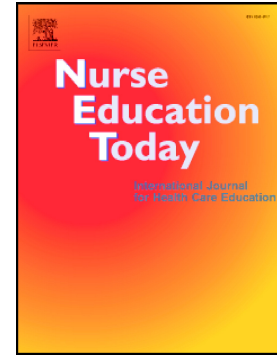


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Nurses' experiences of their competence at mentoring nursing students during clinical practice: A systematic review of qualitative studies

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NURSES' EXPERIENCES OF THEIR COMPETENCE AT MENTORING NURSING STUDENTS DURING CLINICAL PRACTICE: A SYSTEMATIC REVIEW OF QUALITATIVE STUDIES'

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Abstract

Aim: To identify and synthesize the best available evidence on nurse mentors' experiences of their competence in mentoring nursing students during clinical practice.

Design: The research employed a systematic literature review that followed the guidelines of the Joanna Briggs Institute (JBI).

Data sources: The databases CINAHL, Medline Ovid, Scopus, Eric, Web of Science, Medic, and OATD were systemically searched from 2000 to 2017.

Review methods: The identified studies were screened by title, abstract (n=3080) and full-text (n=91) using the following inclusion criteria: registered nurses, nurses' experiences of competence in mentoring nursing students, acute and primary care organizations providing clinical practice for nursing students, qualitative study. Quality appraisal was performed, data extracted and findings from the included studies (n=21) were pooled using meta-aggregation with the Qualitative Assessment and Review Instrument (JBI-QARI).

Results: A total of 92 extracted findings were aggregated into 21 categories and then further grouped into five synthesized findings: 1) creating an interactive relationship with the student; 2) developing mentor's characteristics and cooperation with stakeholders; 3) providing goal-oriented mentoring; 4) supporting students' development to nurse profession; 5) supporting the student's learning process.

Conclusions: This review demonstrated that multifaceted mentoring competence is essential to supporting students' learning processes and helping them become confident professionals. For this reason, the findings suggest that healthcare organizations which provide clinical practice for students should emphasize developing the mentoring competence of nurses by offering nurse mentors adequate education, ensuring that the organizational structure affords them sufficient support, and creating a receptive learning atmosphere.

Keywords

Mentoring competence; clinical learning; clinical mentors; clinical practice; nurse; student nursing; systematic review

INTRODUCTION

Clinical practice nurses are crucial to the development of nursing students' clinical competence and act as a vital source of support (Omasky, 2010). Evidence demonstrates that the supportive role of mentors is critical for building nursing students' future clinical skills (McIntosh et al., 2014). A mentor is also responsible for a significant amount of teaching (Kemper, 2007), along with transferring clinical knowledge to nursing students (Warren and Denham, 2015); as such, students' clinical placements increase the workload of mentors (Kemper, 2007). Mentors' insufficient mentoring skills and lack of confidence are common reasons for why certain healthcare units refuse to allow nursing students and educational institutions to conduct clinical placements (Andrew, 2013).

Background

Nursing education programs in European Union countries last three years (180 credits), and clinical practice education of these programs comprise of at least 50% of the duration. Clinical practice should be completed in healthcare institutions and students must be mentored by a registered nurse (EU directive, 2013). During the clinical practice period, the student gains practical competence, is taught how to link theory into practice, becomes familiar with the social culture of the profession, learns how to work in, and lead a team, and becomes adept at organizing overall nursing care (HWA, 2014).

The term 'mentor' is associated with various concepts, including preceptor, supervisor, and facilitator (Jokelainen et al., 2011). The Nursing and Midwifery Council (2010) defines a mentor as a nurse or midwife on the NMC register who has completed an NMC-approved mentor preparation program and has been registered on a local register for at least one year before supervising and assessing students in a practice setting. Furthermore, there are no congruent regulations on mentoring education between countries. In England, Croatia, Ireland, Iceland, Italy, Serbia, and the United States of America, the mentor should have completed a mentorship course before acting as a mentor. In contrast, in Poland, Slovenia, Spain (Dobrowolska et al., 2016) and Finland (ME, 2006), the completion of a mentorship course is voluntary. In this review, the term 'mentor' refers to a nurse who mentors undergraduate nursing students and has pedagogical responsibility for the mentoring process during students' clinical placements (Hurley and Snowden, 2008).

According to Cowan et al. (2007), competence includes satisfactory knowledge, skills, performance, attitudes, and values. Health Workforce Australia (HWA, 2013) defines: "Competence is the ability of an individual to do job properly. A competency is a set of defined

behaviors that provide a structured guide to the identification, evaluation and development of particular skills and knowledge in individual workers. A person is deemed competent when they have acquired sufficient competencies to perform the work required of them to an acceptable and agreed standard. Given this is a competency resource the term competency is employed almost exclusively, the exception being where the more holistic term competence is appropriate” (p.22). According to the HWA (2013), a competent mentor is a person who can influence and facilitate students’ contributions to patient care as well as support experiential learning, problem solving and communication.

In addition, the NMC (2008) defines mentors’ competence outcome creating a learning environment which emphasizes evidence-based practice and leadership. Nurses have identified the challenges accompanying the mentoring role by voicing a need to improve their clinical mentoring skills and calling for more support for mentors (Kalischuk et al., 2013). In this review, mentoring competence encompasses the qualities, performances, attitudes, values, knowledge and skills necessary for mentoring students during their clinical practice placements.

Other concepts that are relevant to the subject of nursing clinical education include professional practice (Staykova et al., 2013), professional training (77/453EEC), clinical training (HWA, 2014), work-based education (Hurley and Snowden, 2008), clinical learning and clinical practicum (Walkers et al., 2013). In this review, the concept of ‘clinical practice’ refers to a learning environment in which student nurses practice clinical skills under the guidance of a mentor (Jokelainen et al., 2011). A previous systematic review described the role of a mentor from the point of view of mentors, nursing leaders, students and teachers; this previous systematic review only covered research that had been published up until the end of 2006 (Jokelainen et al., 2011). This review, however, did not focus on nurses’ experiences of which competencies are required for student mentoring. Failure to identify and evaluate nurses’ mentoring competence can lead to inadequate mentoring competence, which, in turn, can result in incompetent future nursing professionals (Almalkawi et al., 2018) and thus affect both patient safety and quality of care (Nash and Flowers, 2017). Additionally, organizational changes in clinical practice – notably, the removal of the nurse teacher role from higher education – have increased the pressure on mentors to take responsibility for students’ learning outcomes (Warne et al., 2010). Identifying the prerequisite competencies for mentoring could improve mentoring quality as well as the subsequent clinical competence of nursing students.

Methods

Research aim

This systematic review aimed to identify and synthesize the best available evidence on nurse mentors' experiences of their competence in mentoring nursing students during clinical practice. The research was guided by the following question: What kinds of experiences do nurse mentors have of their competence in mentoring nursing students?

Design

This systematic review was conducted according to an *a priori* published protocol (PROSPERO CRD42016046883) and followed the Joanna Briggs Institute guidelines (JBI, 2014).

