethics Committee (UCU-REC), all that you require from the Mengo Hospital REC is administrative approval.</p> <p>We hereby grant you administrative approval.</p>		
<p>Continued approval is conditional upon your compliance with the following requirements:</p> <ol style="list-style-type: none"> 1) Significant changes to the study site and significant deviations from the research protocol and all unanticipated problems that may involve risks or affect the safety or welfare of subjects or others, or that may affect the integrity of the research must be promptly reported to the Mengo Hospital REC. 2) Please send the report upon completion or termination of the study to the Mengo Hospital REC. The study cannot continue after 26/11/2025 until re-approved by Uganda Christian University Research Ethics Committee (UCU-REC). <p>Please contact the Mengo Hospital REC office if you have any questions about the terms of this approval.</p>		
<p>Yours Sincerely,</p> 		
<p>Prof. Kawooya Michael <u>Chairman (MHREC)</u> CC. Deputy Medical Director</p>		
<hr style="border: 0.5px solid black;"/> <p>"Christian Medical Witness"</p>		

Appendix E: Group Performance and Level of Self-Efficacy of Nursing Process Phases

Code	Assessment		Diagnosis		Planning		Implementation		Evaluation		overall mean	Level of Self-Efficacy
	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean		
1	19	3.8	10	5	12	4.0	14	3.5	5	5	4.26	high
2	18	3.6	5	2.5	8	2.7	10	2.5	2	2	2.65	low
3	21	4.2	6	3	8	2.7	12	3	5	5	3.57	high
4	16	3.2	6	3	8	2.7	13	3.25	4	4	3.22	moderate
5	15	3	6	3	7	2.3	8	2	5	5	3.07	moderate
6	16	3.2	5	2.5	6	2.0	12	3	5	5	3.14	moderate
7	16	3.2	6	3	6	2.0	11	2.75	4	4	2.99	moderate
8	17	3.4	7	3.5	9	3.0	15	3.75	5	5	3.73	high
9	17	3.4	6	3	10	3.3	14	3.5	4	4	3.45	moderate
10	17	3.4	6	3	10	3.3	15	3.75	5	5	3.70	high
11	18	3.6	6	3	8	2.7	13	3.25	4	4	3.30	moderate
12	20	4	7	3.5	11	3.7	9	2.25	4	4	3.48	moderate
13	17	3.4	3	1.5	11	3.7	13	3.25	3	3	2.96	moderate
14	18	3.6	5	2.5	8	2.7	14	3.5	4	4	3.25	moderate
15	16	3.2	7	3.5	8	2.7	15	3.75	5	5	3.62	high
16	17	3.4	6	3	8	2.7	13	3.25	4	4	3.26	moderate
17	13	2.6	5	2.5	14	4.7	11	2.75	4	4	3.30	moderate
18	16	3.2	7	3.5	9	3.0	12	3	4	4	3.34	moderate
19	16	3.2	6	3	10	3.3	12	3	4	4	3.31	moderate
20	15	3	3	1.5	10	3.3	8	2	3	3	2.57	low

Code	Assessment	Mean	Diagnosis		Planning		Implementation		Evaluation		overall mean	Level of Self-Efficacy
	Total		Total	Mean	Total	Mean	Total	Mean	Total	Mean		
21	17	3.4	7	3.5	8	2.7	12	3	4	4	3.31	moderate
22	19	3.8	6	3	7	2.3	13	3.25	5	5	3.48	moderate
23	20	4	5	2.5	6	2.0	11	2.75	4	4	3.05	moderate
24	18	3.6	5	2.5	7	2.3	11	2.75	4	4	3.04	moderate
25	16	3.2	6	3	8	2.7	13	3.25	5	5	3.42	moderate level of self-ef
26	16	3.2	6	3	7	2.3	12	3	4	4	3.11	moderate
27	16	3.2	5	2.5	8	2.7	12	3	5	5	3.27	moderate
28	17	3.4	7	3.5	8	2.7	13	3.25	5	5	3.56	high
29	16	3.2	7	3.5	9	3.0	13	3.25	4	4	3.39	moderate
30	12	2.4	6	3	6	2.0	11	2.75	5	5	3.03	moderate
31	18	3.6	6	3	8	2.7	13	3.25	4	4	3.30	moderate
32	13	2.6	6	3	7	2.3	13	3.25	4	4	3.04	moderate
33	18	3.6	7	3.5	6	2.0	12	3	4	4	3.22	moderate
34	17	3.4	6	3	9	3.0	11	2.75	5	5	3.43	moderate
35	19	3.8	6	3	6	2.0	12	3	4	4	3.16	moderate
36	17	3.4	5	2.5	7	2.3	11	2.75	4	4	3.00	moderate
37	17	3.4	6	3	4	1.3	16	4	5	5	3.35	moderate

