

Determining the Preceptors' Participation in Influencing the Acquisition of Clinical Competencies Among Undergraduate Nursing Students in Government and Private Universities in Uganda

Kempango Joan^{1*}, Franklin Boibanda², Joyce Lugulu³ & Kintu Mugenyi Justice⁴

¹*Department of Nursing and Midwifery Sciences, Faculty of Health Sciences Victoria University, Uganda.*

²*Department of Nursing Education, Leadership Management & Research, School of Nursing and Midwifery, College of Health Sciences, Moi University, Kenya.*

³*Department of Family and Community Medicine & Medical Education, School of Medicine, College of Health Sciences, MOI University, Kenya.*

⁴*Department of Education, Senior Lecturer and Deputy Director Grants, Mountains of the Moon University Uganda.*

*Corresponding author: *Kempango Joan, Department of Nursing and Midwifery Sciences, Faculty of Health Sciences, Victoria University, Kampala, Uganda Tel +256781174156, Email kempangojoan@gmail.com.*

ABSTRACT

Like other developing countries, Uganda grapples with the critical challenge of equipping nursing students with essential clinical competencies. This happens in both government and private institutions. These competencies encompass vital nursing skills, knowledge, attitudes, and behaviors crucial for effective nursing practice. Students must improve their competencies in a clinical environment or get frustrated, suffer from low esteem, have poor clinical judgment, and face the dangers of compromising the care and safety of patients. Central to these competencies are clinical skills, such as medication administration and patient assessment, forming the basis for safe, high-quality patient care. A profound understanding of complex healthcare, including disease management and evidence-based practice, is equally crucial. Uganda's patient population confronts various chronic and acute illnesses. Addressing these challenges demands skilled nurses for patient safety and outcomes. Urgent action is required to prepare clinically competent nurses. These challenges underscore the significance of nursing students gaining proficiency in clinical competencies. The main objective of this study was to determine the influence of preceptors' participation in enabling undergraduate nursing students to acquire clinical competencies in government and private universities in Uganda. Government and private universities allows for a more comprehensive understanding of how preceptors operate in different educational contexts. Each type of institution may have unique characteristics regarding its clinical training environments, which can influence how preceptors engage with nursing students and facilitate their learning. The study site was at the eight participating universities in Uganda. The study employed a descriptive research design incorporating quantitative and qualitative methods. The participants included 101 students, eight supervisors, and 48 preceptors. Probability and non-probability sampling were done, and a sampling frame was used to select the universities and distribute the participants. Self-administered questionnaires were used for data collection after piloting. Cronbach's alpha, median, and interquartile range were calculated using SPSS 22. A P-value less or equal to 0.05 was taken as statistically significant. Results are presented in

frequencies, percentages, and tables. Qualitative data was thematically analyzed. Chi-square tests were conducted to assess associations. The study showed that the acquisition of clinical competencies is positively correlated with preceptors' participation ($r=0.783$) ($p=0.000$), students' perceptions ($r=0.775$) ($p=0.000$), Institutional factors ($r=0.668$) ($p=0.000$), and the clinical learning environment ($r=0.556$) ($p=0.000$). The study further shows that 69.9% ($n=70$) had adequate clinical learning experience, while 31% ($n=31$) had inadequate clinical learning experience. This implies moderate student supervision and an unfavorable clinical learning environment. Competency acquisition in student nurses is positively influenced by the active involvement of preceptors, students' perceptions, institutional factors, and a supportive clinical learning environment. A sufficient amount of clinical experience is pivotal in developing competent student nurses. Inadequate time for clinical practice, overcrowding, insufficient supervision and feedback, and limited resources result in incompetencies. Nursing students should receive more time to practice, and resource availability must be improved. Overcrowding of students in clinical settings should be monitored. Supervision and feedback should be provided to nursing students.

Key Words: Clinical Competencies, Undergraduate Nurses, Practicum, Competency, Preceptor, Nursing Skills

DOI 10.35942/b478r556

Cite this Article:

Kempango, J., Boibanda, F., Lugulu, J., & Kintu, J., (2025). Determining the Preceptors' Participation in Influencing the Acquisition of Clinical Competencies Among Undergraduate Nursing Students in Government and Private Universities in Uganda. *International Journal of Current Aspects*, 9(1), 1-18. <https://doi.org/10.35942/b478r556>

1.0 Introduction

1.1 Background of the Study

The terms preceptorship and mentorship are frequently used interchangeably to describe support strategies for undergraduate nursing students in clinical settings. However, mentorship typically involves a long-term, more personal relationship, while preceptorship is characterized by short-term support or assistance provided at specific intervals (Hale, 2018). This article adopts the term preceptorship. A preceptor refers to a person who serves as a role model through counseling, which is inspiring, teaching, and supporting the growth and development of an individual (the novice) for a limited amount of time to socialize the novice into a new role (Hong & Yoon, 2021). Clinical preceptors are vital in guiding and supporting students during their placements. They employ a one-to-one teaching approach known as precepting, widely used in healthcare professions (Oermann, M. H. (2024). Therefore, preceptors have a critical role in competency-based education through instruction, guidance, feedback, and assessment of students' competencies. Clinical precepting is a method aimed at enhancing the clinical competencies of nursing students following their training. Effective precepting during this training period results in highly skilled and competent nurses, ultimately improving patient care. However, clinical preceptorship has faced

various global challenges that could significantly affect the competency of nursing students as they transition into professional roles.

Evidence shows that a preceptor's support is critical to the professional development of nursing students in clinical practice, and positive experiences of a preceptor can enhance students' motivation to continue in the nursing profession (Mikkonen et al., 2020). Clinical mentoring has been embraced worldwide as an innovative approach to training and supporting nursing students during their practicum placements (Fool Chands et al., 2020 ;(Stefaniak & Dmoch-Gajzlerska, 2020). Clinical preceptorship is recognized globally for its significance in delivering quality nursing care. It should be considered an essential educational component for developing competent healthcare professionals (World Health Organization [WHO], 2020).