Search methods

Seven electronic databases (CINAHL, Medline Ovid, Scopus, Eric, the Web of Science, Medic, and OATD) were systematically searched from January 2000 to October 2017. The date range was set according to changes in clinical practice standards within nursing education. Since the start of the 21st century, a large proportion of the teaching (Kemper, 2007) and transfer of clinical knowledge to students has become the mentor's responsibility (Warren and Denham, 2015). The keywords used in the search strategy are presented in Table 1.

The inclusion criteria were chosen according to the PICo review protocol (participants, phenomena of interest, context, types of studies) (JBI, 2014; Stern and McArthur, 2014; Tuomikoski & Kääriäinen, 2016). This review included studies of registered nurses' experiences in mentoring undergraduate students and studies that included acute care and primary care organizations which had provided clinical practice for nursing students. Studies that used qualitative research methods, or mixed (qualitative and quantitative) research methods with the qualitative results presented separately, were included. The review was not limited to specific qualitative study designs. All identified quantitative studies were excluded since the quantitative study design – when considered in the scope of critical realism – does not provide descriptions that convey deep meaning relevant to the studied phenomena (Tong et al., 2012; Weaver and Olson, 2009). Studies published in English, Finnish, and Swedish were included.

Search outcomes

Studies were selected separately by two independent reviewers at each stage of the selection and inclusion process. The search strategy produced a total of 5 215 hits, after which duplicates were removed and the identified studies were screened by title and abstract (n=3 080) and full-text (n=91). In addition, a manual search of the reference lists of the retrieved studies identified two more studies, which resulted in 21 studies being selected for the assessment of methodological quality (see Figure 1). Any disagreements between the reviewers were resolved through discussion.

Quality appraisal

The Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) was used to evaluate the quality of each original study chosen for the systematic review (JBI, 2014). Two researchers independently performed the quality appraisal and came to a consensus at the end of the process. A level of credibility was allocated to each finding presented in the identified research based on the reviewer's perception of the degree of support offered for that finding. In this way, only reliable findings were accepted (JBI, 2014; Lockwood et al., 2015). All of the selected studies (n=21) demonstrated good methodological quality (see Table 2).

Data extraction

The JBI-QARI extraction tool was used to extract data from the chosen studies. The data were extracted according to the references of each study, country of origin, methodology, phenomena of interest, setting, participants and key findings (see Table 3). Standardized data extraction forms with clear fields were used to minimize errors in the data extraction process.

Data synthesis

Findings from the included qualitative studies were pooled using meta-aggregation in JBI-QARI. According to JBI's guidance, meta-aggregation is an analytical method for gathering findings from qualitative studies, grouped into categories of similar meanings. (JBI, 2014.) During the extraction process, the data was divided into unequivocal (relating to evidence beyond reasonable doubt), plausible/credible, and not supported/unsupported data. Only unequivocal data, direct illustrations, were chosen for final data analysis. The illustrations were organized into findings without the use of the researchers' further interpretation. The findings generated a set of representative statements that were organized and merged into categories and synthesized findings. (Lockwood et al., 2015.)

RESULTS

Characteristics of the studies

The 21 original articles were conducted in Australia, Canada, Finland, Ireland, Norway, Spain, Sweden, the Uganda, United Kingdom, and the United States. The studies employed various qualitative methodological approaches, including ethnographic, phenomenographic, hermeneutical, and phenomenological approaches, as well as grounded theory and descriptive research. The studies were conducted in general, private, and university hospitals along with general and primary care settings. A total of 294 nurses reported their experiences of competence in mentoring nursing students. Nurses' ages ranged from 20 to 62 years. Data were collected using focus groups, group and individual interviews and analyzed by inductive content analysis, thematic analysis, phenomenographic techniques and constant comparative method.

Review Findings

A total of 92 findings were aggregated into 23 categories, and then into five synthesized findings: 1) creating an interactive relationship with the student; 2) developing mentor's characteristics and cooperation with stakeholders; 3) providing goal-oriented mentoring; 4) supporting students' development to nurse profession; 5) supporting the student's learning process (see Table 4).

Creating an interactive relationship with the student

The first synthesized finding included four categories which reflected 16 findings. The first category, 'able to create a safe atmosphere for learning', was supported by three findings. Mentors explained that students need to feel safe, and that mentors play an important role in creating a safe atmosphere (Carlson et al. 2009b; Hilli et al., 2014a; Lillibridge et al., 2007). The second category, 'able to create a permissive atmosphere for learning', was supported by four findings. Mentors described that in a permissive atmosphere the student is allowed to be a student, but still students are treated as part of the team (Bengtsson et al., 2011; Carlson et al. 2009b; Hilli et al., 2014b; Jokelainen et al. 2013b). The third category, 'creating a reciprocal relationship with the student', was supported by five findings. Nurses explained that their role as a mentor is not only important for creating a reciprocal and mutual relationship with students (Bos et al., 2015; Carlson et al., 2009b; Hilli et al., 2014b; Jokelainen et al., 2013b), but also for mutual respect with other stakeholders, i.e. patients, management, and fellow staff members (Hilli et al., 2014b; Jokelainen et al., 2013b). Respect towards human beings and tolerance were shown to be important characteristics in building this type of relationship (Hilli et al., 2014b). The fourth category, 'able to

reflect during mentoring', was supported by five findings. In general, mentors grasped the importance of reflection and discussion with students during clinical practice (Bos et al., 2015; Carlson et al., 2009; Hilli et al., 2014a; Landmark et al. 2003; Jokelainen et al., 2013b).

Developing mentors' characteristics and cooperate with stakeholders

The second synthesized finding encompassed five categories. The first category, 'motivation', was supported by four findings. Nurse mentors expressed that mentors should enjoy mentoring students, should want students to learn, and should be interested in their work and in taking care of the student (Hilli et al., 2014b; Meretoja et al., 2011). The second category, 'personal qualities', was based on six findings. Mentors described diverse personal qualities that are required for mentoring nursing students: patience (Halcomb et al., 2012; Hilli et al., 2014b; Öhrling et al., 2000), being exemplary and approachable (Mubeezi & Gidman, 2017), ability to avoid stress, charity and thoughtfulness (Bengtsson et al., 2011). The third category, 'able to manage time spent caring for patients and mentoring students', was based on two findings. Mentors explained that they must balance the responsibilities associated with students' and patients' needs, and still find sufficient time for mentoring (Bos et al., 2015; Öhrlin et al., 2000). The fourth category, 'able to cooperate with other members of the nursing faculty', was supported by two findings. Nurses believed that mentors should cooperate with nursing faculty members, especially in difficult mentoring situations. Simultaneously, mentors can clarify the expectations between individuals and organizations (Bengtsson et al., 2011; Landmark et al., 2003). The fifth category, 'able to cooperate with fellow colleagues and mentor students as part of a multi-professional team', was based on three findings. Mentors reported conferring with colleagues, especially when mentoring was proven to be ineffective for a student (Bengtsson et al., 2011; Jokelainen et al., 2013a). Student mentoring competence involves the ability to cooperate with other professionals, work effectively as part of a multi-professional team, and collaborate with other healthcare and social care services (Bourbonnais et al., 2007).