Code	Assessment	Mean	Diagnosis		Planning		Implementation		Evaluation		overall mean	Level of Self-Efficacy
	Total		Total	Mean	Total	Mean	Total	Mean	Total	Mean		
38	16	3.2	6	3	7	2.3	12	3	5	5	3.31	moderate
39	23	4.6	7	3.5	7	2.3	12	3	4	4	3.49	moderate
40	17	3.4	6	3	9	3.0	12	3	5	5	3.48	moderate
41	17	3.4	6	3	7	2.3	13	3.25	4	4	3.20	moderate
42	16	3.2	6	3	10	3.3	14	3.5	4	4	3.41	moderate
43	16	3.2	5	2.5	9	3.0	13	3.25	5	5	3.39	moderate
44	18	3.6	4	2	12	4.0	16	4	4	4	3.52	high
45	17	3.4	4	2	5	1.7	4	1	1	1	1.81	none
Group mean		3.4		2.9		2.7		3.05		4.2	3.28	moderate

Appendix F: Self-efficacy learning processes and category for each participant

ID	Mean Performance Accomplishments	Mean Vicarious Experiences	Mean Verbal Persuasion	Mean Physiological States	TOTAL	Total Mean learning process score	learning process Self-Efficacy mean score categorization
1	3.2	2.6	2.0	1.6	9.47	2.4	low influence
2	2.8	3.1	2.8	2.2	10.90	2.7	moderate influence
3	3.4	2.1	1.7	1	8.15	2.0	low influence
4	3.4	1.5	1.3	1.2	7.44	1.9	low influence
5	3.4	2.6	1.1	1.6	8.65	2.2	low influence
6	3.8	2.2	2.0	2	9.99	2.5	low influence
7	2.2	1.8	2.3	2	8.31	2.1	low influence
8	4	2.7	2.1	1.6	10.41	2.6	moderate influence
9	3.2	2.9	2.4	2.6	11.08	2.8	moderate influence
10	2.2	1.9	1.6	3.2	8.86	2.2	low influence
11	3	2.1	1.8	1.4	8.28	2.1	low influence
12	2.4	2.5	2.8	2.2	9.87	2.5	low influence
13	2.6	2.4	2.3	1.8	9.12	2.3	low influence
14	3.6	1.8	1.7	1.8	8.91	2.2	low influence
15	2	2.0	1.1	1.8	6.97	1.7	low influence
16	3.2	2.3	1.5	1.6	8.55	2.1	low influence

ID	Mean Performance Accomplishments	Mean Vicarious Experiences	Mean Verbal Persuasion	Mean Physiological States	TOTAL	Total Mean learning process score	learning process Self-Efficacy mean score categorization
17	2.4	0.8	2.1	1.6	6.87	1.7	low influence
18	2.6	1.9	1.3	1.4	7.16	1.8	low influence
19	2.8	2.1	1.6	0.8	7.33	1.8	low influence
20	1.2	1.5	2.3	2.8	7.77	1.9	low influence
21	4	2.6	2.2	2.4	11.17	2.8	moderate influence
22	2.8	2.1	1.5	1.4	7.81	2.0	low influence
23	3.8	2.8	2.1	2.8	11.50	2.9	moderate influence
24	2.8	2.4	1.9	1.6	8.65	2.2	low influence
25	3.6	2.3	2.9	3.2	12.04	3.0	moderate influence
26	3.4	2.2	1.3	2	8.93	2.2	low influence
27	3.8	2.4	1.7	0.4	8.29	2.1	low influence
28	4	2.4	1.5	0.8	8.73	2.2	low influence
29	2.8	2.0	2.0	2.6	9.45	2.4	low influence
30	3.8	1.9	1.5	1.6	8.81	2.2	low influence
31	3.8	1.5	0.8	0.2	6.38	1.6	low influence
32	3.2	2.0	1.9	1.4	8.49	2.1	low influence
33	3.8	2.3	1.4	1	8.42	2.1	low influence
34	2.8	1.8	1.5	0.8	6.91	1.7	low influence
35	2.6	1.8	2.1	2.2	8.69	2.2	low influence

ID	Mean Performance Accomplishments	Mean Vicarious Experiences	Mean Verbal Persuasion	Mean Physiological States	TOTAL	Total Mean learning process score	learning process Self-Efficacy mean score categorization
36	2.8	2.8	3.0	2.8	11.44	2.9	moderate influence
37	3.2	2.2	2.4	2.6	10.39	2.6	low influence
38	3	2.4	3.2	1.2	9.85	2.5	low influence
39	3.8	2.3	1.9	0	8.01	2.0	low influence
40	3.8	2.5	1.9	1.4	9.60	2.4	low influence
41	3.2	2.3	1.7	1.6	8.72	2.2	low influence
42	3.4	2.0	1.4	1.6	8.35	2.1	low influence
43	3.4	2.1	1.9	1	8.36	2.1	low influence
44	1.6	2.0	2.4	2.8	8.72	2.2	low influence
45	3.4	2.4	3.0	3	11.8	2.9	moderate influence
Mean	3.1	2.2	1.9	1.8		2.3	Low influence