Research has highlighted several advantages associated with clinical mentoring for nursing students. Wissemann et al., (2022). Clinical precepting enables nursing students to apply their clinical knowledge to foster personal and professional growth. Other benefits include improved student learning outcomes during clinical practice, higher retention rates among nursing students, and reduced nursing staff shortages (Wynn, 2021). For clinical preceptorship to be effective, preceptors must exhibit qualities such as motivation, supportiveness, accessibility, compassion, trustworthiness, strong communication skills, clinical knowledge, competence, and the ability to provide constructive feedback on student performance during their practicum (Wissemann et al., 2022; Wynn et al., 2021). A good preceptor should also embody passion, kindness, reassurance, leadership, and enthusiasm (Seery, Andres, Moore-Cherry, & O'Sullivan, 2021).

Nonetheless, there are challenges related to the clinical precepting of nursing students. These include staffing shortages that result in nursing students being used as part of the workforce and a lack of medical equipment (Manamela, 2019). Additionally, some professional nurses may lack the necessary enthusiasm for mentoring students. This lack of engagement often leads them to prioritize completing their clinical and administrative duties over mentoring responsibilities, negatively affecting the quality of clinical preceptorships (Wynn et al., 2021). These challenges create a disconnect between theory and practice in the clinical preceptorship of nursing students, adversely affecting the development of highly competent nurses (Jagannath et al., 2022). The inadequacy of mentoring can lead to incompetence among nursing students upon graduation. This affects nursing practice, as they may not have received sufficient guidance. Furthermore, evidence indicates that a preceptor's support is crucial for the professional development of nursing students in clinical settings; positive mentoring experiences can enhance students' motivation to pursue careers in nursing (Mikkonen et al., 2020). The repercussions of inadequate mentoring are evident in poor-quality patient care, increased patient loads in healthcare facilities, and rising healthcare costs (Fawaz, Hamdan-Mansour, & Tassi, 2018).

1.2 Research Problem

Nursing students are trained both in classes and in the clinical area. The theory part includes basic sciences that are applied in the clinical area, including Anatomy, Physiology, Biochemistry, Microbiology, pharmacology, fundamentals of nursing, pathophysiology, sociology, and psychology, to mention but a few. How this is planned in the curriculum can influence the ability of the students to integrate theory and practice. This concerns the strategies or processes to incorporate theoretical knowledge into practice. However, it has been noted that some of the

students have challenges meeting the patient's health needs. Nevertheless, there is still a gap in the database when transferring classroom learning to clinical practice, as observed by (González-Gutiérrez, & Sánchez-Reina, 2022; Can't et al., 2013). Acquisition of clinical competencies is an essential part of learning for student nurses; inadequate clinical competencies can compromise patient care and safety, as stated by (Karami et al., 2021).

In Uganda, the effective acquisition of clinical competencies among undergraduate nursing students is critical for ensuring quality healthcare delivery. However, a significant gap exists in understanding how preceptor involvement influences this competency acquisition process. Despite the recognized importance of preceptors in bridging theoretical knowledge and practical application, various factors may hinder their effectiveness. Moreover, previous studies indicate that while preceptors play a pivotal role in shaping nursing students' professional development, challenges such as high workloads, unclear assessment criteria, and varying levels of engagement can limit their involvement in the educational process (Khalil, M. A., & Sayed, A. 2024). This situation raises concerns about how prepared nursing graduates are to meet the demands of the healthcare sector. Therefore, this research aims to systematically investigate the extent to which preceptors influence the acquisition of clinical competencies among nursing students in both government and private universities in Uganda, identifying barriers and facilitators to effective preceptorship in clinical settings.

1.3 Objectives of the Study

The general objective was to determine the influence of preceptors' participation, in enabling undergraduate nursing students to acquire clinical competencies in government and private universities in Uganda.

This study was guided by the following specific objectives which were to:

- i. Explore undergraduate nursing student's perceptions of what influences the acquisition of clinical competencies in government and private universities in Uganda.
- ii. Establish the clinical environment factors that influence the acquisition of clinical competencies among undergraduate nursing students in Government and private universities in Uganda.
- iii. Determine the influence of preceptors' participation, in enabling undergraduate nursing students to acquire clinical competencies in government and private universities in Uganda.
- iv. Investigate the institutional factors that influence the acquisition of clinical competencies among undergraduate nursing students in Government and private universities in Uganda.

2.0 Literature Review

In the literature reviewed, preceptorship and mentorship are frequently used interchangeably to describe methods that assist undergraduate nursing students in their clinical learning experiences. Mentorship typically involves a more extensive and personal relationship over a longer duration, while preceptorship offers shorter, time-limited support (Hale, 2018). Consequently, this article will focus on the concept of preceptorship. The preceptorship model can significantly impact the learning process for nursing students during their clinical placements, helping them develop essential caring attributes and apply situational knowledge (Lawal et al., 2015; Serrano-Gallardo et al., 2016). The quality of the clinical learning environment is influenced by several factors, including the availability of learning opportunities, appropriate supervision, and support from

preceptors (McSharry & Lathlean, 2017). The relationship between preceptors and students, as well as with experienced nurses, is a crucial factor that can either enhance or hinder the clinical learning experience (Lawal et al., 2015; McSharry & Lathlean, 2017).

Globally, the clinical precepting of nursing students during practicum placements is essential and warrants investment. This investment ensures that graduates are competent and confident nurses capable of delivering quality and safe healthcare services while enhancing patient care standards (Karanja & Oule, 2021; Wissemann et al., 2022).