Providing goal-oriented mentoring

The third synthesized finding included three categories. The first category, 'able to recognize students' current competencies', was based on six findings. Mentors recognized their role in identifying a student's learning needs (Halcomb et al. 2012; Hilli et al. 2014a; Jokelainen et al., 2013a) and current competence, noting that they discuss the student's expectations and experiences at the beginning of clinical practice (Bengström et al. 2011; Bourbonnais et al., 2007; Jokelainen et al., 2013a). The second category, 'able to set individual learning objectives', was supported by five findings. It refers to how mentors support students in setting realistic, achievable, and individual

learning objectives through discussion while also taking into consideration the objectives of the educational program (Carlson et al., 2009b; Hilli et al., 2014a; Jokelainen et al., 2013b; Landmark et al., 2006; Meretoja et al., 2006). The third category, 'able to give responsibility according to a student's level of knowledge', reflected four findings. Mentors should be able to provide advanced learning tasks according to a student's level of development, and to delegate responsibilities when students are ready (Bourbonnais et al., 2007; Carlson et al 2009b; Jokelainen et al., 2013b; McSharry et al., 2017).

Supporting students' development to nurse profession

The fourth synthesized finding included four categories. The first category, 'able to teach the holistic perspective of nursing', was supported by two findings. Mentors expressed their desire to convey the spirit of nursing to students and reported that they often narrate their own nursing experiences to students (Brammer, 2006; Hilli et al., 2014a). The second category, 'able to develop a student's clinical competence' was based on nine findings. This category describes how mentors should teach and allow students to practice communication skills, practical skills, nursing diagnoses, clinical procedures, and high-quality nursing during clinical practice (Brammer, 2006; Carlson et al., 2010; Hilli et al., 2014a; Jokelainen et al., 2013a; Meretoja et al., 2006). The third category, 'able to teach the student about nurses' decision-making role', reflected two findings. Mentors felt that it is important for students to have sound management of patient care decision-making (Bos et al., 2015; Öhring et al., 2000). The fourth category, 'able to assist students in their professional growth and to act as a professional role model', was supported by four findings. Mentors felt that one purpose of mentoring is supporting and assisting students' professional growth (Bourbonnais et al., 2007; Hilli et al., 2009b; Meretoja et al., 2006) and they are aware that their behavior influences students' attitudes and behaviors (Landmark et al., 2003).

Supporting the student's learning process

The fifth synthesized finding comprised of five categories. The first category, 'able to use different kinds of teaching methods', was based on seven findings. Mentors described pedagogical competence (Meretoja et al., 2012) as the ability to demonstrate (Hilli et al., 2014a), ask questions (Carlson et al., 2009b, Hilli et al., 2014a; McSharry et al., 2017), observe, advise, and explain (Öhring et al., 2001) issues related to the clinical field. The second category, 'able to organize learning opportunities for students', was supported by three findings. Mentors felt that their responsibilities include choosing, encouraging, and offering suitable learning situations for the student (Jokelainen et al., 2013b; Lillibridge, 2007; Öhring et al., 2001). The third category, 'able to connect theory and practice', was based on four findings. Mentors expressed that mentors should

understand the relationship between nursing theory and practice (Brammer, 2006; Hilli et al., 2014a; Landmark et al., 2003; Mubeezi et al., 2017). The fourth category, 'able to give feedback to the student and to receive feedback' reflected seven findings. Mentors expressed that feedback should be situational, private, objective, honest, positive, constructive, immediate, continuous, timely, and based on the student's identified goals (Carlson et al., 2009a; Jokelainen et al., 2013b). Mentors stated that a mentor should be able to receive feedback from a student so that they can develop their professional and mentoring competence (Bos et al., 2005; Carlson et al., 2009b; Hilli et al., 2014b; Jokelainen et al., 2013a) and it enables mentors' reflection on their own clinical practice to ensure they are not transferring bad habits to students (Halcomb et al., 2012). The fifth category, 'able to conduct student evaluation of learning and competence in collaboration with stakeholders', reflected six findings. Mentors mentioned that they should be able to gather feedback about a student's performance from other colleagues (Jokelainen et al., 2013b). Mentors expressed that student evaluations should focus on concrete performance (Meretoja et al., 2006). Guidance during the second half of clinical practice is based on the assessment conducted at the half-way point of the clinical practice period. The final assessment concludes the clinical placement and should recommend specific areas for the student to focus on in future clinical practice (Carlson et al., 2009b; Meretoja et al., 2002).

DISCUSSION

This systematic review synthesized nurse mentors' experiences of their competence in mentoring and organized the findings into five synthesized findings. According to the findings, mentors should be able to create an interactive relationship with the student in order to ensure a successful mentoring experience. Previous studies have also shown that the mentor and student interactive relationship is relevant to the student (Jokelainen et al., 2011; Trede et al., 2016) and that this is one of the most important factors relating to student's learning. Also, students have evaluated the pedagogical atmosphere of clinical practice according to how mentoring is organized (Sundler et al., 2014). Mentors' competence to create an interactive relationship with students is also a major part of the quality of the clinical environment, and creates a basis for students' learning.

In addition to various mentoring competencies, the importance of mentors' personal characteristics has been extensively covered by previous literature (Pitkänen et al., 2018). Mentors feel that they should have personal characteristics that support student learning, for example, a passion for mentoring nursing students. In previous studies, nursing students have estimated that mentors are motivated in mentoring nursing students (Gidman, 2011; Pitkänen et al., 2018) and mentors have

assessed their attitudes towards students to be good. The negative attitudes towards students have also been identified and are often associated with the increased workload of mentoring students (Kamolo et al., 2017). It is essential to identify and develop the qualities of the mentor, as the characteristics of the mentor are the starting point for successful student guidance (Kamolo et al., 2017). Mentors' ability to create a positive relationship with students is an ethical issue, which includes the mentors' values and perceptions of student mentoring. Cooperation with stakeholders, such as nursing faculty members and multiprofessions teams are another key part of well-organized mentoring, and the research assessed in this review agreed with this point. The review by Jokelainen et al. (2011) highlighted that co-operation with all relevant stakeholders who participate in a student's clinical education enables the student to take equal participation in teamwork during placement.

This review found that mentors felt responsible for identifying a student's current level of competence and helping them set individual learning objectives that are aligned with the curriculum. According to mentors, this process involves monitoring achievements and setting realistic learning objectives. Mentors play a significant role in students' achievement of their goals (Löfmark et al., 2012), but order to provide the goal-oriented mentoring. Mentors have also assessed that they are unable to take into account the student's level of competence and to support the student's growth and development (Mather et al., 2015). Mentors' competence in providing goal-oriented mentoring may promote students' individual learning (Perry et al., 2018). Discussion on goals is important because students' overall satisfaction with their practice is found to increase if they regularly discuss their learning objectives with the mentor. Hence, cooperation between the nurse teacher and mentor has been identified as essential to providing students with a successful learning experience. (Pitkänen et al., 2018.)

