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Nursing Students' Practical Training Experiences in Finland

An Integrated Review

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Thesis abstract

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As the healthcare industry continues to evolve, nurses are required to take on more professional responsibilities to meet the complex needs of the patients. Nursing education is regulated, and includes practical training for hands-on experience. Advanced education and a supportive learning environment enhance competencies and patient safety. Continuous development of core competencies through nursing education and practical trainings are important for nurses, which can be achieved through standardized assessment tools, clear objectives, mentors' support, and supportive clinical environments.

This thesis investigates how various clinical trainings support the development of students' clinical competence and suggests a model based on positive experiences to improve the theory-practice connection. Integrative reviews (IR) is used as a methodology to evaluate and synthesize sources for evidence-based practice. This literature review examines 11 articles focusing on nursing students' clinical experiences. The data was thematically analyzed, resulting in the identification of three key themes: students' experiences, clinical learning environment, and effective practices for developing clinical competence.

A clinical learning environment supporting equality, competence, and integration are crucial for students' career growth. Effective learning requires feedback and goal-oriented approaches. Collaboration between educational institutions and healthcare can facilitate student-friendly environments. Students value named mentors, goal discussions, final assessments, and continue support. Creating a supportive CLE with designated mentors and evidence-based knowledge integration is crucial for student nurses to enhance competence. Competence in language and culture is important for nursing students and mentors. Mentors and nurse educators play a critical role in providing guidance and constructive feedback. Furthermore, research on nursing students' experiences can improve education, evaluate competencies and enhance learning in clinical placement.

¹ Keywords: clinical learning environment, competencies, experiences, nursing student, mentoring

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Terms and Abbreviations

WHO	World Health Organization
IOM	The Institute of Medicine
RN	Registered Nurse
EU	European Union
ECTS	European Credit Transfer and Accumulation System
AACN	The American Association of Colleges of Nursing
UAS	Universities of Applied Sciences
CP	Clinical Practice
AACN	American Association of Colleges of Nursing
VALVIRA	The Social and Health Licensing and Supervision
CPD	Continues Professional Development
APN	Advance Practice Nursing
APNs	Advance Practice Nurses
FNA	Finnish Nurses Association
CNS	Clinical nurse specialists
SOTE	Social welfare and healthcare
CPN	Clinical Practice Nursing
ICN	International Council of Nurses
EBP	Evidence-based practice
CC	Clinical competence
CBE	Competency-based Education
NCS	Nursing Competency Scale
CLE	Clinical Learning Environment
CALD	Culturally and Linguistically Diverse

1 INTRODUCTION

Healthcare is evolving rapidly due to changes in disease patterns and an ageing population. It also increases the expectation that nurses take more professional responsibilities to meet patient demands. To maintain their skills, they need to learn and develop competencies continuously. Professionalism is crucial for high-quality care and positive outcomes. Developing core competencies is essential for all healthcare professionals. There is an intense and persistent link between nursing education and clinical practice. Regardless of their specific practice area, all healthcare professionals should develop core competencies.

Nursing education has gone through many changes over the years. The World Health Organization (WHO) reported that there are almost 27 million nursing and midwifery workforce globally, yet there is a more than 50% shortage of nurses and midwives (WHO, 2022). One of the biggest challenges faced by the healthcare industry across the globe is establishing a workforce capable of meeting nursing resource demands efficiently. Nursing education is regulated to ensure that nurses achieve a specific level of competence upon completing their degree. European Union member countries are obligated to comply with the EU's directive requirements for nursing education and the competencies of nurses. According to a study by Lima et al. 2016 (p. 878-888), experience increases competence and confidence among nurses. Practical training is integral to the educational process and provides students with hands-on practical experiences. Nursing educators prepare responsible nurses for the future.

In the Quality Chasm report, the Institute of Medicine (IOM US, 2003) states that healthcare professionals should possess five core competencies: patient-centred care, evidence-based practice, quality improvement, interdisciplinary teamwork, and informatics. Nursing competency integrates knowledge and skills to provide quality care and assist patients in daily activities. Holistic understanding and integration of knowledge and skills are essential for nurses to handle challenging situations. Competency is crucial in nursing - a combination of expertise and abilities needed in clinical settings. Consistency between nursing students and nurses ensures that patients receive high-quality care.

The literature has considered clinical competence, clinical learning environment, and clinical placement crucial in nursing and medicine. The clinical competence of Registered Nurses (RN) is a recurring theme in nursing research studies (Gunawan et al., 2020, pp. 623-624).

However, there has yet to be a consensus on defining competence, which varies by country (Currie et al., 2022, p.292). In the United Kingdom, competence is the ability to safely perform tasks within an occupation by combining training, skills, and knowledge (Competence in Health and Safety, n.d.). Clinical experiences have always been essential to nursing education (Dahlke et al., 2016, p. 145). Clinical experiences improve nurses' competence, affecting quality, standards, and patient safety (Salminen et al., 2010, p.235). Nurses should get Education and experiences from different clinical settings that prepare them for the readiness of work (Currie et al., 2022, p.284).

The development of clinical competence among nursing students has been given less priority in nursing literature. Educators worldwide are facing a challenge in evaluating students' clinical competence. There is a need for standardised tools and methods for assessment. Thus, assessing students' competencies during clinical practice is also challenging for educators and mentors/supervisors. (Immonen et al., 2019, p.2; Najafi et al., 2019, p.8; Helminen et al., 2017). Stobinski (2020, p.153) acknowledged the difficulty of this task, as competency development is often overlooked during a nursing career. Therefore, there is a need to examine the use of different clinical environments as a learning environment for developing clinical competencies and enhancing students' learning experiences in nursing education curriculum design and development. More research from students' and instructors' perspectives is needed (Manninen et al., 2013, p.141).

When clinical training objectives are clear and measurable, and student nurses are supported throughout their learning journey by their workplace mentor or educators to reach the target, it leads to greater satisfaction, increases motivation, and provides valuable insights for enhancing clinical competencies. There is a need for research that focuses on identifying opportunities for further training and developing clinical competencies for registered nurses so that they are ready to take on future challenges and address national health priorities.

This thesis aimed to identify key factors contributing to a supportive clinical learning environment and clinical competence development of nursing students. A review of the literature was conducted to examine the learning experiences and clinical competence development of nursing students and determine if the results could be useful in enhancing current clinical training methodologies. This research can offer significant perspectives for advancing and formulating nursing education curricula.

2 THEORETICAL FRAMEWORK

In this section, the theoretical studies conducted on nursing education, clinical competence, and clinical learning environment are presented and discussed. By combining two theoretical frameworks: Clinical competence and Student learning experience. The findings focus on how student experience can be used as a self-assessment approach to determine the gap between nursing education and clinical placement (American Nursing: An Introduction of the Past, n.d.; D' Antonio & Buhler-Wilkerson, 2023).

2.1 Nursing education

Evidence-based practice in nursing can be traced back to Florence Nightingale's work with British soldiers in Crimea in the 1800s. Her emphasis on education for nurses has helped define nursing as a scientific discipline (Mackey & Bassendowski, 2017, pp. 51-55). During the Crimean War, Florence Nightingale played a pivotal role in organizing and leading a contingent of female nurses who provided medical care to British soldiers. This pioneering work laid the foundation for the nursing profession, which has since become a crucial component of the healthcare sector. Despite challenges, Nightingale's emphasis on education for nurses has been widely recognized and has helped to define nursing as a distinct scientific discipline.

In the 1970s and 1980s, contemporary nursing began to take shape as a discipline, with analysis of literature identifying four key themes: Health/Healing/Well-being, Human wholeness, Human-environment-health relationship, and Caring (Smith, 2019, p. 3). Today, the future of nursing hinges on the quality of nursing education and the critical role that nurse educators play in designing and implementing evidence-based strategies to prepare students for professional positions. This is essential for developing a highly qualified workforce that can promote excellence in education, nursing research, and clinical practices.

Nursing education has been undergoing a reformation worldwide, including in European countries. These reforms aim to put more effort into professional development within nursing education and harmonize higher Education in several European countries (Råholm et al., 2010, p. 2126). The Bologna process and EU directives have significantly reformed nursing education in Europe. As a result, educational standards have been raised, mobility has

increased, and more employment opportunities have been created (Bologna Declaration, 1999; Davies R., 2008; Humar & Sansoni, 2017).