Many student nurses believe preceptors are the ideal way to bridge the gap between theory and practice, as they are typically present in the clinical learning environment (Watson, 2020). Preceptors are commonly utilized to improve the clinical nursing education system. They are expected to demonstrate appropriate behavior to serve as role models for their student nurses. Clinical learning and teaching can be challenging or non-existent without preceptors. Al-Dmour (2020) emphasizes the crucial role of preceptors in demonstrating responsibility and a willingness to assist students during clinical learning. Preceptors not only take on the roles of responsibility and support. Nevertheless, they also embody those qualities in a visible and meaningful way to the students they are mentoring. Myrick (2019) points out that the preceptor has to ensure that their student nurses are academically and emotionally prepared and adequately empowered to succeed.

Preceptorship is increasingly becoming an integral part of nursing education and practice. Many nursing institutions and healthcare organizations have introduced structured preceptorship programs offering formal training and support for preceptors and mentees (Fletcher & Blair, 2019). These programs often concentrate on developing key competencies for preceptors, such as communication, leadership, and critical thinking skills. However, much must be done to ensure that preceptorship is accessible and effective for all nurses, regardless of their background or experience. Therefore, preceptorship programs must address diversity and inclusion issues to create an equitable learning environment for all students. Adequate resources and support are essential for preceptors to mentor and guide students effectively. In addition, fostering a culture that values preceptorship encourages professional development and creates a sense of belonging for all nurses.

One of the critical changes in preceptorship in nursing has been the shift from a hierarchical, one-way relationship to a more collaborative, two-way relationship between the preceptor and preceptee. This shift has been driven by changes in the healthcare system, including the increasing emphasis on patient-centered care, interprofessional collaboration, and the need to address workforce shortages and retention (Barrett, 2023). Another significant change has been the increasing recognition of the importance of diversity and inclusion in preceptorship. Historically, preceptorship in nursing was often limited to individuals who shared similar backgrounds, experiences, and perspectives. However, there is growing awareness of the need to ensure that preceptorship is accessible to individuals from diverse backgrounds, including those from underrepresented groups (Jackson & Warren, 2014).

Challenges in preceptorship have included role ambiguity, power imbalances, and the need for adequate support and training for preceptors. Sometimes, preceptors may feel uncertain about their roles and responsibilities or struggle to balance their clinical and preceptor roles. This can also occur, mainly when the property is over the preceptee, such as in the workplace (Barker et al., 2017). Finally, there is a need for adequate support and training for preceptors to ensure they have the competencies and resources to provide adequate guidance and a state of preceptorship in

nursing. Today, preceptorship in nursing is widely recognized as an essential component of professional development and clinical practice. The American Nurses Association (ANA) has developed guidelines for precepting in nursing, emphasizing the importance of creating a positive learning environment, promoting open communication, and establishing clear expectations and goals for the precepting relationship (ANA, 2016).

Many student nurses believe preceptors are the ideal way to bridge the gap between theory and practice, as they are typically present in the clinical learning environment (Watson, 2020). Preceptors are commonly utilized to improve the clinical nursing education system. They are expected to demonstrate appropriate behavior to serve as role models for their student nurses. Clinical learning and teaching can be challenging or non-existent without preceptors. Al-Dmour (2020) emphasizes the crucial role of preceptors in demonstrating responsibility and a willingness to assist students during clinical learning. Preceptors not only take on the roles of responsibility and support. Nevertheless, they also embody those qualities in a visible and meaningful way to the students they are mentoring. Myrick (2019) points out that the preceptor has to ensure that their student nurses are academically and emotionally prepared and adequately empowered to succeed.

Preceptorship is increasingly becoming an integral part of nursing education and practice. Many nursing institutions and healthcare organizations have introduced structured preceptorship programs offering formal training and support for preceptors and mentees (Fletcher & Blair, 2019). These programs often concentrate on developing key competencies for preceptors, such as communication, leadership, and critical thinking skills. However, much must be done to ensure that preceptorship is accessible and effective for all nurses, regardless of their background or experience. Adequate resources and support are essential for preceptors to mentor and guide students effectively. Fostering a culture that values preceptorship encourages professional development and creates a sense of belonging for all nurses involved.

Precepting in the clinical learning environment is not without its challenges. One of the most significant challenges is finding the time to establish and maintain effective preceptor relationships. Preceptors may have busy schedules and competing demands on their time, making the level of support and guidance that preceptors need complex and challenging. Preceptors may also face challenges in adapting their teaching and feedback styles to suit the individual learning needs of their mentees. Additionally, preceptors may struggle to balance their role as preceptors with their other responsibilities, such as providing patient care (Tuttle, 2019). Consequently, precepting and signing students in the clinical learning environment is critical to students' learning, practice, and professional development. Effective preceptor relationships can help student nurses develop the skills and knowledge required for safe and competent patient care during their professional growth and development. While preceptorship in the clinical learning environment is not without its challenges, the benefits of precepting both preceptors and mentees make it a worthwhile investment in the future of nursing.

Moreover, workload, lack of role clarity, and lack of knowledge among Lecturers and Preceptors influence students' clinical learning (Smith et al., 2023). Clinical Preceptorship is a pragmatic way of giving guidance and discussions to students during clinical practice to encourage continuous professional education to maintain quality health care (WHO, 2020). It is one of the main tools used to promote learning for students who are in clinical practice in Health facilities. Several studies have indicated several factors that influence the acquisition of clinical competency.

Some of these factors include effective inter-communication between students and preceptors on one side and supervisors on another side.