This review demonstrates that mentors should be able to support students' development into the nursing profession. The HWA (2013) states that mentors are responsible for organizing and coordinating student learning activities as well as facilitating students' development of particular skills and knowledge during clinical practice. Students have also identified that the task of the mentor is to challenge students to think independently and solve nursing problems, thus developing their critical thinking and decision-making skills (Reljić et al., 2019). This is a relevant result, because a significant part of nurse education is taking place during clinical practice (EU directive, 2013).

According to the findings of this review, mentors should be able to support students' learning processes, that includes pedagogical issues, feedback and student evaluation. Mentors should able

to have pedagogical competence and reflective mentoring skills; nevertheless, several countries currently do not require mentors to have completed mentoring education (Dobrowolska et al., 2016; ME, 2006). There is evidence that mentors who have completed mentoring education evaluate their competence in facilitating students' learning processes more positively than mentors without education (Tuomikoski et al. 2019; Wu et al., 2018). Furthermore, according to this review, mentors should be able to give and receive feedback from students. Constructive feedback increases students' confidence, motivation and self-esteem as well as improves clinical practice. Without receiving feedback from a mentor, students cannot develop their competence in nursing. Previously identified barriers to the feedback process included inadequate mentoring education, an unfavorable learning environment and insufficient time spent with students (Clynes et al., 2008). Another important finding in this review was that the evaluation and assessment of a student's performance is a crucial part of mentoring. Mentors have evaluated their competence in assessing students at the lowest level when compared to other areas of competence (Helminen et al., 2017; Tuomikoski et al., 2018). They felt they needed more information on student assessment issues (Ford et al., 2013). Nevertheless, mentors need support from nursing teachers to ensure the completion of a relevant assessment process (Helminen et al., 2017).

This review provides versatile and thorough findings regarding nurse mentors' experiences of mentoring nursing students that can be used to develop education, evaluate nurses' mentoring competencies and improve the learning processes afforded to clinical placement students. The findings can also be used to develop a tool that can be used to measure a nurse's mentoring competence and/or to create content that will support mentoring education. Identifying and evaluating nurses' mentoring competence is important because inadequate competence development of students can lead to the development of incompetent nurses (Almalkawi et al., 2018) and thus affect patient safety and the quality of care (Nash & Flowers, 2017). Mentors need to ensure the high-quality of mentoring of clinical practice in social and health care environments (Kalischuk et al., 2013). Mentoring in clinical practice and mentors' competence can be developed through mentor education (Kamolo et al., 2017).

Limitations

This review has some limitations. In an attempt to avoid any language bias, we included studies reported in English, Finnish, and Swedish in this review. However, this language restriction could lead to relevant research being overlooked. While every effort was made to identify relevant studies and a systematic search was conducted, some studies may have been missed.

Implications for Practice and Research

The creation of a reciprocal and trusting mentor - nursing student relationship requires that clinical placements are well-organized and include practical activities arranged by educated mentors. Similarly, mentoring education must cover how subject knowledge and patient care situations can be incorporated into pedagogical training so the student is actively guided through the learning process. Additionally, mentors must be adept at setting relevant learning objectives and providing constructive feedback. Mentors must also be open to collaborating with higher education institutions and other relevant stakeholders if they want to provide the best mentoring experience. Further research on the requirements of mentoring competence needs to consider the perspectives of both mentors and students. This research could compare students' and mentors' perceptions of the clinical learning environment and mentoring practices.

CONCLUSION

According to the evidence-based knowledge presented in this review, mentors' experiences of mentoring demonstrate that mentors require a diverse range of competencies to successfully mentor nursing students in clinical practice. It is important to assess mentoring competence and support the development of additional mentoring skills, as a mentor's competencies can influence nursing students' experiences of clinical practice as well as their attitudes towards the nursing profession. Mentoring competence could be enhanced by education that initially offers general mentoring training and is later supplemented with continuous education on diverse topics. According to the findings of this review, we argue that the development of mentoring competence improves the guidance of nursing students during their traineeship, increases students' competence in nursing, benefits patient safety and provides patients with better care.

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Figure 1: Flowchart of study selection process

Table 1. Keywords used in the search strategy

Initial keywords used in the search strategy

In English: MH "mentorship" or mentor* or supervis* or facilitat* or precept* or coach* or instructor* or teach* or tutor* or educator* or coach* or train* AND MH "Students, Nursing" or "nurs* student*" AND MH "learning environment clinical" or MH "education clinical" or MH "students placement" or "clinical practice" or "clinical placement*" or "clinical rotation" or "clinical training" or "clinical learning" or "clinical teaching" AND competence* or skill* or knowledge or attitude* or perform* or value*

In Finnish: ohjaaj* or lähiohjaaj* or arvioij* or opiskelijaohjaaj* AND osaami* or kompetens* or ohjausosaami* or asen* AND "käytännön harjoittelu" or kliini* or harjo* or käytän* AND sairaanhoitaj* or opisk*

Journal Pre-proof

Table 2. Assessment of methodological quality (JBI-QARI) of included studies

Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Bengtsson M, Kvarnhäll J, Svedberg P. 2011	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Bos E, Silèn C, Kaila P. 2015	N	Y	Y	Y	Y	N	Y	Y	Y	Y
Bourbonnais F, Kerr E. 2007	N	Y	Y	Y	Y	N	N	Y	Y	Y
Brammer J. 2006	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Carlson E, Pilhammar E, Wann-Hansson C. 2009a	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Carlson E, Pilhammar E, Wann-Hansson C. 2009b	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Carlson E, Pilhammar E, Wann-Hansson C. 2010	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Halcomb EJ, Peters K, McInness S. 2012	N	Y	Y	Y	Y	N	N	Y	Y	Y
Hathorn D, Machtmes K, Tillman K. 2009	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hilli Y, Melenderc HL, Salmuc M, Jonsénd E. 2014a	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Hilli y, Salmu M. Jonsèn E. 2014b	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Jokelainen M, Jamookeeah D, Tossavainen K, Turunen H. 2013a	N	Y	Y	Y	Y	Y	N	Y	Y	Y
Jokelainen M, Tossavainen K, Jamookeeah D, Turunen H. 2013b	N	Y	Y	Y	Y	N	N	Y	Y	Y
Landmark B, Hansen G, Bjones I, Bohler A. 2003	N	Y	Y	Y	Y	N	N	Y	Y	Y
Raquel Lapena-Monux Y, Cibanal-Juan L, Orts-Cortes I, Macia-Soler L, Palacios-Cena D. (2016)	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Lillibridge J. 2007	N	Y	Y	Y	Y	N	N	Y	Y	Y
Meretoja R, Häggman-Laitila A, Lankinen I, Sillanpää K, Rekola L, Eriksson E. 2006	N	Y	Y	Y	Y	N	Y	Y	Y	Y
McSharry E & Lathlean J (2017)	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Mubeezi MP & Gidman J (2017)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Öhring K, Hallberg IR. 2001	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Öhring K. Hallberg IR. 2000	Y	Y	Y	Y	Y	N	N	Y	Y	Y
%	61.90	100	100	100	100	14.29	28.57	100	100	100

Y = Yes, N = No, U = Unclear; JBI critical appraisal checklist for qualitative research: Q1 =Is there congruity between the stated philosophical perspective and the research methodology; Q2 =Is there congruity between the research methodology and the research question or objectives?; Q3 = Is there congruity between the research methodology and the methods used to collect

data?; Q4 = Is there congruity between the research methodology and the representation and analysis of data?; Q5 = Is there congruity between the research methodology and the interpretation of result?; Q6 = Is there a statement locating the researcher culturally or theoretically?; Q7 = Is the influence of the researcher on the research, and vice-versa, addressed?; Q8 = Are participants, and their voices, adequately represented?; Q9 = Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?; Q10 = Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?