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SCHOOL OF RESEARCH & POSTGRADUATE STUDIES

DISSERTATION CORRECTION COMPLIANCE REPORT BY THE CANDIDATE (POST VIVA FORM)

Date: 26th/9/25

Name of Candidate: **NAGADYA IRENE** Reg. No: **RM17M11/063**

Title of Dissertation: **Finalist Diploma Nursing Extension Students' Self-Efficacy to use the Nursing Process to Care for Patients in Central Uganda.**

SN	COMMENTS BY EXTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	Overall Structure & Presentation A few minor typographical errors were noted (e.g., "participants" is misspelled as "participants" on p.58), but overall readability and layout are good.	Reviewed the rest of the document for misspellings	Corrected misspelling on page 58
2	1. Introduction & Problem Statement The second objective, which focuses on	The second objective is embedded in how students develop self-efficacy in using the nursing process.	

	<p>describing the self-efficacy learning process, is not reflected in either the title or the research question. Please address this.</p> <p>A minor issue is a bit of repetition – for instance, the purpose of the study is stated in narrative form and then restated under a separate heading.</p>	<p>Although not directly stated, the title and research question are framed around outcomes of self-efficacy in using the nursing process which then include how it is developed.</p> <p>I acknowledge that the purpose of the study appears both in the narrative form within the background and again under a separate heading. This was intentional, as the first mention situates the purpose in context, while the separate heading provides a concise and clear reference point for readers.</p>	<p>page16</p> <p>Page 17</p>
3	<p>Literature Review</p> <p>A section is needed at the end to explicitly highlight the gap in knowledge that the current study fills.</p>	<p>A paragraph added to explicitly describe the gap in knowledge on page 39</p>	<p>Page 39</p>
4	<p>Methodology</p> <ul style="list-style-type: none"> • Please discuss the study population in addition to the target population. • Provide more information on the study setting—why it was chosen, the number of students, and relevant statistics that give context to the site • Strengthen the justification for methodological choices. For example, why was consecutive sampling used instead of a more robust method given the finite population? What implications does this have for the findings? • In the sampling plan, you state that consecutive sampling reduces bias, but this is not accurate. Consecutive 	<p>A discussion on study population done on page 40</p> <p>More information added for the study setting as asked.</p> <p>The site was purposively selected in accordance with the principles outlined by Polit & Beck(2012), to ensure that the accessible population possessed the characteristics necessary to achieve the study objectives</p> <p>Purposive selection allowed the researcher to focus on an accessible population that could provide</p>	<p>Added on page 40</p> <p>Page 41</p> <p>Page 41& 42</p>

	<p>sampling is not random and does not guarantee equal opportunity for participation. Please clarify and clearly describe the procedure.</p> <ul style="list-style-type: none"> • Since the study setting was purposively selected and participants were sampled consecutively, please consider whether this constitutes multistage sampling and revise accordingly. • Please avoid first-person language (e.g., “I”) throughout the methodology. Instead, use passive voice or refer to “the researcher” or “the principal investigator.” • Some sections (e.g., the self-efficacy learning process) are still written in future tense (“I will”). Please revise the entire methodology to use past tense. 	<p>relevant and reliable data.</p> <p>The study intentionally targeted a setting that had the required characteristics for the research objectives, making purposive selection both practical and appropriate. Consecutive sampling then ensured that all available and eligible students within that setting were included systematically, reducing subjective exclusion. While this limits broad generalizability, the findings remain valid for the target group and transferable to similar nursing education contexts.</p> <p>Within this setting, consecutive sampling was employed to recruit all eligible participants who were available during the data collection period to have the required sample size. This approach represented a combination of purposive (for site selection) and consecutive (for participant recruitment) sampling. It does not constitute multistage sampling, as both steps involved non-probability approaches.</p> <p>I used first person language as recommended in Polit and Beck’s (2012) textbook</p> <p>Entire methodology revised and sections changed to past tense</p>	<p>Pages 45,46,47</p> <p>48-52</p>
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5	<p>Data Presentation & Analysis</p> <ul style="list-style-type: none"> In Table 1, please explain why the age category was cut off at 30 years. For age and other numerical data, provide the mean or median with standard deviation (or interquartile range) rather than only categorical groupings. For self-efficacy scores and any key variables under Objective One, include 	<p>The age category was cut off at 30 years because the majority of Diploma Nursing Extension students are typically young adults in their 20s, while those above 30 years often represent older, mid-career learners returning for further qualification. This cut-off therefore provided a meaningful distinction between the two groups, consistent with age distributions reported in nursing education literature, and allowed clearer analysis of variations in self-efficacy across different age ranges.</p> <p>These measures such as the mean with standard deviation or median with interquartile range were not provided because the data were collected and coded directly into categorical groupings (e.g., age ranges). As such, individual raw values were not available to compute precise measures of central tendency and dispersion. Additionally, categorical presentation was considered more meaningful for describing demographic characteristics of the study population, especially given the limited sample size and the fact that age was not a primary variable of interest.</p> <p>Confidence intervals were not provided for the self-efficacy scores and variables under Objective One because the analysis was primarily descriptive in</p>	<p>Page 51</p> <p>Page 54</p> <p>Page 54</p>