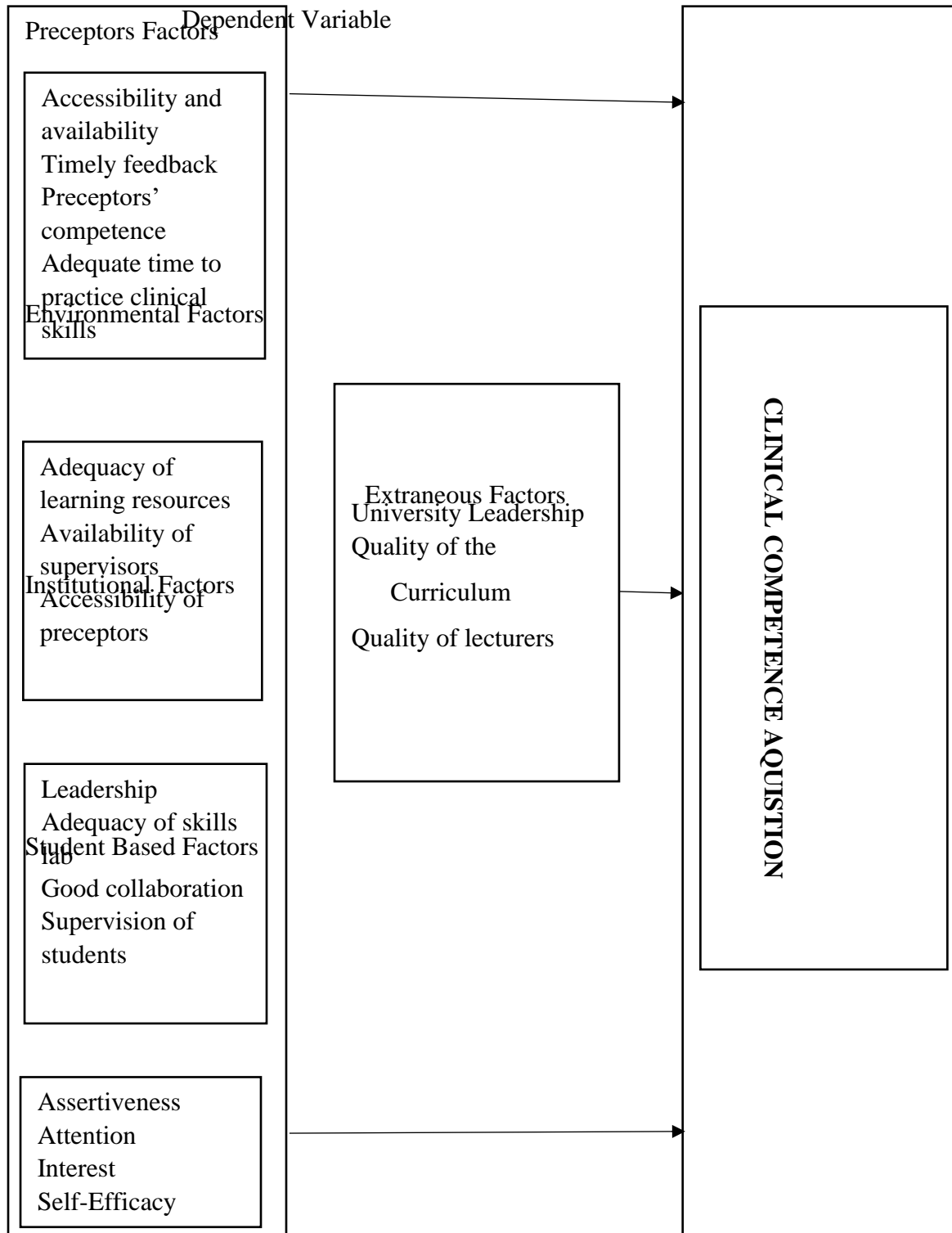
Additionally, a conducive clinical learning environment, the competency of the preceptors and supervisors, and effective feedback equally influence the acquisition of clinical competencies (Melnyk & Fineout-Overholt, 2019). Clinical placements successfully execute the aims of clinical education in the clinical practice environment. These aims include but are not limited to the quantity and quality of learning students experience and the degree to which the experience is personalized to meet student needs (Can't et al., 2016). Therefore, clinical placements are essential for ensuring nursing students develop the competencies to provide safe and effective care in clinical practice. Clinical placements are primarily defined in terms of the student learning process and occur in high-quality environments for clinical learning. Some other intricate factors affect students' acquisition of clinical competencies. These may include the curriculum philosophy, the context for clinical nursing training, and the resources needed for practical clinical training in nursing (Oermann et al., 2018). Therefore, each university must make decisions congruent with its planned curriculum to acquire clinical competencies successfully. This study was carried out to assess factors associated with the acquisition of clinical competencies among undergraduate nursing students in Government and private universities in Uganda. Therefore, skilled and dedicated preceptors are essential for guiding nursing students toward becoming competent and compassionate professionals. A preceptor's accessibility, clear communication, and ability to demonstrate critical skills greatly influence a student's clinical development. Preceptorship has become more collaborative and structured, vital to nursing practice and education. While technical expertise is crucial, a preceptor's positive attitude and interpersonal skills are equally important in fostering a passion for lifelong learning and a commitment to high-quality care. Effective preceptorship ultimately shapes the future of healthcare by empowering nurses to impact patient outcomes positively.

2.1 Conceptual Framework

Fig 1 shows the linkage between different factors and competence acquisition of bachelor of nursing students. It shows how competence acquisition as a dependent variable is related to the dependent variables: preceptor, environmental, institutional, and student factors. The researcher also identified some extraneous variables that may affect the acquisition of clinical competencies, including the university management, facilities, and the quality of lectures, among many others. The variables are part of the input and process explained in Ludwig's Input-Output model. They play a role in determining output and academic performance. If these variables are not controlled, they may interfere with the study results. The researcher maintained the effect of the extraneous variables by randomly selecting students because randomization is one way to attempt to control many extraneous variables.

Fig 1 Conceptual framework for the factors affecting the acquisition of competencies

Independent Variables



Source: Adopted from Koontz and Weihrich (1988).