Table 3. Extracted data of studies included for the review

Original studies, country, publication language	Methodology, method, and data analysis	Phenomena of interest	Setting and participants	Findings
Bengtsson M et al., (2011) Sweden, in Swedish	Qualitative, interview, Grounded theory	To gain a deeper understanding of nurses' experiences with supervision of nursing students in clinical practice.	Hospital, 15 registered nurses, all female, ages 25–50 years	The results comprise one core category "supervision was perceived as development and stimulation" and four subcategories: to have sufficient time, to have positive functional cooperation, to have sufficient knowledge, and to receive affirmation. These categories formed a conceptual model explaining nurses' experiences with supervision and their needs for time, cooperation, knowledge, and affirmation, and whether supervision should be perceived as developmental and stimulating.
Bos E et al., (2015) Sweden, in English	Qualitative (no specific mention of philosophical framework), semi-structured with guided questions, focus group interviews, face-to-face, two authors, Inductive content analysis	To gain understanding of supervisors' experiences supervising undergraduate students.	Primary Health Care, 24 supervisors'/ district nurses' (registered nurses)	Three themes illustrated supervisors' experiences: abandonment, ambivalence, and sharing the holistic approach. Supervisors felt abandoned by their managers, colleagues, and nursing teachers at universities. They experienced ambivalence due to simultaneously being supervisors for students and carrying out their daily work with patients. At the same time, they were proud to be DNs and were willing to use their unique role as supervisor to apply a holistic approach and continuity to patient care with students.
Bourbonnais F et al., (2007) Canada, in English	Qualitative (no specific mention of philosophical framework), one-on-one interviews, Thematic analysis	To capture personal reflections on being a preceptor and to identify the supports and challenges to enacting the role.	Hospital, 7 baccalaureate nurses and 1 diploma nurse, with previous experience as a preceptor	The overriding theme from the analysis was "safe passage." This safe passage was for the patient and the student and was accomplished through teaching and a clear view of the preceptor role. Challenges to the role were a lack of recognition by other nursing staff and limited support from some faculty advisors. Support for the role was provided by the visible presence and ongoing support of faculty advisors and the hospital workshop.
Brammer J, (2006) Australia, in English	A phenomenographic approach, individual semi-structured interviews, Phenomenographic techniques	To explore the varied ways RNs understand their role with the undergraduate nursing student in the clinical environment.	Metropolitan and regional locations, 28 registered nurses	Eight variations of registered nurses' insights on their informal role with students were identified. The registered nurses' insights varied from a focus that is "student-centered" to "completion-of-workload-centered" to "registered-nurse-control-centered" to a preference for no contact with students.
Carlson E et al., (2009a) Sweden, in English	Ethnographic approach, observed and focus group interviews,	To describe conditions for precepting in a Swedish	Regional and university hospital, 16 staff nurses	Precepting was found to be a complex function for nurses, influenced by conditions that could be both supportive and limiting in nature. Three themes

	Ethnographic approach	clinical context from the perspective of precepting nurses.		described these conditions: organization, comprising clinical responsibilities and routines; collaboration, focusing on professional relations and interactions; and the personal perspective, comprising preceptors' experiences, need for feedback, and notions of benefits.
Carlson E et al., (2009b) Sweden, in English	Ethnographic approach, observed and focus group interviews, Ethnographic approach, constant comparative method	Describes which strategies and techniques preceptors use to teach undergraduate nursing students during clinical practice.	Regional and university hospital, 16 staff nurses	Findings illustrated how preceptors used different strategies and techniques in a continuous process of adjusting, performing, and evaluating precepting. Increased knowledge of how the preceptors actually teach student nurses during clinical practice will help facilitate educational programs for preceptors, which will enhance their pedagogical skills and competencies.
Carlson E et al., (2010) Sweden, in English	Ethnographic approach, observed and focus group interviews, Ethnographic approach	To describe how preceptors mediated nursing as a profession to undergraduate nursing students during clinical practice	Hospital, 16 staff nurses	Findings illustrated how nursing was portrayed as a medical-technical, administrative, and caring role. Preceptors aimed for professionalism in their students by teaching the students to reflect on what they can do independently as nurses. Preceptors strived to verbalize their practical knowledge to make theory explicit and to contextualize it for student nurses. This knowledge can guide the implementation of preceptor programs focusing on the meaning and implications of professionalism.
Halcomb EJ et al., (2012) Australia, in English	Qualitative (no specific mention of philosophical framework), Structured telephone interviews, Thematic analysis	To explore the experiences of practice nurses when supervising undergraduate nursing students on clinical placement in a general practice setting.	General practice setting, 12 practice nurse who had experience supervising undergraduate nursing students in general practice placements	Findings are presented in the following three themes: (1) Promoting practice nursing: we really need to get students in, (2) Mentoring future co-workers: patience and reassurance, and (3) Reciprocity in learning: it's a bit of a two-way street, which shows the benefits of such placements. Clinical placements in general practice settings can be mutually beneficial in terms of providing quality teaching and learning experiences for students.
Hathorn D et al., (2009) USA, in English	Phenomenological, Semi-structured interview, Modified Van Kaam method	Gained an understanding of what attitudes the nurses experienced and how negative attitudes were developed.	6 staff nurses who worked with nursing students in an acute care clinical facility	Data analysis identified the emerging themes as: professional socialization attitudes, beliefs about nursing education, role expectations, motivational deterrents, and communication factors. Findings suggest collaborative strategies to reduce negative attitudes and promote positive, professional socialization behaviors of nurses toward student nurses in the clinical environment.
Hilli Y et al., (2014b) Finland and Sweden, in English	Hermeneutical approach, thematic narrative interviews, Hermeneutical approach	To explore preceptors perceived experiences of good preceptorship	Hospitals and primary care, N=27, 14 Swedish and 13 Finnish, ages 26–61,	A caring relationship, based on caring ethics, was considered the foundation for learning and development. Moreover, mutual respect was a prerequisite for fellowship and a good atmosphere. As such, encounters were characterized by