In 1999, 29 EU countries signed the "Bologna Declaration" to reform their higher education system by setting the strategy and achieving six action lines of the declaration. The Bologna agreement offers continuous professional development (CPD), lifelong learning, and nursing career development to safeguard the quality of care and patient safety (Salminen et al., 2010, p. 234). There are two types of degree programmes, undergraduate and graduate, and a credit system called the European Credit Transfer and Accumulation System (ECTS). To promote student mobility, Quality assurance, and promotion of the European dimensions of Higher Education. Finland was one of the European countries to sign the Bologna process. Furthermore, in 2001, the Prague Declaration added three more actions: emphasizing lifelong learning, involvement of the students in higher education institutions as active partners, and enhancement of European higher Education as attractive and competitive internationally (European Higher Education Area and Bologna Process, n.d.).

The American Association of Colleges of Nursing's "Essentials" series outlines competencies for nursing graduates to bridge the gap between education and practice. New education standards now emphasize the crucial need for entry-level nurses to gain knowledge and proficiencies through nursing education and practical training in various clinical settings (AACN 2021, p.15). The nursing education strategy for the 21st century is to prepare a future workforce ready to work in diverse spheres of care. Nursing education has transformed to focus on building foundational competencies rather than just completing required credit hours. The ultimate goal of nursing education is for students to prepare to demonstrate the necessary skills, knowledge, and attitudes as a set of competencies required by the law and the employers before leaving the academic environment (Cate, 2017; Hodges et al., 2019).

The American Association of Colleges of Nursing (AACN) published new education standards for nursing baccalaureate and higher degrees. (AACN, 2021, p.19) presented an educational shift to provide more opportunities for Nursing students to prepare as a better workforce now and into the future. It emphasized the need for all entry-level professional nurses to gain knowledge and proficiencies through nursing education and practical training in diverse clinical settings. AACN curricula include programs for students practising throughout the four spheres of care with diverse populations. Lipstein et al. (2016) described four categories representing the health status of a broad population seeking health care: 1)

Health and wellness, 2) Acute and restorative care, 3) Chronic disease management, and 4) Palliative care. This four-sphere of care (see Figure 1) model addresses nursing shortages due to an ageing nursing workforce by preparing and maintaining a nurse workforce able to work in all areas, specifically in delivering acute and restorative care (Giddens & Mullaney, 2023, pp. 9-10).

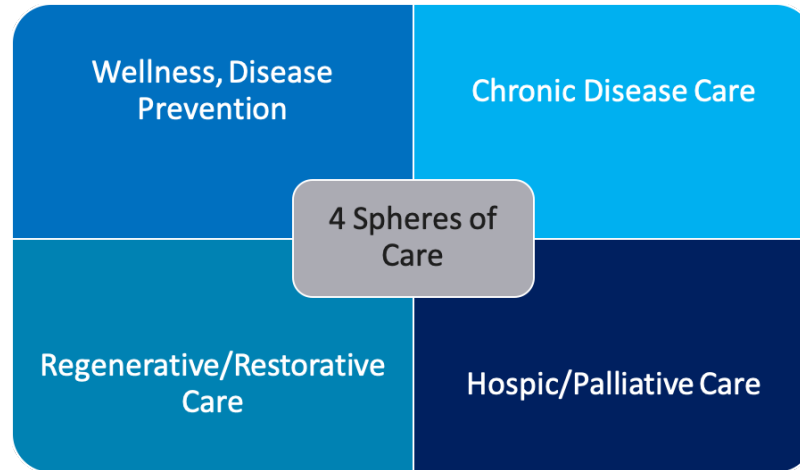


Figure 1. Four Spheres of Care. (AACN released "The Essentials: Core Competencies for Professional Nursing Education" AACN, 2021, p.19).

2.1.1 Nursing education in Finland

In 1990, the educational reforms in Finland changed the nursing education system. After the reform, every nursing school had to create an individual nursing curriculum for their institution (Hytönen, 2021). According to Hytönen, at the end of the 2000s, Higher education in nursing became well-established. The Higher Education Acts also regulates nursing education. In Finland, the Universities of Applied Sciences (UASs) provide a Bachelor's degree in nursing education. According to UAS; Ministry of Education and Culture (2023), 23 universities of applied sciences provide nursing training in Finland. The Bachelor's degree program takes about 3.5 -4 years to complete common 180 ECTS credits defined by the EU's directive (Directive 2005/36/EC, Directive 2013/55/EU) that outlines the competence of a nurse responsible for general nursing care. Nursing programs include about 90 ECTS clinical practice and skills modules.

Finland's nursing training requirement criteria are similar to those in other European Union member states and collaborating European countries. Finland requires 210 credits instead of 180, which takes 3.5 to 4 years (1 ECTS credit = 27 hours of work). After completing

mandatory studies, students can specialize in mental health, surgical nursing, and more. The specialization courses consist of 20-30 ETCS. Nursing education programs' clinical practice (CP) should be completed in healthcare institutions and under the supervision of a registered nurse (EU directive, 2013/755/EU). The National Supervisory Authority for Welfare and Health ([VALVIRA](#)) grants the graduates of nursing programs the right to work as licensed healthcare professionals in Finland. VALVIRA maintains a register and information of all registered nurses granted professional practice rights in the Terhikki-register (Sairaanhoitajaksi Suomeen/Finnish Nurses Association. (n.d.)). As reported by Jokiniemi et al. (2021, p.2), there are about 80,000 RNs, which is about 14.7 per 1000 population, which is four times higher than the number of physicians 3.2 per 1000 population. Nursing education research has always been essential to nursing science research in Finland. According to research by Vierula et al. (2016), about 12.3% of nursing science doctoral dissertations in Finland focus on nursing education.

According to Salminen et al., 2010, p.233, nursing curricula should be based on research and skills by addressing and identifying future challenges for nursing education. After graduation, registered nurses (RN) can continue a Master's level education in Nursing either at the universities of applied sciences or at Academic Universities. At the UAS, continuing a master's degree requires at least three years of work experience. At Science University, work experience is not a requirement. There are three cycles of nursing studies: the first cycle, Bachelor of Nursing; the second cycle, Master of Nursing; and the third cycle, Ph.D. The Finnish nursing education structure (Figure 2), adopted from R  holm et al., 2010, p. presented below.

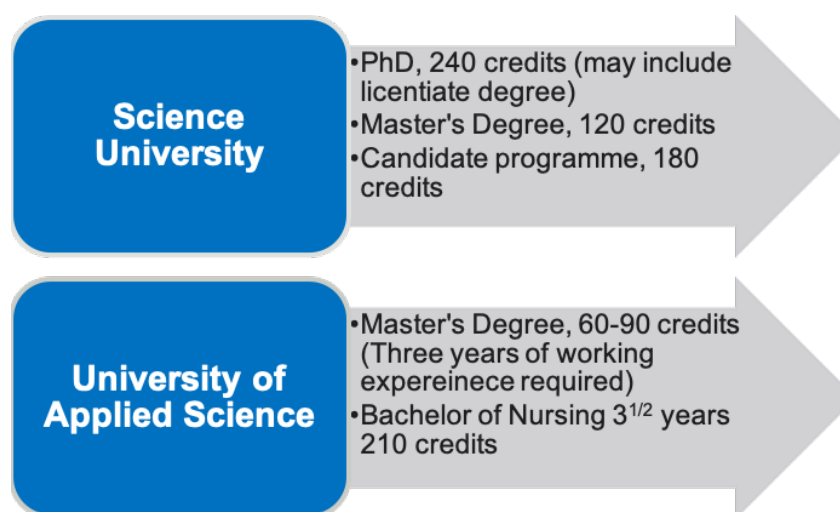


Figure 2. Nursing Education Structure in Finland.

2.1.2 Advanced Practice Nurse in Finland

After obtaining a Bachelor's degree in Nursing, nurses can advance their careers by completing specialized training. APNs are introduced in the healthcare system to increase high quality of care and reduce healthcare costs. In the United States, APNs have five developed roles, including Nurse Practitioner, Clinical Nurse Specialist, Nurse Anaesthetist, Nurse Midwife, and Case Manager (Sheer & Wong, 2008, p. 204). Advances practice nurses' roles and duties vary in different countries (Li et al., 2023, pp. 2-3). The International Council of Nurses (ICN) released an official position statement on advanced practice nursing in 2002. ICN defines Advanced Practice Nurses (APNs) as nurses with additional graduate education, expert knowledge, complex decision-making skills, and clinical competencies whose characteristics are shaped by their practice context. (ICN, 2020). According to ICN, 2002, APN roles require a master's degree.