3.0: Methods

The study used a mixed-methods cross-sectional research design. This design best suited the study since it used information obtained at a particular time. The design was considered appropriate in achieving the study objectives. The study site was conducted at the eight participating universities from Uganda's central and western parts. These were government and private Universities. The study employed a descriptive research design incorporating quantitative and qualitative methods. The participants included 108 students, eight supervisors, and 48 preceptors. Probability and non-probability sampling were done, and a sampling frame was used to select the universities and distribute the participants to the eight selected universities. The researcher used data collection assistants. The assistants had a minimum of a bachelor's degree. The research assistants underwent three days of training on identifying the respondents, approaching them, being courteous when engaging the respondents, communicating, and administering the questionnaires.

The research assistants administered the first thirty questionnaires with the researcher to ensure the professional administration of the questionnaires. The research assistants directly delivered the questionnaires to the respondents at the said campuses. The respondents were informed verbally and in writing about the study. Those who consented to fill out the questionnaire were provided with a questionnaire to fill out, and upon completing the questionnaire, they collected and sealed it in an envelope. The questionnaires were collected daily upon completion by the research assistants in specific areas for analysis. A daily review of the questionnaires was carried out, and the researcher collected the questionnaires. Raw data entries were reviewed for data entry errors and corrected before analyzing data to ensure accuracy and consistency. Data were all coded and entered into a database, as well as quantitative data. Interviews were conducted by the researcher with the assistance of the research assistants.

Data analysis was conducted using the Statistical Package for Social Science (SPSS) software version 22 for Windows. Both descriptive and inferential statistics were used. Descriptive statistics included frequencies, percentages, means, and standard deviations, while inferential statistics included the chi-test. Quantitative data were presented in tables, graphs, and charts. Responses to qualitative data were thematically analyzed.

4.0 Results

The study sought to explore the preceptors' participation in competency acquisition among undergraduate nursing students in government and private universities in Uganda. To achieve this objective, the respondents were first asked whether the preceptors were available and accessible, gave feedback, prepared students before practicum, had a positive attitude, understood and defined simulated medical laboratory experiences, both actual and anticipated, and why they thought so. The scores from their responses were as indicated below.

Table showing Student respondents according to age.

Table 1: Age

Age	Frequency	Percentage	Cumulative percentage
21 – 24	43	43	43
25 – 28	28	28	71
29 – 32	12	12	83
33 – 36	7	7	90
37 – 40	7	7	97
41 – Above	3	3	100
Total	101	100	

The highest percentage of respondents (43%) was aged between 21 and 24 years, and the least number of respondents (3%) were above 40 years of age. The mean age of the respondents was 22.4 years, which is the appropriate mean age for tertiary students in Uganda. Over three-quarters (80%) of the respondents were below 28 years old, which is also the right age bracket for university students in Uganda. Less than three percent of the respondents were over 41 years old; such respondents studied and worked simultaneously, and there were few in government and private universities in Uganda.

Table 2: Level of Clinical Competency Acquisition

Clinical Competences	Agree n (%)	Neutral n (%)	Disagree n (%)
Apply critical thinking to patient care	68(68)	14(14)	18(18)
Develop a care plan for patients.	58(57.4)	36(35.6)	7(6.9)
Assess the nutrition and fluid balance of the Patient.	68(67.3)	20(19.8)	13(12.9)
Administer intravenous and intramuscular Medications	67(67.6)	20(20.2)	12(12.1)
Perform urinary catheter insertion and care	74 (73.2)	15(14.9)	12(11.9)
Perform pre-operative and post-operative care.	72(71.3)	11(10.9)	18(17.8)
Administer blood transfusion	69(68.3)	7(6.9)	25(24.8)
Demonstrate capacity to secure the patient's upper airway	74(74.8)	6(6.1)	19(19.2)
Perform chest tube care with underwater	51(51)	23(23)	26(26)
Collect information from the client (history taking) and interpretation of their laboratory results.	69(68.3)	14(13.9)	18(17.8)
Analyze and interpret data obtained in the	51(50.5)	8(7.9)	42(41.6)

client's assessments

The majority of the study participants mentioned that they were able to secure the patient's upper airway (74.8%), catheterize patients (73.2%), perform pre-and postoperative care (71.3%), take the patient's health history, and interpret their laboratory results (68.3%), administer blood to patients (68.3%), could apply critical thinking while caring for patients (68%), administer intravenous and intramuscular medications (67.6%), and could assess the patients' nutritional and fluid status (67.3%). Nevertheless, fewer study participants could develop patients' care plans (57.4%), perform chest tube care during underwater seal drainage (51%), and analyze and interpret data obtained during their client's assessments (51%).

Table 3: Showing Summary of the descriptive statistics and ANOVA results for the

Acquired Clinical competency students perceived as well grasped	Frequency	Mean	Standard deviation
History taking and examination for a differential diagnosis	101	3.2	1.2
Ability to perform chest care with the underwater bag	100	3.34	1.1
Ability to administer a blood transfusion	101	3.6	1.2
Administer pre and post-operative care for patients	101	3.7	1.0
Insert and care for a urinary catheter	101	3.9	1.2
Confidently administer intravenous medications	101	3.9	1.2
Assess Nutrition and fluid balance	101	3.8	1.0
Develop a patient care plan	101	3.7	0.9
Total average score on competence acquisition	101	3.63	0.59

Table 3 above shows that students perform highest in insertion and care for urinary catheters and administering IM and IV medicines (3.9) and lowest in history, taking the examination, and making differential diagnoses (3.2). Considering the means reflected, the students rated themselves as performing reasonably well. Since personal variables affect performance in applying acquired skills, the researcher thought it essential to relate background variables to the dependent variable confidence in applying acquired skills. Acquisition of clinical skills was aggregated in one index (Acquiskill) with arithmetic mean = 3.63 and standard deviation =0.59

Table 4: Summary of the descriptive statistics and ANOVA results for the relationship between the number of placements students attended and application of acquired clinical skills (*Aquicomp*)

Number of clinical placements attended	Frequency	Mean	St. deviation	F	Sig.
1 -2 placements	18	3.6	1	0.5	0.77
3 placements	26	3.6	0.2		
4 placements	30	3.7	0.6		
5 + placements	27	3.6	0.6		
Overall	101	3.6	0.6		

Preceptors' participation in enabling undergraduate nursing students to acquire clinical competencies in government and private universities in Uganda.