		in relation to undergraduate student nurses in clinical practice.	22 females and 5 males	reciprocity and mutuality. The preceptors had a deep sense of responsibility for the students and the profession. Furthermore, the preceptors felt an inner responsibility to guide students into working life and to share their knowledge by acting as role models.
Hilli Y et al., (2014a) Finland and Sweden, in English	Hermeneutical approach, thematic interviews, Hermeneutical approach	To gain a deeper understanding of perceived experiences with preceptorship used to support undergraduate student nurses during their clinical education.	Hospitals and primary care , N=31, 15 Swedish and 16 Finnish, ages 27–59, 27 females and 4 male	Preceptorship involves teaching in a supportive environment with ethical dimensions uniting theory and practice. A caring relationship is essential and the basis for student learning and development.
Jokelainen M et al., (2013a) Finland and the UK, in English	Phenomenographical, focus group interviews, Hermeneutical approach	To provide a description of Finnish and British mentors' conceptions of the facilitation of pre-registration nursing students when they mentor students in healthcare placements	General, private and university hospitals, N= 39, 22 from Finland and 17 from the UK, ages 29–58.	The findings identified four main descriptive categories that grouped the different experiences of mentors with student facilitation. First, students should be the focus and should be respected as individual partners with personal learning goals. Second, placements must be fit for students' practice and learning. Third, facilitation was considered guided co-working and spurring to enable a student to attain the stipulated nursing competencies. Finally, the ongoing assessment of students' achievements, learning outcomes and professional attributes were considered significant.
Jokelainen M et al., (2013b) Finland and the UK, in English	Phenomenographical, focus group interviews, Phenomenographical approach	To present Finnish and British mentors' conceptions of the factors that affect their ability to mentor student nurses effectively in healthcare placements.	General, private and university hospitals, N= 39, 22 from Finland and 17 from the UK, ages 29–58, nurses who mentored student nurses in healthcare placements	The findings highlighted the factors governing seamless and committed collaboration among all stakeholders involved in student mentorship. Mentors expressed that their own advantageous attitudes, capabilities, and competence, their supportive cooperation with colleagues and lecturers, and the enthusiasm and active participation of students were all significant factors determining the effectiveness of student mentorship.
Landmark B et al., (2003) Norway, in English	Qualitative descriptive research design, focus group interviews, Qualitative content analysis	To describe factors defined by nurses as influential to the development of	Hospital N= 20, ages 22–62, nurses who had experience supervising student nurses in the	Nurses in this study identified factors related to three areas of importance for the development of competence and skill at supervising students: didactics, role functions, and organizational framework. Didactic factors described included: integration of theory and practice; reflection on clinical situations; clarification

		competence and skills in supervision.	clinical field	of supervision aims, and student evaluation. Factors related to role function included: feelings of security and awareness while supervising; differentiation between student and supervisor roles; and the meaning attached to being a role model. Framework factors included nursing faculty and clinical field expectations. An understanding of how nurses describe what they need to support their development as clinical supervisors gives a basis for the development of postgraduate education in clinical supervision. Competent clinical supervisors are better able to support students as they build bridges between theory and practice.
Lapena-Monux et al., (2016) Spain, in English	A phenomenological qualitative study, 16 unstructured interviews and 10 semi-structured interviews, one personal letter and five diaries, Giorgi data analysis proposal	To explore the experiences of registered nurses working with Spanish nursing students in the hospital.	University hospital, N=21, mean age 46 years	Three main themes described the experiences of registered nurses: "the nurse's relationship with nursing students"; most nurses emphasized the importance of initial contact with students and considered students' attitudes essential. "Defining the role of the student in clinical practice"; it is necessary to unify the nurses' role with interventions to avoid misleading students and to establish priorities for clinical practice. "Building bridges between clinical settings and the University"; nurses emphasized the need to establish common ground and connection between the university and hospital clinical settings. Nurses felt that the training program should also be designed according to the clinical settings themselves. Conclusions: understanding the meaning of nursing students with registered nurses might gain a deeper insight into their expectations?
Lillibridge J, (2007) Rural Northern California, USA, in English	Qualitative descriptive research design, private interviews, Use of computer program Nvivo	The purpose of this qualitative descriptive study was to explore the preceptorship experiences of five nurses currently in the preceptor pool for a baccalaureate nursing program in rural Northern California.	Hospitals, N=5, ages 37-60 years	Theme 1 represented how nurses saw the personal and professional rewards and benefits of being preceptors. Theme 2 described how nurses felt they made a difference in student learning. Theme 3 described how nurses created learning opportunities for students by being good role models and by protecting students from negative experiences. Theme 4 identified difficult aspects of the precepting role. Theme 5 identified the different people involved in the complex precepting experience (the preceptor, nursing faculty, students, and the nurse manager) that all had to collaborate if students were to have a good experience.
Meretoja R et al., (2006) Finland,	Qualitative (no specific philosophical framework	The purpose of this study was to	University hospital, N= 7 registered	The findings indicated that nurses and managers described the prerequisites of and tasks involved in mentoring from many

in Finnish	mentioned), semi - structured, focus group interview, face-to-face, two interviews, Inductive content analysis	describe the perspectives of nurses and clinical managers on mentoring nursing students in clinical practice	nurses who work in the university hospital and have experience mentoring undergraduate nursing students	perspectives. The main prerequisites identified for personal mentoring were: knowing the organization, skills in care work, and skills in development and supervision. Tasks involved in personal mentoring included planning the implementation of nursing practice, implementing nursing practice, evaluating students' skills, and supporting the students.
Mubeezi M. & Gidman (2017) Uganda, in English	Phenomenological approach, open – ended, semi-structured, in-depth interviews, Interpretative Phenomenological Analysis (IPA)	How mentors perceived their roles and their own knowledge of and skills at mentoring student nurses	Hospital, N=5 qualified practicing nurses registered with the Uganda Nurses and Midwives Council who had taught student nurses in practice for at least a year	The findings of this study were presented in the three themes which emerged from the data, using verbatim quotations to illustrate the participants' voices: 1. Meaning of the term 'mentoring' 2. Mentors' perceptions of their knowledge and skills 3. Challenges
McSharry E. & Lathlean J. (2017) Ireland, in English	A qualitative design underpinned by the philosophy of social constructivism, semi-structured one-to-one interviews, Interpretative approach	This study aimed to explore clinical teaching and learning occurring within a preceptorship model in an acute care hospital in Ireland, and to identify when best practices, based on current theoretical, professional, and educational principles, occurred.	n=13 preceptors	Preceptor-student contact time within an empowering student-preceptor learning relationship was the foundation of effective teaching, learning and assessment. Dialoguing and talking through practice enhanced students' knowledge and understanding, while the preceptors' ability to ask higher order questions promoted students' clinical reasoning and problem-solving skills. Insufficient time to teach, and an over-reliance on students' ability to participate in and contribute to practice with minimal guidance were found to negatively impact students' learning.
Öhrilng K et al., (2001) Sweden, in English	Phenomenological-hermeneutic, narrative interviews, Phenomenological-hermeneutic analysis	The aim of this study was to elucidate registered nurses' experiences with the preceptorship process and develop an understanding of the meaning of	Hospitals, N=17, all female, ages 29–55, nurses acting as preceptors for individual student nurses	The meaning of preceptorship was understood as reducing the risk of students' helplessness in learning and empowering students learning during clinical practice. The meaning of preceptorship highlighted the need for further preceptor support and development of the role of the preceptor. Suggestions based on the findings were made to increase the preceptors' awareness of values in nursing practice and to increase the use of pedagogical strategies in the preceptorship process.