The role of advanced practice nurses (APNs) was first discussed in Finland in the 1980s as part of continuing professional development (CPD) in nursing. In advanced practice Nursing, a Finnish translation is "laajavastuinen hoitotyö", used by the Finnish Nurses Association (FNA), a member of ICN. Advance practice nurse (APN)'s Finnish term is "laajavastuisen hoitotyön asiantuntija" and CNS is term as "Hoitotyön kliininen asiantuntija". The first APNs' roles emerged in early 2000, and by 2018, there were about 80 clinical nurse specialists in Finland. The first CNSs started working at the Helsinki University Hospital in 2001 (Sairaanhoitajaliiton APN-asiantutijatyöryhmä, 2020, pp. 26-29). Likewise, in other countries, Finnish healthcare also started to focus on developing APNs' roles to address the demands and strategies of healthcare.

According to Jokiniemi (2014, p.125), registered nurses in Finland have limited opportunities for career advancement due to a lack of awareness about advanced practice nursing (APN) roles and their scope of practice. To address this issue, the Finnish Nurses Association created an APN expert working group, which developed a document outlining new nursing roles and recommended education, monitoring, and progressive remuneration. As a result, nurses with specialized training and work experience can now work as Specialist Nurses. Working closely with Social welfare and health care (SOTE) experts, the task force produced a document that explains the new nursing roles. Advanced Practice Nurse (APN) experts have standardized these roles and recommend specialized training and progressive

remuneration based on the level of practice. Nurses with 30-60 credits of specialized training and work experience can now work as Specialists.

The Clinical Practice Nursing (CPN) certification system, administered by the FNA, recognizes clinical expertise as a national standard. To earn this title, a minimum of 200 credits in work experience, publication, teaching, continuing education, and development work are required. While a master's degree is not mandatory, advanced practice nursing expertise is essential. In Finland, nurses are authorized to prescribe medication and obtain Clinical Practice Nursing Certification. However, since these levels fall short of international recommendations, they are situated between the Advanced Practice Nurse and Specialist Nurse levels. The FNA's Clinical nursing career model (Figure 3) is adapted from STM 2009, Arene ry 2006, and presented by the Sairaanhoidajaliiton APN-asiantutijatyöryhmä (2020, pp.31-32), which explains the title, education, and job descriptions of RNs, Specialist Nurses, Nurse Practitioners (NP), and CNSs. A CNS is an experienced RN with a master's or doctoral degree who focuses on advanced clinical nursing. They support healthcare organizations by providing quality patient care, promoting evidence-based practices, and helping to achieve strategic goals. The CNS's role is critical in advancing clinical practice, staff education, consultation, leadership, and scholarship activities (Jokiniemi et al., 2021, p.3).

Title	Registered nurse	Specialist nurse	Advanced practice nursing, APN (laajavastuinen hoitotyö)	
			Nurse practitioner, NP (asiantuntija-sairaanhoitaja)	Clinical nurse specialist, CNS (kliinisen hoitotyön asiantuntija)
Education	Bachelor's degree 210 credits	Specialist training, continuing education 30–60 credits	Master's degree (from a university or university of applied sciences) Academic postgraduate degree (doctoral degree)	
Job description	Implementation and development of evidence based nursing that promotes and maintains health, prevents illnesses, heals, rehabilitates and alleviates suffering. Supporting the resources of people and communities at different stages of their lives. Helping people face their illness, injury and death.	Applying the specialist expertise provided by specialist education in nursing. Applying evidence-based information in the nurse's own specialty and steering and supporting evidence-based practices in the work unit.	At the advanced level, independent clinical nursing and health promotion as well as the related ethical decision-making, teaching and instruction, consultation, evidence-based practices, management, cooperation, research and development. Broad-based and comprehensive nursing, independent examination of patients and assessment of their need for care as well as starting treatment based on symptoms and monitoring both acute and chronic health issues.	
EQF	6	6–7	7–8	7–8

Figure 3. The career model for clinical nursing in Finland.

2.2 Nursing competence

Competency is a fundamental aspect of Nursing education, one of the most commonly used terms in nursing science, and a core quality required to fulfil responsibilities. (Garside & Nhemachena, 2013, p.541; Fukada 2018, p.6; Kajander-Unkuri et al., 2013, p.626). Competency encompasses core abilities, knowledge, skills, attitudes, values, and performances developed through various education, learning strategies, learning processes, nursing management, and crises (Munangatire & McInerney, 2021, p.1113; Tian et al., 2023, p.1). The development of Clinical Competence (CC) is to provide quality care that improves patient health and increases patient safety. Fukada (2018, p.1) borrowed the concept analysis of nursing competence from Takase et al., 2011, which divided competency into three theories: trait theory, behaviourism, and holism. Trait theory perceives competency as individual traits needed to perform responsibilities effectively. Behaviourism theory explains competency as an ability to perform individual core skills and is evaluated based on the performance demonstrated. Holism considers competency a cluster of elements, including skills, knowledge, attitude, critical thinking, and values needed in different situations. Theoretical knowledge, skills, values, and professional judgment are critical components of nursing and contribute to the development of professional clinical competence. Gaining knowledge and skills through learning and experience is a continuous process for nurses to deliver high-quality care and ensure optimal patient outcomes (Fukada, 2018, p.3; Nehrir et al., 2016, p.; Immonen et al., 2019, p.; Huang et al., 2022, p.).

Nurses undergo extensive clinical training to become experts in their field, but their core competencies have yet to become apparent and remain inconsistent (Gunawan et al., 2020, p.624). Competence is a controversial issue in healthcare; the definition varies in different countries, different researchers define the concept differently, and many concept analyses demonstrated it as a complex concept (Garside & Nhemachena, 2013, p. 545; Gunawan et al., 2020, p.623; Fukada, 2018, p. 6). There should be uniformity in the high level of competencies between the nurses and nursing students to provide continuous quality services to the patients. Munangatire and McInerney (2021, p.1126) found that students understand competence differently. A clear definition of nursing competency is essential in establishing a solid foundation for the nursing education curriculum; further investigation is necessary. According to Fukada (2018, p. 2), upon developing a clear, simple, and easy-to-understand definition of nursing competency and competency levels, nursing students and RNs can evaluate and enhance their competencies accordingly.

ACCN, introduced ten domains of competencies that are applicable across Four spheres of care. The nursing educational curriculum should lead students to achieve the competencies and bridge the gap between education and practice. (AACN, 2021, P.1). The domains tailored by Englander et al. (2013, p. 1089) are adopted by Essentials (AACN, 2021, p.10). The ten domains of competencies (See Figure 4) are broad in scope, and each Domain has multiple sub-competencies at two different levels: entry-level and advanced nursing education designed in a way that is understandable, measurable, and reflects learner expectations (AACN, 2021, p.15).



Figure 4. Ten domains of competencies AACN, 2021, p.10

In Finland, there are specific areas of competence that nurses are required to possess, including professionalism and ethics, client-centred care, communication and multi-professionalism, health promotion, leadership, and cooperation skills, information technology and documentation, guidance and education competence, clinical nursing, evidence-based practice, entrepreneurship and development, quality management. Ensuring the safety of patients and clients is a critical aspect of the healthcare and social welfare service systems. As a professional, it is important to prioritize patient and client safety in all aspects of service delivery. According to Laukkanen (2020), these requirements were established through collaboration with EduPal and Sote Peda 24/7, both of which are leader projects of the Ministry of Education and Culture. As of 2021, a national examination for nurses (180 ECTS credits) has been introduced, and each of these competence categories will be included in the examination. The competencies outlined in this document shall serve as the fundamental basis for the planning of the curriculum. It is of utmost importance to ensure that these competencies are well-defined, concise, and comprehensive to facilitate effective curriculum development.

2.2.1 Nursing Competence Scale (NCS)

Assessing nursing competencies is also complex, and challenging nursing educators for decades. Assessing the competence of nurses is crucial to identifying professional development in different states of their career and educational needs (Meretoja et al., 2004, p.125). There is a need for consistency among assessment methods and tools across different institutions and countries (Nehir et al., 2016, p.8). Meretoja borrowed the 73 categories from Banner's Novice to Expert Competency framework. After a pilot test, they distributed NCS to nurses working at a significant Finnish university hospital to evaluate their competence (Meretoja et al., 2004, p.126) and found that competence content used in the NCS developed is valid in clinical practice. The results were congruent with the original purpose of the scale (Flinkman et al., 2017, p. 1035). The NCS is a structured tool that describes competencies at different stages of development. *Competence* integrates knowledge, attitudes, values, and skills in specific situations (Lejonqvist & Kajander-Unkuri, 2021, p.6). According to Flinkman et al. (2017, p. 1045), The Nurse Competence Scale (NCS) serves as a reliable, valid, and widely utilized assessment tool across European countries for evaluating the competency of nurses. NCS has been used to evaluate the competence of experienced nurses, newly graduated nurses, and nursing students.