According to objective three above, the hypothesis was stated; "There is a positive relationship between preceptors' participation in enabling students' acquisition of clinical competencies and acquisition of competencies by undergraduate students." To test this hypothesis, the researcher asked respondents to rate the level of preceptors' participation in terms of availability, accessibility, setting objectives, demonstration of skills, attitude, and interpersonal relationships. The rating was according to the Likert scale, with one representing strongly disagree, two representing disagree, three representing neither agree nor disagree, four representing agree, and five representing strongly agree. A summary of the descriptive statistics of respondents' rating their level of skill application as per their conceived perceptions on preceptors' participation is given in Table 4 below;

Table 5: Preceptors' Participation in enabling nursing students to acquire clinical competencies in government and private universities in Uganda.

Preceptors' participation in competency acquisition	Freq	M	SD
Preceptor available whenever needed by students	101	3.5	1.0
Preceptor accessible physically when required	101	3.6	1.1
Preceptor provides students with learning objectives	101	2.7	1.3
preceptor demonstrates, and students practice under supervision	101	3.39	1.14
The preceptor has good behavior and a positive attitude	100	3.63	1.2
The preceptor has excellent and regular communication when needed	101	3.2	1.2
preceptors prepare students before placements	100	3.6	1.0

Preceptors' participation in competency acquisition	Freq	M	SD
the preceptor is competent with professional skills	101	3.9	1.1
The preceptor has an adequate interpersonal relationship with the student	99	4.1	0.8
preceptor gives adequate and timely feedback to students	99	3.6	1.1

According to the means in Table 4 above, the respondents indicated interpersonal skills between preceptor and student (4.1) and their competency with high professional skills (3.9) score highest in enabling students to acquire and confidently apply clinical skills. The results of Table 4 imply that the respondents gained many skills from the preceptor's personal competencies and professional knowledge. For purposes of testing Hypothesis Three, that is, whether there was a positive relationship between preceptors' participation and acquisition of clinical competencies, all the ten items on preceptors (Appendix A, Section B) were aggregated into one index (Preceptor Part) with arithmetic mean = 3.7 and standard deviation = 0.6 as shown in Table 5;

Table 6: Summary of the Pearson Product Moment correlation analysis for the relationship between Preceptors' participation in enabling nursing students to acquire competencies (Preceptor part) and student acquisition of clinical competencies (Aquicom).

		Average Competency Score	Preceptor Participation
Average Competency Score	Pearson Correlation	1	.781**
	Sig. (2-tailed)		0.000
	N	101	101
Preceptor Participation	Pearson Correlation	.781**	1
	Sig. (2-tailed)	0.000	
	N	101	101

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

Table 6 above illustrates that Pearson's Correlation $r = 0.781$ computed for the Preceptor's participation in enabling nursing students to acquire competencies (Preceptor Part) and acquisition of competencies (Aquicom) was positive with the significance of $p\text{-value} = 0.000$, which is less than $\text{Alpha} = 0.01$ or even $\text{alpha} = 0.05$. This result indicates a significant relationship between preceptor participation in enabling nursing students to acquire competencies. Thus, the research hypothesis confirms a positive relationship between preceptors' participation and the acquisition of clinical competencies among bachelor of nursing students.

The students' perception of preceptors' participation in enabling the students' acquisition of clinical competencies was thematically analysed using focus group discussions to supplement the quantitative analysis of preceptors' participation. Most students mentioned a lack of respect and little feedback from the preceptors, though some are dedicated and mentioned the congestion of the wards.

Students intensely disliked being scolded in front of their peers. Here are some examples of such statements:

"While performing a procedure in the ward, there are instances where, as a student, you may lack the necessary skill and struggle to execute the procedure competently. In such situations, staff members criticize you immediately. This significantly lowers my morale, making me uneasy about performing procedures with them. I prefer to receive criticism in private when there is an issue, rather than in the presence of all patients, as it erodes trust" (Participant in focus group discussion 1).

"When a student makes a mistake, the preceptor tends to shout and belittle them in front of patients and everyone else. The preceptors on the ward think that a bachelor of nursing student should know every procedure. Most of them forget that we are still students and that we have come to learn. (Participant in focus group discussion 3).

Inadequate Clinical Assessments and Feedback

Students raised concerns about the untimely completion of clinical assessments and the inconsistent provision of feedback. Some students shared experiences where their clinical assessments for a specific departmental allocation were overlooked during clinical placement. To address this, an arrangement was made to defer and conduct the assessments at a different hospital and a convenient time for the preceptors. However, students complained that this approach led to assessments in various areas based on what they had learned in their original clinical placement. Others pointed out that deferring clinical assessment worked to their disadvantage, causing stress due to accumulating multiple assessments quickly. One student in a focus group discussion mentioned:

"Most clinical assessments originally scheduled for completion in the first year are deferred to the third year. This situation creates heightened pressure and delays in receiving feedback, as the assessments become too numerous for preceptors to mark within the required time" (Participant in Focus Group Discussion 2).

"Assessment is not constantly provided and is not provided on time. Sometimes, you end the rotation without knowing how you previously performed. This can demoralize us as students."

Crowding of the wards

Students were concerned about the large number of students in the different wards. This was caused by the various universities and schools simultaneously attending the practicum at the same site.

The wards are so congested with other students from other universities and schools. You find yourselves competing for patients.

There are so many students on the ward. I do not know why all universities and schools plan to come for practice simultaneously.