		preceptorship when acting as a preceptor for student nurses.		
Öhrling K et al., (2000) Sweden, in English	Phenomenological-hermeneutic, narrative interviews, Phenomenological-hermeneutic analysis	The aim of this study was to elucidate nurses' experiences being a preceptor for student nurses in an inpatient setting.	Hospitals, N=17, all female, ages 29–55, nurses acting as preceptors for individual student nurses	The analysis revealed two main themes: (1) including the student in their daily work, and (2) increasing awareness of the learning process. Six other themes were identified, and they contributed to a new comprehension of the meaning of being a preceptor. All the themes were related to the ongoing preceptor-student relationship. Preceptors' thinking on past experiences and their ideas about future nursing care were presented simultaneously. Nurses acting as preceptors were perceived as conscious individuals, demanding a balance in their daily work responsibility with increased awareness of the professional demands of nursing care. Preceptors gained increased awareness of, and a desire to fulfill, student nurses' varied learning needs and increased awareness of their own learning processes.

Table 4. Synthesized findings, presented as synthesized categories, the underlying categories and findings supporting each category.

SYNTHESIZED FINDINGS	CATEGORIES	FINDINGS
Creating an interactive relationship with the student	Able to create a safe atmosphere for learning	Opportunity for students to take responsibility of their learning in a safe environment (Lillebridge, 2007).
		To encourage a climate that allows the student to think freely or outside the box (Carlson et al., 2009b).
		Safe relationship (Hilli et al., 2014a).
	Able to create a permissive atmosphere for learning	In a permissive learning environment, each student is allowed to be the person he or she is and have space to be a student (Hilli et al., 2014a).
		To get the students to feel they belonged to the placement, team and working community as part of the staff (Jokelainen et al., 2013b).
		A good fellowship and a permissive atmosphere allows the student to be a student (Hilli et al., 2014b)
		To create a permissive learning environment and to help weaker students become safe and independent in their upcoming professional role. Swedish: <i>Att skapa en tillåtande inlärningsmiljö och bidra till att svagare studenter blev trygga och självständiga i sin kommande yrkesroll</i> (Bengtsson et al., 2011).
	Able to create a reciprocal relationship with the student	In a good fellowship, the personnel show each other great respect as human beings and are tolerant towards each other (Hilli et al., 2014b).
		To create a feeling of security is fundamental for teaching; one way to do this is to assure that students can trust you (Carlson et al., 2009b).
		A workable receptive and mutual relationship with a motivated nursing student was also viewed as a crucial factor for effective student mentorship (Jokelainen et al., 2013a).
		Trust in students' abilities and mentor's belief that it was valuable for student's learning to spend time alone with patients and their families (Bos et al., 2015).
	Able to reflect during mentoring	To understand the reflection sessions important relation to the student's learning process (Hilli et al., 2014a).
		To think aloud and to place emphasis on information retrieval were important aspects in reflection (Jokelainen et al., 2013b).
		Nurses in the study need different forms of support to help them create meaningful arenas for reflection with their students (Landmark et al., 2003).
		To ask reflective questions (Carlson et al., 2009b).
To reflect on complex nursing situations (Bos et al., 2015).		
Developing mentor's characteristics and cooperation with stakeholders	Motivation	"Burning" interest for the work and an interest in teaching (Hilli et al., 2014b).
		To enjoy teaching and being able to share their knowledge with the students (Hilli et al., 2014b, 571).
		Motivation and organization of mentoring belongs to mentoring competence. Finnish; <i>Molemmat ryhmät katsoivat ohjausosaamiseen kuuluvan motivaation ja ohjauksen organisoimien</i> (Meretoja et al., 2002).
		The motivational factors identified were to gain knowledge and fresh ideas, provide a change in the work routine, and personal satisfaction and pride in helping (Hathorn et al., 2009).
	Personal qualities	To have patience and realize the need to alter their pace of work (Öhrling & Hallberg 2000).
		Patience and reassurance (Halcomb et al., 2012).
		To have much patience (Hilli et al., 2014b).
		The qualities of a good mentor included being highly qualified, skilled/knowledgeable, having the ability for self-reflection/self-awareness, being exemplary and approachable (Mubeezi & Gidman, 2017).
		Good mentors have the ability to avoid stress, to be charity and thoughtful, have pedagogical skills and like to be with the students. Swedish; <i>Informanterna beskrev att en bra handledare ska vara stresstålig, tillåtande, lyhörd, pedagogisk och tycka det är roligt med studenter</i> (Bengtsson et al., 2011).
		Being flexible in order to deal with the unexpected is critical in nursing (Lillibridge 2007).
	Able to manage time spent caring for patients and mentoring students	To give priority to patients (Öhrling & Hallberg 2000).
		To be torn between caring for patients and properly supervising students (Bos et al., 2015).
	Able to cooperate with other members of the nursing faculty	Cooperation between the nursing faculty and the clinical field, the clarification of expectations between individuals and organizations, and ways of organizing supervision of nursing students in the clinical field (Landmark et al., 2003).
		Participants described that co-operation with the faculty was very important. Swedish; <i>Samarbetet med Högskolan upplevde</i>