2.3 Clinical learning environment

A supportive clinical learning environment (CLE) is crucial for high-quality clinical experience, facilitating the practical application of theoretical knowledge, fostering a sense of belonging, and developing competencies in student nurses. (Singer et al., 2022, p.1). Thus, it is the subject at the forefront of discussion and focus of nursing literature and research (Nordquist et al., 2019, p.366; Singer et al., 2022, p.16). According to (Saukkoriipi et al., 2020, p. 2336), students spend about 50% of their studies in practical training at the European level. Positive practice environments play a significant role in promoting the professional development of nurses and increasing satisfaction with the nursing profession (Flott & Linden, 2015, p.501; Nordquist et al., 2019, p.366). Nursing students practising their clinical competencies may consist of three instructional environments: clinical skill labs, simulation, and practical placements where students can practice and improve clinical competencies by adopting new skills or implementing theory. Nursing programs are responsible for ensuring that clinical placement is supportive and safe and stimulates individual students' learning so that students demonstrate attainment of competencies.

When nursing students practice their clinical skills, they have three options: clinical skill labs, simulation, and practice in clinical learning environments. Practical placements offer a clinical environment where students can develop their competencies by precisely encountering actual patients under the guidance and supervision of a workplace instructor (Nordquist et al., 2019, p. 367). The terms 'workplace instructor', 'mentor', 'preceptors' and, 'supervisor' are often used interchangeably to describe RNs who provide support and guidance to student nurses during their practical placements. The clinical learning environment offers opportunities for student nurses to develop technical and non-technical skills, such as communication, teamwork, and knowledge of patients' needs, which are essential for safe and efficient task performance. Healthcare organizations and nursing education programs should collaborate to provide clinical experiences that prepare students for professional nursing roles. The study conducted by Flott and Linden (2015, pp. 501- 505) identified four characteristics of CLE (Figure 5) that impact student learning: Physical environment, psychosocial and interaction elements, organizational culture, and teaching and learning modules. By understanding and addressing each of these characteristics, educators can create a more effective and supportive learning environment for their students.

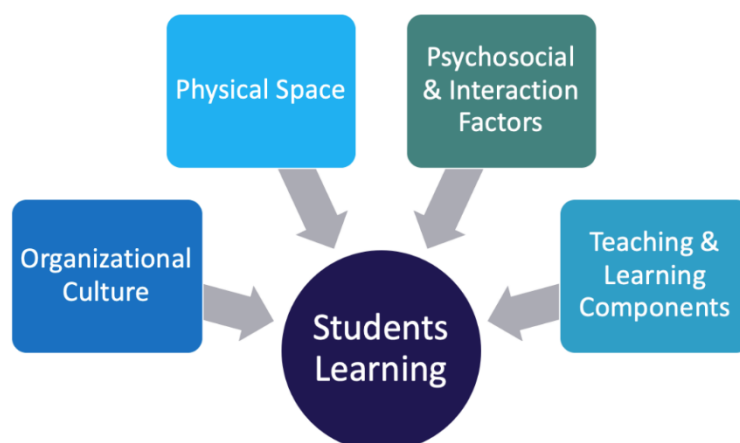


Figure 5. CLE factors influencing students' learning (Flott & Linden 2015).

Mentoring, precepting, and instructing nursing students is essential to providing quality learning experiences (Immonen et al., 2019, pp.10-11). The CLE can also be the tipping point for students, as bad experiences may cause them to leave the education program (Kaihlainen et al., 2021, p. 4788; Singer et al., 2022, p. 17). In addition, international students of nursing programs may find clinical placements particularly challenging due to cultural and linguistic diversity (Mikkonen et al., 2016, pp. 184-185) compared to their local peers. It is crucial to evaluate student satisfaction with their learning experiences and use them to improve nursing education and enhance quality.

3 PURPOSE AND AIM OF THE THESIS

The purpose of this thesis was to identify key factors contributing to a supportive clinical learning environment and clinical competence development of nursing students. This study contributes to bridging the gap between theoretical knowledge and practical implementation in nursing. Specifically, it highlights the best practices for developing clinical competencies among student nurses and equipping them with the necessary skills to tackle future challenges and address national health priorities. By addressing the research question, this thesis offers valuable theoretical and empirical insights to the nursing literature. The research findings expand understanding of the clinical experiences of students and highlight the important aspects of the practical environment as experienced by students themselves. Drawing upon these experiences, we can gain a broader perspective on how to design an effective nursing education curriculum.

As a result of this study, a model (Figure 9) has been proposed to examine the practices that develop the process of clinical competence, based on students' good experiences. Below is an illustration of the research gap (Figure 6). The research question is: How do various clinical trainings support the development of the clinical competence of students?

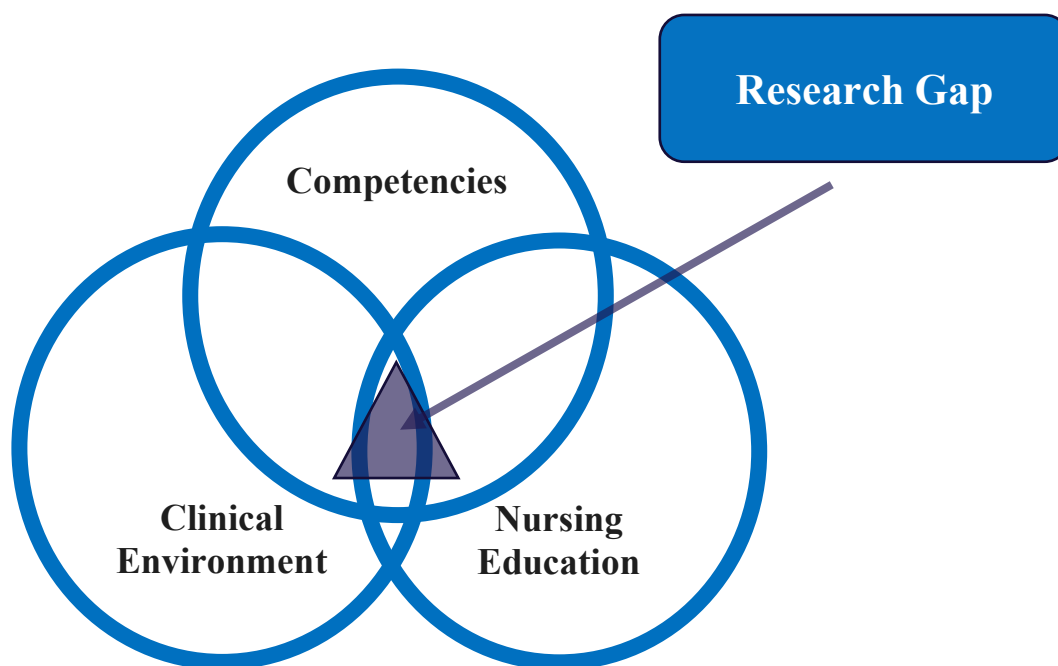


Figure 6. Research Gap this thesis is fulfilling.

4 IMPLEMENTATION OF THESIS

4.1 Research methods

Reviews are essential in nursing and healthcare research to synthesize individual studies and understand a topic better. Clinicians and researchers rely on reviews to identify what is known and unknown about a subject, providing evidence to guide practice and policy decisions. Integrative reviews (IR) provide comprehensive and trustworthy conclusions and are an essential tool in research that involves synthesizing and evaluating data from various sources to address research questions (Soares et al., 2014, p. 335; Oermann & Knaf, 2021, p. 65; Kutcher & LeBaron, 2022, pp.13-14). IR is essential for evaluating and synthesizing various sources to inform Evidence-based practice and develop new knowledge (Kutcher & LeBaron, 2022b, pp.13-14). IR helped the researcher investigate systematic literature searches and produce a holistic synthesis of the subject to inform EBP, provide critical insight, and recommend future research directions. The integrative review method is a unique approach that integrates diverse methodologies to achieve comprehensive research results. It combines experimental and non-experimental research and considers qualitative and quantitative research to reach its conclusion.