	<p>confidence intervals, since the study references the target population.</p> <ul style="list-style-type: none"> • There is a mislabel in appendix referencing: the text refers to “Appendix C” for detailed performance in the nursing process, but the Table of Contents indicates this should be Appendix E. Please correct. 	<p>nature, focusing on summarizing the levels and distribution of self-efficacy within the study group. Additionally, the study involved a finite and largely accessible population of finalist Diploma Nursing Extension students, which limited the need for inferential generalization.</p> <p>Mislabel corrected in appendix referencing</p>	<p>Page 97</p>
	<p>The limitations section needs to be expanded to include:</p> <ul style="list-style-type: none"> ▪ The potential for random error due to the small sample size. ▪ Bias introduced by the sampling method used. ▪ There should also be discussion on the reliance on only one institution, which raises challenges for generalisability and external validity ▪ Since the definition of self-efficacy can vary, please include a statement noting that the findings should be interpreted with caution, given the limitations in both internal and external 	<p>Section expanded and included the following</p> <ul style="list-style-type: none"> • Bias introduced due to the sampling method used • Potential for random error due to the small sample size • Discussion on reliance on only one institution which makes generalizability difficult. <p>Statement that self-efficacy can vary was included</p>	<p>Page 70</p> <p>Page 70</p>

	validity.		
	<ul style="list-style-type: none"> Explicitly state that the research objectives were achieved and to comment on the adequacy of the methodology (e.g., “the chosen methods were sufficient to address the research problem”). 	Statement for achieving the objectives and chosen methods being sufficient was added.	Page 72

SN	COMMENTS BY VIVA VOCE PANNEL	ACTION TAKEN	INDICATOR
1			e.g. Cover page
2	<p>Methodology: consecutive sampling reduces bias, is it true? You need to check on it and make it clear.</p> <p>You need to describe the procedure of the sampling plan.</p> <p>Need to rework methodology to use past tense (and avoid the I and say the researcher).</p> <p>What new knowledge is your research bringing to the nursing field? Need to elaborate.</p> <p>Problem statement: what was the real problem you investigated? You need to ring this out clearly.</p> <p>General objective: you need to articulate this well.</p> <p>How would you tell that the diploma contributes to the self-efficacy? The design of your study is struggling. What would be the appropriate design for your study? If they came with self-efficacy</p>	<p>stated on page 41</p> <p>Sampling plan Procedure described on page 41& 42</p> <p>Revised methodology and made corrections</p> <p>Discussed in the conclusion</p> <p>Discussed in the problem statement</p> <p>This is stated as the research question</p> <p>If the study was not descriptive, then it would be comparative which would help in understanding what it was before and then after.</p>	<p>Page 41</p> <p>Page 41& 42</p> <p>Pages 40 to 52</p> <p>Page 73</p> <p>Page 16</p> <p>Page 17</p>

5	<p>form Diploma to Bachelors, where would you attribute the efficacy? Did you have a baseline? What were they at a previous level?</p> <p>You needed to have a control to measure self-efficacy, it would give you the idea eg those who had certificate and at the time when they enrolled for diploma and compare the then and now. There was a need to know where they were before they enrolled for Diploma.</p> <p>You need to point out the expected standards and where they are. You need to show this in your findings/conclusions/recommendations. You need to talk about the scope.</p> <p>Why did you limit the sample to 45?</p> <p>You needed to do more than one school considering the publication of your work.</p>	<p>The base line relied on the scope of practice defining the level of practice</p> <p>Did not have a control measure basing on the fact that my study was entirely descriptive.</p> <p>In the section of areas for further study, I stated the need for conducting longitudinal studies since the current study was entirely descriptive.</p> <p>Expected standards were stated on page 14</p> <p>The expected capacity is 50, however the number of students admitted that year was 45.</p> <p>Considering the fact that the setting was purposively selected in line with Polit & Beck's (2012) principles of selecting the setting, the institution had the characteristics that were suitable for my study.</p>	<p>Page14</p> <p>Page72</p> <p>Page 14</p> <p>Page 41&42</p>
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Nagadya Irene
Candidate's Name



Signature

Dr. Karen Drake
Supervisor's Name



Signature