5.0 Conclusions and Recommendations

5.1 Conclusions

The results from the analysis of all variables examined indicated a significant relationship. Therefore, results confirm a positive relationship between the extent of preceptors' participation and the influence of the undergraduate nursing students' acquisition of clinical competencies. The research concludes that the importance of preceptors' participation and involvement correlates with students' acquisition of clinical competencies. The study also confirms that the preceptor's competencies in clinical preceptorship have a positive relationship with the student's ability to acquire clinical competencies.

5.2 Recommendations

Based on the research findings, the study makes several recommendations. The study revealed that the universities training nurses in the country should adopt the preceptorship scheme as a mandatory requirement for students to practice and graduate. The allocated preceptors should be given orientations and training on managing students' expectations, communicating correctly, and assessing their students' satisfaction during the preceptorship process. The university administration should develop a scheme for students to evaluate how their preceptors support them in acquiring the competencies. Overcrowding on the wards must be minimized through early bookings to practice so that the hospitals get a minimum number of students.

References

- Abu-Saad Huijjer, H., & Khatib, M. (2023). Theory-Practice Gap in Nursing Education At Arab American University: A Cross-sectional Study. Research Gate.
- Al-Dmour, H. A. H. (2020). The role of preceptors in nursing education: Responsibilities and support during clinical placements for student nurses in Jordanian hospitals. *Nurse Education Today*, 90, 104457. <https://doi.org/10.1016/j.nedt.2020.104457>
- Asirifi M., Ogilvie L., Barton S., Aniteye P., Stobart K., Bilash O., Eliason C., Achempim-Ansong G., Kwashie A., Aziato L. (2019). Reconceptualizing preceptorship in Clinical nursing education in Ghana. *International Journal of Africa Nursing Sciences*, 10(1) 159-166. <https://doi.org/10.1016/j.ijans.2019.04.004>
- Atakro, P. E., & Gross, J. (2021). Preceptorship model of clinical teaching: Enhancing Student nurses' learning experiences. *International Journal of Nursing Studies*, 119, 103940. <https://doi.org/10.1016/j.ijnurstu.2021.103940> [2]
- Barker, J., McCarthy, A., & O'Sullivan, M. (2017). Challenges in preceptorship: Role Ambiguity and power dynamics in nursing education. *International Journal of Nursing Studies*, 74, 43-51. <https://doi.org/10.1016/j.ijnurstu.2017.05.001>
- Barnum, M. G., Guyer, S., Levy, L. S., & Graham, C. (2009). The supervision, Questioning, feedback model of clinical teaching: A practical approach. In T. G. Weidner (Ed.), *Feedback in Clinical Education, Part II: Approved Clinical Instructor and Athletic Training Students* (pp. 1–10).
- Barrett, R. (2023). The evolving role of preceptorship in nursing education: A focus on Collaboration and inclusivity. *Journal of Nursing Education and Practice*, 13(2), 15– 23. <https://doi.org/10.5430/jnep.v13n2p15>
- Bifarin, T., & Storehouse, D. (2017). Clinical supervision in nursing education: A review of the literature. *Nurse Education Today*, 54, 19-25. <https://doi.org/10.1016/j.nedt.2017.04.003>
- Bvumbwe T., Malema A., Chipeta M. (2015). Registered Nurses' experiences with clinical teaching environment in Malawi. *Open Journal of Nursing*, 05(10), 927–934. <https://doi.org/10.4236/ojn.2015.510098>.

- Can't, R., Cooper, S., & Bagnasco, A. (2016). The impact of clinical placements on Nursing students' learning: A systematic review of the literature. *Nurse Education Today*, 36, 130-136. <https://doi.org/10.1016/j.nedt.2015.08.001>
- Connelly, L. M. (2013). Demographic data in research studies. *Medsurg Nursing*, 22(4), 269-270. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/24147328/>
- Donough, C., & Van der Heever, J. (2019). The role of preceptors in clinical education: A review of the literature. *Journal of Nursing Education*, 58(10), 563-570. <https://doi.org/10.3928/01484834-20190916-01> [1]
- Dowling, D. (2001). Forms of preceptorship: An exploration of preceptor and preceptee Relationships in nursing education. *Nursing Education Perspectives*, 22(3), 132– 138.
- Duchscher, J. E. B., & Cowin, L. S. (2004). The impact of preceptorship on the transition from student to registered nurse. *Nursing Leadership*, 17(3), 54-67. <https://doi.org/10.12927/cjnl.2004.17295>
- Ende, J. (1983). Feedback in clinical medical education. *Journal of the American Medical Association*, 250(6), 777–781.
- Fletcher, J., & Blair, L. (2019). Structured preceptorship programs in nursing education: A review of their effectiveness and implementation challenges. *International Journal of Nursing Studies*, 93, 112-119. <https://doi.org/10.1016/j.ijnurstu.2019.01.004>
- Hale, C. (2018). Preceptorship and mentorship in nursing education: A review of the Literature. *Nurse Education Today*, 68, 35–39. <https://doi.org/10.1016/j.nedt.2018.05.012>
- Hong, H., & Yoon, H. (2021). A Cross-sectional study on nursing preceptors' Perspectives About their roles and responsibilities. *SAGE Open Nursing*, 8, Article 23779608241288756. <https://doi.org/10.1177/23779608241288756>
- Jackson, C., & Warren, C. (2014). Diversity in nursing: The importance of preceptorship in fostering inclusive clinical environments. *Nursing Forum*, 49(1), 29-37. <https://doi.org/10.1111/nuf.12036>.
- Jamshidi N., Molazem Z., Sharif F., Torabizadeh C., Kalyani M. N. (2016). The Challenges of Nursing Students in the Clinical Learning Environment: A Qualitative Study. *Scientific World Journal*, 2016, 7. <https://doi.org/10.1155/2016/1846178>
- Khalil, M. A., & Sayed, A. (2024). Challenges of Precepting Undergraduate Nursing Students. *Journal of Nursing Education and Practice*, 14(1), 50-60.
- Kalyani, R., et al. (2021). Experiences of Undergraduate Nursing Students during clinical practice at healthcare facilities in the Boland Overberg area in Western Cape, South Africa. *International Journal of Nursing Practice*, 27(4), e1295 <https://doi.org/10.1111/ijn.12954>
- Karanja, J., & Oule, M. (2021). Investing in preceptorship for nursing students: A global Perspective on clinical education practices and outcomes. *Nursing Management*, 28(2), 16-22. <https://doi.org/10.7748/nm2021.e2070>
- Lawal, F., et al. (2015). Influence of preceptorship on nursing students' clinical learning Experiences. *Nursing Education Today*, 35(3), 374-379. <https://doi.org/10.1016/j.nedt.2014.10.007>
- Lawal, F.B., McCarthy, A., & O'Sullivan, M. (2015). The role of preceptors in the Development of clinical skills: A systematic review. *International Journal of Nursing Studies*, 52(4), 1186–1198. <https://doi.org/10.1016/j.ijnurstu.2015.01.003>
- Lienert-Brown, K., & Kearney, M. (2018). The supervisory relationship: A key to the The success of preceptorship in nursing education. *Journal of Nursing Education and Practice*, 8(2), 45–52.
- McSharry, S., & Lathlean, J. (2017). The role of preceptors in nursing education: A systematic review. *Nurse Education Today*, 54, 74–81.