IR systematically synthesizes and evaluates theoretical and empirical literature on nursing students' challenges during clinical practice to enhance their clinical competencies. Therefore, an integrative review is a valuable tool for synthesizing multiple sources and providing a comprehensive overview of a particular subject in nursing research. The framework developed by Whitemore and Knaf (2005, p. 552) outlines five stages for conducting an integrative review: identifying the problem, conducting a literature search, evaluating, analysing, and presenting the findings. The model of Integrative review is shown in the figure 7.

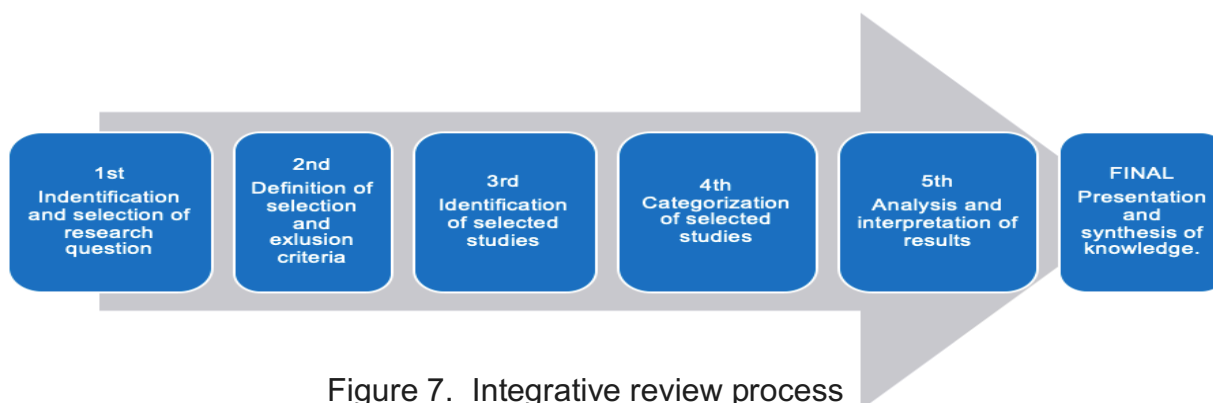


Figure 7. Integrative review process

4.2 Data collection

Using the PRISMA methodology (Figure 8), relevant literature was searched in electronic databases, including [SCOPUS](#), [ScienceDirect](#), and [EBSCOhost Research Database: MEDLINE](#); CINAHL Ultimate databases. The study selected peer-reviewed studies. Peer-reviewed content is reliable and offers high-quality articles licensed from authorized, well-known publishers. The studies chosen for review included peer-reviewed studies published in English from 2013-2023. The search term was limited to the English language and the Affiliation country Finland. Search terms were divided into three groups, in the second stage of IR. Limited search results produced total of **90** studies: Scopus 36, ScienceDirect 34, and MEDLINE; CINAHL 20.

Table 1. Search terms

Group	Search keywords
1	(student nurses OR nursing students OR student nurse OR nursing student OR undergraduate nurse)
2	(experiences OR perceptions OR attitudes OR views OR feelings OR qualitative OR perspective)
3	(clinical practice OR clinical setting OR clinical placements)

4.3 Search Outcomes

In the third stage, 69 publications were screened and assessed based on their title, abstracts, and full text. A total of 28 documents were excluded based on the inclusion criteria. 15 documents were included in the quality assessment, and 11 were used in the thematic synthesis after being assessed for quality, presented in table 4, fourth stage of IR. The study was evaluated using the PRISMA checklist of items. (Moher et al., 2009). The inclusion criteria were adopted from the PICOS protocol (Table 2).

Table 2. Inclusion Criteria according to PICOS review protocol

Participants	Undergraduate students, Nursing students
Phenomena of interest	Students' Learning Experiences, Learning process
Context	Practical training, Clinical placement, Clinical environment, Clinical Learning environment.
Outcomes	Studies published during 2013-2023, research or study conducted either in Finland or for Finnish Institutes.

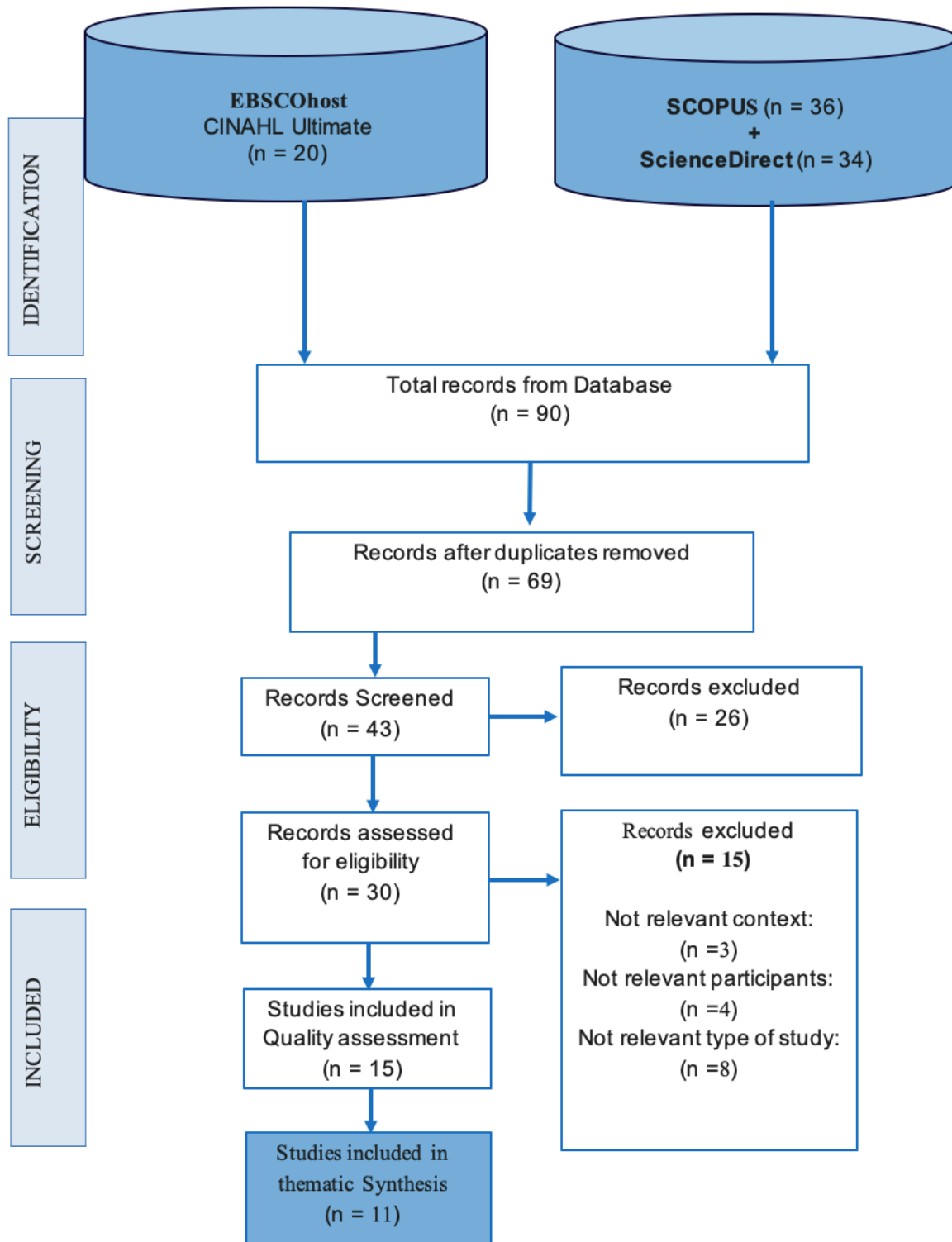


Figure 8. PRISMA flow diagram of study (Moher et al., 2009)

In the fourth stage of the integrative review strategy, a total of 43 studies were screened for eligibility and sorted, applying the exclusion criteria to preserve consistency with the previously established research question, as shown in Table 3.

Table 3. The selection of attributes was made following a thorough analysis of their prevalence in the papers.

	Author(s)	Learning Experience	CLE/Clinical practice	Competence	Mentoring
1	Castren et al. (2017)	x		x	
2	González-García et al. (2021)		x	x	
3	Hagqvist et al. (2020)		x		x
4	Heinonen et al. (2019)		x		x
5	Helminen et al. (2014)	x	x	x	x
6	Hilli & Sandvik (2020)	x	x		
7	Häggman-Laitila & Rekola (2014)				
8	Immonen et al. (2019)	x	x	x	x
9	Jokelainen et al. (2013)	x			x
10	Jokelainen et al. (2013)				
11	Jonsén et al. (2013)	x	x	x	
12	Järvinen et al. (2021)	x	x	x	
13	Kaihlanen et al. (2019)		x		
14	Kaihlanen et al. (2020)	x	x		
15	Kaihlanen et al. (2020)	x	x		
16	Kajander-Unkuri et al. (2015)			x	x
17	Korhonen et al. (2019)	x	x		x
18	Koskinen & Äijö (2013)	x			
19	Luukkonen et al. (2023)		x	x	x
20	Melender et al. (2013)	x	x		
21	Mikkonen et al. (2017)		x		
22	Mikkonen et al. (2020)	x	x	x	x
23	Mikkonen et al. (2020)	x	x	x	x
24	Mikkonen et al. (2022)		x	x	x
25	Mikkonen et al. (2022)				x
26	Oikarainen et al. (2018)			x	x
27	Oikarainen et al. (2019)			x	
28	Oikarainen et al. (2022)				x
29	Paric et al. (2021)			x	
30	Pitkänen et al. (2018)	x	x	x	
31	Ropponen et al. (2023)	x	x	x	
32	Saarikoski et al., 2013	x			
33	Salminen et al. (2021)			x	
34	Salminen et al. (2021)				
35	Sandvik et al. (2014)	x	x	x	
36	Saukkoriipi et al. (2020)	x	x	x	x
37	Savukoski et al., 2020		x		x
38	Taylor et al., 2020	x		x	
39	Tomietto et al. (2016)	x	x		
40	Tomietto et al (2022)		x		x
41	Tuomikoski et al. (2018)	x			x
42	Tuomikoski et al. (2020)	x	x		x
43	Westerbotn et al. (2015)	x			
	Frequency	24	26	18	19
		56 %	60 %	42 %	43 %

A literature summary of all 11 studies selected in the Integrated Review presented in Table 4, was created to extract relevant information on authors, study purpose, population, key findings, and results related to the review questions.

Table 4. Description of the studies selected in the IR.

Authors (Year)	Study Design	Objectives	Study Population	Results/ Key Findings
Jonsén et al. (2013)	Qualitative content analysis	To illuminate first-year nursing students' clinical practice experiences, focusing on perception, reflection, and the link between theory and practice.	22 Nursing students	A study conducted in the Nordic region on first-year nursing students' experiences during their clinical placement found that supportive and visible preceptors led to positive experiences, while unsupportive environments and absent preceptors resulted in negative experiences. The study highlights the importance of creating a supportive environment with visible preceptors to optimize learning and integrate scientific and evidence-based knowledge.
Sandvik et al. (2014)	Phenomenological–hermeneutical approach	To gain a comprehensive understanding of the process of student learning and development in becoming a nurse.	Nursing students from; two in Western Finland and one in Northern Sweden	The study found that forming strong bonds between students and preceptors is crucial for effective learning and successful transition into nursing. Preceptors and teachers require additional training to support students' professional growth. Compassionate relationships are key and need adequate time to develop.
Pitkänen et al. (2018)	A cross-sectional study.	To analyze the assessment of the clinical learning surroundings and the supervision provided to healthcare trainees	2,500 healthcare students, concluded their practical training at a university hospital in Finland.	Effective supervision in a constructive learning environment supports clinical competence and support the development of future healthcare professionals' skills. Students rated their experience as "good" when assigned a specific supervisor and had private, unscheduled sessions. Improving the quality of the supervisory relationship is crucial, and the study recommend designing educational programs for healthcare trainees' supervisors to enhance their pedagogical competencies.
Immonen et al. (2019)	Systematic Review	To find out best practices on the assessment of nursing student's competence in clinical practice	NA	The results of the study found out that nursing education and assessment tools commonly prioritize professional attributes, ethical practices, communication and interpersonal relationships, nursing processes, critical thinking, and reasoning when evaluating students' competencies. Clinical learning environments and mentorship are valuable resources that facilitate student learning. Furthermore, the use of assessment tools, criteria, personalized feedback, and reflection time can all contribute to more objective and reliable evaluations.
Korhonen et al. (2019)	A qualitative study	To describe CALD students' experience in the clinical learning environment and mentoring	CALD Students, exchange students from eight Universities of Applied Sciences in Finland.	To improve clinical learning environments for students, it is important for them to have a designated mentor and enough time to build a good relationship. Universities should provide additional support to ensure quality guidance. Culturally diverse pedagogical learning environments and mentors with education on culture and diversity are also important. CALD students often face discrimination and social isolation, which should be addressed in education and clinical practice.
Mikkonen et al. (2020)	A cross-sectional study	To create and validate an empirical model that assesses the clinical learning environment and mentorship for nursing students from diverse cultural and linguistic backgrounds.	eight universities 187 participants,	The findings indicate that both environmental and relational factors are integral components in fostering an effective clinical learning environment. The model CLES+T scale and CALDs is a valuable tool for universities and healthcare organizations to improve the quality of clinical learning environments in practical settings.

Continue table 4.

Saukkoripi et al. (2020)	A cross-sectional study	To examine the perceptions of nursing and midwifery students regarding their clinical learning environment and mentoring, as well as to identify various student profiles based on these perceptions.	2,609 nursing and midwifery students	This study found four profiles (A, B, C, & D) based on clinical learning environment and mentoring. Profile A (1,352 students) rated their environment and mentoring highest, while Profile D (151 students) rated them lowest. Results show that mentoring and environment quality greatly impact student success. Positive ratings were linked to designated mentors, discussing objectives, final assessments, supportive guidance, professional development, and pre-clinical teaching.
Tuomikoski et al. (2020)	systematic literature review	To analyze nurse mentors' experiences in mentoring nursing students during clinical practice.	N.A.	The findings were classified into 21 categories and grouped into five synthesized findings. These findings highlight the importance of multifaceted mentoring competence to support the learning process of nursing students. Healthcare organizations should prioritize developing the mentoring competence of nurses to create a receptive learning environment.
Mikkonen et al. (2020)	An international cross-sectional survey	To create and test a proven model for mentoring nursing students during their clinical experience.	4980 registered nurses and 1360 mentors from: Finland, Italy, Lithuania, Slovenia and Spain.	This study confirmed that mentors with motivation and reflection skills have positive mentoring practices. Constructive feedback and goal-oriented approaches to clinical learning were found to be effective. Mentorship is crucial for improving students' clinical skills and commitment to the nursing profession.
Järvinen et al. (2021)	Descriptive qualitative study	To investigate nurse educators' perceptions regarding the factors that affect the proficiency of nursing graduates.	23 nurse educators from five universities of applied sciences in Finland.	The findings of the research revealed six primary categories associated with the competence of nursing students who are about to graduate, namely: (1) commitment to the nursing profession, (2) healthcare experiences, (3) learning capabilities, (4) learning environments, (5) student characteristics, and (6) the role of the nurse educator. The study also suggested that supporting their dedication to the nursing field and fostering their learning abilities is essential. Moreover, the quality of the learning environment, including study groups and successful clinical practices, should be maintained throughout their education.
Ropponen et al. (2023)	Descriptive qualitative study	To explore Culturally and linguistically different (CALD) nursing students' clinical practice experiences and perceptions of their career path.	CALD nursing Students from six Finnish university	Proficiency in the Finnish language is crucial for a clinical placement and a satisfactory nursing career. It's important to tailor nursing education to CALD students, providing language courses based on individual needs. Clinical placement experience affects career plans and integration into working life. International nursing degree educators can support CALD students in advancing their careers and promoting their language-cultural competence.

4.4 Data analysis

To obtain a comprehensive understanding of nursing students' experiences in the clinical environment, factors affecting successful practical training completion, and how it improves nursing competencies, 43 articles were thoroughly reviewed multiple times. The resulting analysis revealed four distinct attributes: Learning experience, CLE/Clinical practice, Competence, and mentoring (as shown in Table 3). Thematic data analysis was performed on 11 studies out of a total of 43 articles, with a focus on examining three or more attributes (please refer to Table 3 for details). The data was analyzed using Braun and Clarke's six-phase method for thematic analysis (2006, p.79). As noted by Vaismoradi et al. (2013,

p.339), thematic analysis is a widely used method in nursing data analysis that involves identifying, analyzing, and reporting themes within the data, as well as providing a detailed description of the data sets. The data analysis process involved in thematic analysis is outlined in Table 5, as presented by Braun and Clarke (2006).

Table 5. Thematic Analysis phases and their description.