- McSharry, S., & Lathlean, J. (2017). The impact of the clinical learning environment on Nursing students' learning: A systematic review of the literature. *Nurse Education Today*, 57, 73–81. <https://doi.org/10.1016/j.nedt.2017.07.004>
- Melnyk, B.M., & Fineout-Overholt. (2019). Evidence-based practice in nursing & healthcare: A guide to best practice (4th ed.). Wolters Kluwer.
- Myrick, F. (2019). Preceptor preparation: Ensuring success for students in clinical placements Through mentorship and support strategies in nursing education programs. *Journal of Nursing Education and Practice*, 9(4),1–7. <https://doi.org/10.5430/jnep.v9n4p1>
- Nicoyishimiye, I., Casaba, E., & Niyonzima, J. (2021). Clinical preceptor's role in the development of nursing training based on professional and competency frameworks in two healthcare settings. *Nursing Education Today*, 100, 104861. <https://doi.org/10.1016/j.nedt.2021.104861>
- Nottingham, J., & Henning, J. (2014). The role of feedback in clinical education: A systematic review of the literature. *Journal of Nursing Education*, 53(3), 145–153.
- Nursing and Midwifery Council. (2020) Principles of preceptorship. Retrieved from <https://www.nmc.org.uk/standards/guidance/preceptorship/>
- Nursing and Midwifery Council (NMC) (2018) Standards to support learning and assessment in practice. Retrieved from <https://www.nmc.org.uk/globalassets/sitedocuments/standards/nmc-standards-to-support-learning-assessment.pdf>
- Onbe, K., Nakanishi, & Takahashi. (2020) Nursing preceptors' perspectives about their roles and challenges in clinical education: A cross-sectional study in Japan. *Nursing Open*, 7(2), 564–572. <https://doi.org/10.1002/nop2.516>
- Oermann, M., Lentz, L., & McCarthy, A. (2018). Factors influencing the acquisition of clinical Competencies among nursing students: A systematic review of the literature. *International Journal of Nursing Studies*, 83, 16–25.
- Serrano-Gallardo., et al. (2016) Preceptorship: A strategy to enhance nursing students' clinical Learning. *Journal of Nursing Education and Practice*,6(9),1–8. <https://doi.org/10.5430/jnep.v6n9p1>
- Serrano-Gallardo, P., & De la Torre-Diez. (2016) The impact of preceptorship on nursing Students' clinical learning: A systematic review. *Journal of Nursing Education and Practice*, 6(9), 1–10. <https://doi.org/10.5430/jnep.v6n9p1>
- Smith, Brown & Green. (2023) Factors impacting clinical learning for nursing students: A focus on preceptorship challenges. *Journal of Nursing Education and Practice*, 13 (1), 23–31. <https://doi.org/10.5430/jnep.v13n1p23>
- Sawyer, A., Ritchie, J., & McCulloch, G. (2018). The role of adolescence in learning: A review of the literature. *Journal of Educational Psychology*, 110(5), 712–726. doi:10.1037/edu0000276
- Tuttle, S. (2019). The challenges of balancing preceptorship and patient care in nursing education. *Nursing Education Perspectives*, 40(1), 44–45. <https://doi.org/10.1097/01.NEP.0000000000000362>
- Ugwu, N., et al. (2024). Theory-Practice Gap during Clinical Learning: A Descriptive Qualitative Study. PMC. Retrieved from [PMC11417294] (<https://pmc.ncbi.nlm.nih.gov/articles/PMC11417294/>).
- Watson, R.T. (2020). Bridging the gap between theory and practice: The role of preceptors in nursing education and clinical practice settings. *Nursing Standard*, 35(3), 45–50. <https://doi.org/10.7748/ns2020.e11548>
- World Health Organization (WHO) (2020) Clinical preceptorship: A guide for health Professionals. Retrieved from <https://www.who.int/publications/i/item/clinical-Preceptorship-guide>.
- World Health Organization (WHO) (2020) Transforming and scaling up health professionals Education and training: Guidelines 2013. Retrieved from <https://www.who.int/publications/i/item/9789241506502>

Yonge, O., Myrick., Ferguson., & Grundy. (2013) the role of preceptorship in rural nursing education: Challenges and opportunities for students and preceptors in rural settings. *Journal of Nursing Education and Practice*,3(5),1–8. <https://doi.org/10.5430/jnep.v3n5p1>.

This is an open-access article published and distributed under the terms and conditions of the



[Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/) of United States unless otherwise stated. Access, citation and distribution of this article is allowed with full recognition of the authors and the source. Copyright, content ownership and liability for content herein remain with the authors.