Step 1	Familiarization: which included reading and rereading the data, taking detailed notes, and highlighting patterns that emerged. Despite being time-consuming, this process of memoing provided an opportunity to gain insights from varying perspectives (Saunders et al., 2023, p.2).
Step 2	Generating initial Codes: Data was coded, using different colours. Coding is interesting features of the data systematically across the entire data set, collating data relevant to each code. In this process the data was labeled with few, short, meaningful words. Coding is both the foundation for and the beginning of thematic analysis.
Step 3	Generating themes: The process of generating themes from identified codes involved collating the codes and identifying patterns that are relevant to each potential theme. This step involves gathering all relevant data that pertains to each theme.
Step 4	Reviewing themes: To maintain accuracy and integrity, researchers compare initial themes with coded data and the entire dataset. Examining the nuances of the codes and identifying their interdependence is crucial to uncovering hidden patterns and connections between overlapping themes.
Step 5	Defining and naming Themes: Developing a clear and impactful narrative requires continuous analysis, emphasizing the need for unambiguous definitions and titles for each theme. This ensures a focused and precise analysis, with inclusivity and a methodical approach producing pragmatic and enlightening results.
Step 6	Producing the Report: It involved carefully choosing vivid and compelling examples, conducting a thorough analysis of the selected extracts, and connecting the findings to the research question and existing literature. The end result came as a comprehensive report of the analysis. The section on results and findings covers the identified themes and provided insight into how the research questions were addressed.

After analyzing the extracted data, a comprehensive review has been conducted. The resulting summary offers valuable insights into the relevant research and contributes to a better understanding of the research topic. To explore the core competencies enhanced during clinical training within the clinical learning environment and the best practices supporting students' learning, three themes were designed. These themes include: (1) The core competencies students learn in clinical training and the practical process of learning; (2) The existing clinical learning environment, where students can enhance competencies and integrate theoretical knowledge into practice; and (3) The good practices and process of developing the clinical competence of student nurses. The thematic synthesis provides a clear interpretation of the results. A model is presented as a result of synthesis in the figure 9.

5 RESULTS

The results comprised two systematic reviews (Immonen et al., 2019; Tuomikoski et al., 2020), four cross-sectional studies (Pitkänen et al., 2018; Mikkonen et al., 2020; Saukkoriipi et al., 2020; Mikkonen et al., 2020), two qualitative studies (Jonsén et al., 2013; Korhonen et al., 2019), two descriptive qualitative studies (Järvinen et al., 2021; Ropponen et al., 2023), and a phenomenological–hermeneutical approach (Sandvik et al., 2014). The data analysis was categorized into three themes to answer the research question.

i. Core competence students learn in clinical training and the effective process of learning

Immonen et al. (2019) found that assessment tools are commonly used to evaluate nursing students' competence in ethical practices, communication and interpersonal relationships, nursing processes, and critical thinking. In a recent study by Järvinen et al. (2021), six primary categories of nursing student competence were identified, including commitment to the nursing profession, healthcare experiences, learning capabilities, learning environments, student characteristics, and the role of the nurse educator. Learning experiences are crucial in enhancing students' competence, especially when they are successful. Järvinen et al. (2021) describe these events as confidence-boosting incidents that promote learning. Mikkonen et al. (2020) highlighted the importance of language and cultural competence in the clinical learning environment for nursing students. Integrational programs must be designed to help international students develop their knowledge of the foreign language, practice language skills, and understand cultural communication aspects relevant to the country they are studying in (Korhonen et al., 2019). Additionally, third-year nursing students are capable of more critical reflection on nursing practice and have a deeper understanding of the essential content of nursing competence, including client-centeredness, ethics, professionalism in nursing, as well as documentation and reporting (Pitkänen et al., 2018).

ii. The existing clinical learning environment, how students can enhance competencies and integrate theoretical knowledge into practice.

In clinical practice, students' experiences and competence development can be categorized into five essential areas. These include the need for adequate support, equality in education and working life, nursing competence, the importance and difficulty of integration, and changes in career growth due to clinical practice experiences. Developing students' professional competencies and identity in clinical learning environments is critical (Järvinen et al.,

2021). Building an effective clinical learning environment requires careful attention to environmental and relational factors. Collaboration between educational institutions and healthcare organizations can foster a model for a student-friendly clinical learning environment in clinical practice (Pitkänen et al., 2018; Mikkonen et al., 2020). Students highly value having a named mentor, discussing learning goals with their mentor, receiving a final assessment in clinical learning, and having a mentor who can support their learning. Mentoring of clinical practice significantly impacts students' perceptions of their success in clinical learning, and building collaboration between nursing teachers and registered nurses is recommended to strengthen clinical practice (Saukkoriipi et al., 2020). Effective communication is critical for successful clinical placements, and mentors play a crucial role in this regard (Ropponen et al., 2023).

iii. The Good practices and process of developing the clinical competence of student nurses.

In Jonsén et al.'s (2013) study, the importance of creating a positive learning environment with readily available mentors to incorporate scientific and evidence-based knowledge was emphasized. Providing proper guidance within a constructive learning atmosphere is essential to the clinical competency and professional skill development of budding healthcare practitioners, as stated by Pitkänen et al. (2018). A strong relationship between mentors and students is crucial for effective learning and a successful transition into the nursing profession. Mentors and teachers require additional training to support the professional growth of their students, and nurturing relationships require ample time to develop, according to Sandvik et al. (2014). Saukkoriipi et al. (2020) found that mentoring and environment quality significantly impact student success. A positive experience is associated with designated mentors, discussing objectives, final assessments, supportive guidance, professional development, and pre-clinical teaching.

The study by Mikkonen et al. (2020) confirmed that mentors with motivation and reflection skills have positive mentoring practices. Effective clinical learning requires constructive feedback and goal-oriented approaches. To have a satisfactory nursing career, proficiency in the Finnish language is crucial for clinical placement. Nursing education should be tailored to culturally and linguistically diverse students, providing language courses based on individual needs (Ropponen et al., 2023). A supportive clinical learning environment and good mentoring are crucial for nursing students during their clinical training. Positive experiences can

help boost their competence and smooth their integration into the work life. Conversely, negative experiences can have a detrimental impact on their professional career. Based on our synthesis of findings, we have identified the factors that are essential for effective CLE and mentoring, which are presented in Figure 9. By evaluating nursing students' clinical experiences, the clinical learning environment, and mentoring, we can gain valuable insights that can shape and advance nursing education curricula. This will serve as a solid foundation for enhancing nursing education, assessing nurses' competencies, and improving the learning processes of clinical placement students.

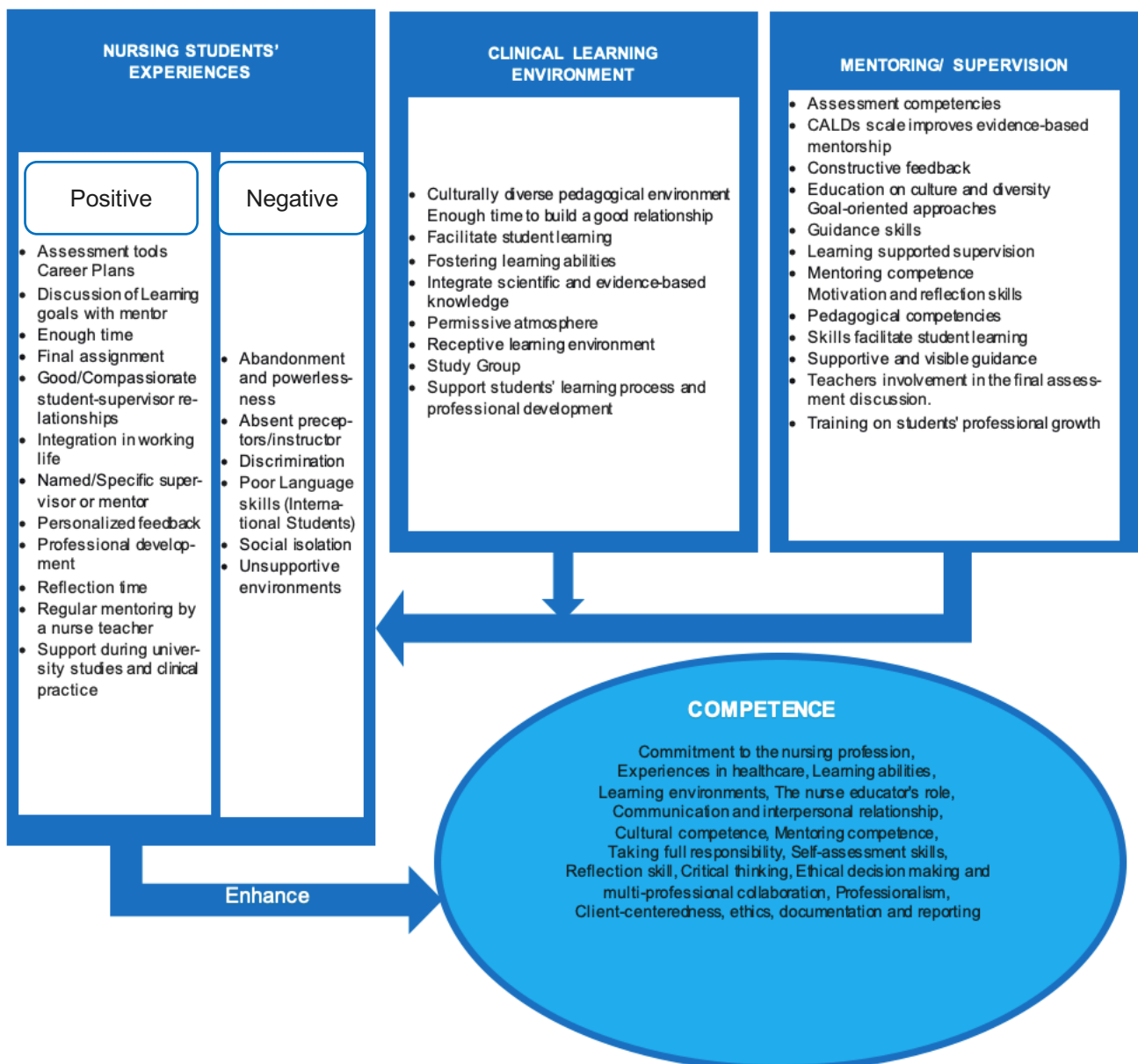


Figure 9. Synthesis of findings

6 DISCUSSION

The review analysed nursing students' experiences during clinical placements and found that having a named mentor/supervisor, enough time to develop a good relationship, personalized feedback, and regular mentoring by a nurse teacher and workplace supervisor can lead to a positive clinical placement experience (Saukkoriipi et al., 2020; Korhonen et al., 2019; Immonen et al., 2019). A recent study by Immonen et al., 2019; Mikkonen et al., 2020, discovered that positive experiences encourage and support students to further develop as future healthcare professionals. Conversely, an unsupportive environment, the absence of a mentor/supervisor, and discrimination can negatively affect the students' experience. Providing positive and constructive feedback helps with professional development and learning nursing competence and clinical skills. Jonsen et al., 2013 found that a supportive environment with visible preceptors is essential to optimizing student learning and integrating scientific and evidence-based knowledge. Mentorship was also found to be a valuable resource that facilitates student learning. Mentors and preceptors need adequate time to develop compassionate relationships and training to support students' professional growth to ensure that students experience a successful transition into the nursing career and to support them in reflecting on situations in the clinical field (Sandvik et al., 2014).

The positive receptive, permissive atmosphere and supportive CLE significantly impact students' success (Saukkoriipi et al., 2020; Tuomikoski et al., 2020). A Supportive environment helps students to optimize learning and integrate scientific and evidence-based knowledge (Jonsen et al., 2013). The study by Järvinen et al., 2021 suggested that a clinical learning environment should support the student in their dedication to the nursing field and foster their learning abilities. Successful clinical practices should be maintained throughout their education. Due to language insufficiencies, CALD students face various challenges, feeling uncomfortable going to the ward at the start of a shift, not being able to approach staff, their feelings of distress, and not feeling comfortable participating in discussions. Mikkonen et al., 2020, suggested that the model CLES+T scale and CLADs can help improve the quality of clinical learning environments for CALD students. Creating a positive pedagogical atmosphere is crucial for CALD students to feel comfortable using a foreign language professionally.

Ropponen et al., 2023 explored the challenges faced by culturally and linguistically diverse nursing students in clinical learning environments, including social isolation, discrimination, and bullying. The article emphasizes the need for mentoring education that focuses on evaluating and supporting CLAD students' learning processes to enhance their clinical practice experiences and attitudes towards nursing. Additionally, Tuomikoski, et al., 2020 highlights the importance of mentoring competence and continuous education on diverse topics to provide adequate assessment and guidance to students. Finally, the article suggests tailoring nursing education to culturally and linguistically diverse students, including language courses based on individual needs. The results emphasized on developing competent mentors who can build a supportive clinical learning environment, facilitate learning, monitor students' progress, assess clinical competence, guide students to reach their training goals, and provide constructive feedback.

Mentors are key to ensuring that students have a positive and successful clinical experience. To become competent mentors, education and training are essential. This includes developing assessment skills, guidance skills, knowledge of culture and diversity, the ability to facilitate student learning, pedagogical competencies, and the ability to support reflective discussions with students. According to Immonen et al., 2019, a competent mentor should be able to build a supportive clinical learning environment, facilitate learning, monitor students' progress, assess clinical competence, guide students to reach their training goals, and provide constructive feedback. It is crucial to develop mentors' competence in assessing students' learning development in the clinical environment, as this has a significant impact on student learning outcomes and competence development.

7 ETHICS AND RELIABILITY

The study in question has been designed with the utmost care to ensure that no vulnerable groups, including patients or minors, are involved in any way. The research does not comprise any interviews or observations of individuals, and no harm or danger is caused to any subject. The study adheres to the ethical guidelines set by TENK (2019), and as a result, it does not require approval from an Ethical committee in Finland. Approval from the University of Applied Science researcher is sufficient, as it forms part of the bachelor's degree thesis. The researchers have given due credit to the authors from whom they have borrowed ideas and appropriately cited the sources. The sources used in this study are mentioned in the Bibliography.

The primary objective of this research is to gain valuable insights into real-life scenarios, explore experiences, and promote patient safety. The research is ethical as it does not cause harm or opposition. The researcher's primary motivation is to support nursing students in their future careers by identifying their learning experiences as a crucial factor in nursing education. This will help provide a clinical learning environment that fosters their clinical competency, enabling them to reach their full potential. To ensure the study's quality, the researcher has taken great care to consider validity and reliability. Two important concepts in research: validity and reliability. Validity pertains to the accuracy of the research in measuring what it's supposed to measure and the precision of the data analysis. Reliability, on the other hand, refers to the consistency and repeatability of the study. The researcher has thoroughly documented the data collection and analysis process to increase reliability.

To improve the validity and reliability of the study, a robust theoretical framework has been employed, and an effective literature review has been conducted by searching various reliable and credible databases such as CINAHL, SCOPUS, and SCIENCE DIRECT. Integrative reviews, as research designs, assimilate research data from various research designs to reach conclusions that are comprehensive and reliable (Dollande et al., 2021, p. 428). Therefore, this research is highly reliable.

8 CONCLUSION

Clear and measurable clinical training objectives, along with support from nursing teachers and mentors, can enhance satisfaction, motivation, and clinical competencies for student nurses. Positive clinical learning environments as well as students' personal responsibility and initiatives are essential for developing their professional skills. The regular mentoring, clear objectives, effective feedback, and a supportive atmosphere are key factors in creating a positive experience. Negative experiences such as discrimination, lack of support, and unrealistic expectations can impede learning and make students feel uncomfortable and pressured.

To ensure effective nursing education, it is important to have access to assessment tools, clear career plans, designated mentors, and enough time for assignments and reflection. Building strong relationships between student & supervisors, and student & teachers is also essential, as it supports integrating students into working life. Reflection time and regular mentoring can help students understand the nursing profession better, support to achieve their goals and successful completion of practical trainings. Cultural and language-tailored nursing education is essential for culturally and linguistically diverse students, and collaboration between nursing teachers and mentors is highly recommended. It is essential to regularly equip mentors with pedagogical skills, including effective guidance, constructive feedback, assessment competencies, and an understanding of culture and diversity. Implementing reward systems, such as capacity development, financial incentives, or extra hours to supervise students, can inspire mentors to create a positive learning environment and remain competent, motivated and committed.

Nursing students' experiences can serve as a foundation for enhancing nursing education, evaluating nurses' competencies, and improving learning processes for clinical placement students. By conducting extensive research, identifying opportunities for further training, and developing clinical competencies, registered nurses can be well-equipped to tackle future challenges and address national health priorities. The insights gained from students' experiences can be invaluable in shaping and advancing nursing education curricula. To ensure the effectiveness of practical training in enhancing student competencies, it is recommended that future research studies take into account the viewpoints of both mentors and students. This can help develop more targeted and evidence-based training programs.

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