		<i>informanterna som viktigt.</i> (Bengström et al., 2011.)
	Able to cooperate with fellow colleagues, work and mentor students as part of a multi-professional team	To have intensive support from colleagues in the healthcare environment (Jokelainen et al., 2013b). Collaboration with colleagues was important especially when there were challenges with student. Swedish; <i>Delat handledarskap med kollegor upplevdes positivt av informanterna, framför allt vid tillfällen då samarbetet med studenten inte fungerade.</i> (Bengström et al., 2011). To integrate the students so that they can work effectively as a professional in an interprofessional team. (Bourbonnais & Kerr 2007)
Providing goal-oriented mentoring	Able to recognize students' current competencies	Able to describe how they determined the level of functioning of the student and then planned learning activities (Bourbonnais & Kerr 2007). Receptive to the needs of the student and tried to respond to those needs (Hilli et al., 2014a). To know the student's competence level, previous skills, knowledge and abilities in order to mentor successfully (Jokelainen et al., 2013). To ensure students became competent with the skills they had previously lacked (Hatcomb et al., 2012). Mentoring was adapted based on the students' previous knowledge and towards the students with previous experience of nursing, the supervisor was more permissive. Swedish; <i>Handledningen anpassades utifrån studenternas förkunskaper och gentemotstudenter med tidigare erfarenhet av omvårdnad var handledaren mer tillåtande.</i> (Bengström et al., 2011.) To know what students ought to know and be able to do in their 1st, 2nd or 3rd year. (Carlson et al 2009b, 524).
	Able to set individual learning objectives	To support students formulating their individual objectives (Carlson et al., 2009b). By supporting students to become aware of their own supervision aims (Landmark et al., 2003). The learning outcomes set the tone of the aims and were often supporting the learning process (Hilli et al., 2014a). To know the student's present stage of education and training, the main objectives of the educational program and current clinical practice period, as well as the student's individual learning goals (Jokelainen et al., 2013b). Nurses described that mentoring included the setting of learning objectives and the checking of these at least weekly. Finnish; <i>Sairaanhoitajat liittivät harjoittelun toteutuksen suunnitteluun yhteisten tavoitteiden asettamisen ja tarkistamisen vähintään viikoittain</i> (Meretoja et al., 2002).
	Able to give responsibility according to a student's level of knowledge	To allow students to practice independently under supervision and provide suitable work with increased responsibility (Jokelainen et al., 2013b). To determine the level of functioning of the student and then plan learning activities (Bourbonnais & Kerr 2007). By giving the student responsibility under preceptoring (Hilli et al., 2014a). To achieve mastery and gradually withdraw support (McSharry & Lathlean, 2017).
Supporting students' development to nurse profession	Able to teach the holistic perspective of nursing	Understand the holistic perspective of nursing. (Brammer, 2006). To give a more holistic picture of nursing care (Hilli et al., 2014a).
	Able to develop student clinical competence	Mentoring included guiding students in taking care of the patient in order for them to achieve their objectives. Finnish; <i>Harjoittelun toteutuksesta huolehtiminen sisälsi potilaan hoitamiseen liittyvää konkreettista ohjaamista tavoitteeseen pääsemiseksi</i> (Meretoja et al., 2002). Practical skills included situations where the preceptor let the student practice techniques such as blood sampling, injections of various kinds, catheterization, handling of peripheral and central venous catheter, handling of gastric tubes and drug administration. (Carlson et al., 2010). To assure that students learned nursing diagnosis and vocabulary specific for the specialty where the students underwent their clinical practice (Carlson et al., 2010). To have extensive knowledge and skills, and substantial experience of nursing (Jokelainen et al., 2013). To teach how to think and act like a nurse and teach different ways of conduct. To guide the student into working life while instructing in the nursing process. (Hilli et al., 2014a). To assist students to develop knowledge and understanding of the reality of nursing (Brammer, 2006). Most nurses emphasized that learning priorities have changed, and that students are guided towards technology demanding care, compared to

		basic care (Lapeña-Moñux et al., 2016).
		To be familiar with one's own work and work environment which is part of overall patient care. <i>Finnish; Oman työn ja tointaympäristön tuntemisen osana kokonaishoitoa. (Meretoja et al., 2002).</i>
		To transfer knowledge rather than promoting active, student-centered learning (Mubeezi & Gidman, 2017).
	Able to teach the student about nurses' decision-making role	Planning and prioritizing was another essential part of nursing work (Carlson et al., 2010).
		Nurses described that mentor should able to make decisions. <i>Finnish; Sairaanhoitajat kuvasivat, että lähiohjaajan on osattava myös tehdä päätöksiä (Meretoja et al., 2002.)</i>
	Able to assist student professional growth and to act as a professional role model	Nurses described the support of students required to facilitate their professional growth. <i>Finnish; sairaanhoitajat kuvasivat opiskelijan tukemista ammattiin kasvamisen tukemisena. (Mereroja et al., 2002.)</i>
		To guide the students into working life and to the profession (Hilli et al., 2914b).
		To help students grow (Bourbonnais & Kerr, 2007).
		The nurses in this study describe factors related to their function as role models (Landmark et al., 2003).
Supporting the student's learning process	Able to use different kinds of teaching methods	...and the importance of improving teaching and assessment competencies. (Jokelainen et al., 2013)
		Nurses demanded pedagogical expertise from mentors. <i>Finnish; sairaanhoitajat edellyttivät lähiohjaajalta pedagogista osaamista (Meretoja et al., 2002.)</i>
		Demonstration of technical skills (Hilli et al., 2014a).
		Challenging the knowledge of the students by asking questions was another commonly used method (Hilli et al., 2014).
		Standing near the student, observing and being ready to give hints during the student's own actions (Öhrling & Hallberg, 2001).
		Elucidated teaching strategies that involved problem-solving questions (McSharry & Lathlean, 2017).
		To ask students "what if" questions helped them to think about what they might do in other situations (McSharry & Lathlean 2017).
	Able to organize learning opportunities for students	To choose nursing actions suitable for students (Öhrling & Hallberg, 2001).
		Able to clarify and articulate how they worked and in the process created learning opportunities for students (Lillibridge, 2007).
		Provision of a wide range of learning opportunities for students (Jokelainen et al., 2013b).
	Able to connect theory and practice	To keep up with developments in nursing theory and to challenge students' knowledge of theory of practice by supporting them to reflect on situations in the clinical field (Landmark et al., 2003).
		The relation between theory and practice is like a dialectic movement, you cannot do one without the other (Hilli et al., 2014).
		Teaching and promoting the application of theory and practice (Brammer, 2006).
		To facilitating the application of theory to practice and skills acquisition (Mubeezi & Gidman, 2017)
	Able to give feedback to student and to receive feedback	Giving situational feedback (Carlson et al 2009b).
		To provide objective, honest, positive, and constructive feedback to each student separately based on the identified goals (Jokelainen et al., 2013b).
		To receive constructive feedback on supervision and nursing care from students (Bos et al., 2015).
		To reflect upon one's own clinical practice to ensure not to impose bad habits on students (Halcomb et al., 2012).
		To benefit nurses' professional development in terms of nursing competence and clinical skills (Carlson et al., 2009a).
		To continuously keep up with the times and search for new knowledge (Hilli et al., 2014b).
		To receive feedback on one's own performance and abilities allowed to develop own professional skills (Jokelainen et al., 2013a).
	Able to conduct student evaluation of learning and competence in collaboration with stakeholders	Shared and team evaluation including all stakeholders, such as mentors, associate mentors, colleagues, and lecturers was important when assessing students' learning. (Jokelainen et al., 2013b).
		Evaluation is seen as important to help students proceed in their professional development (Carlson et al., 2009b).
		Nurses described that ongoing evaluation of a students' practice and actions was part of their duty It included the organization of an half-time and final evaluations. <i>Finnish; Sairaanhoitajat kertoivat lähiohjaajan tehtäviin kuuluvan opiskelijan toiminnan jatkuva arviointi. Se sisälsi väli- ja loppuarvioinnin järjestämisen. (Meretoja et al., 2002.)</i>
		The final assessment usually took the form of conclusion and a

		<p>recommendation for what areas the student needed to focus on during upcoming clinical practices (Carlson et al., 2009b).</p> <p>Assessment that was conducted once half of the placement was completed was used as guidance for the remaining part of the clinical practice (Carlson et al., 2009b).</p> <p>They felt insecure about how to assess students' learning outcomes because they did not understand the learning assessment form and found the assessment of students to be difficult. (Bos e t el., 2015.)</p>
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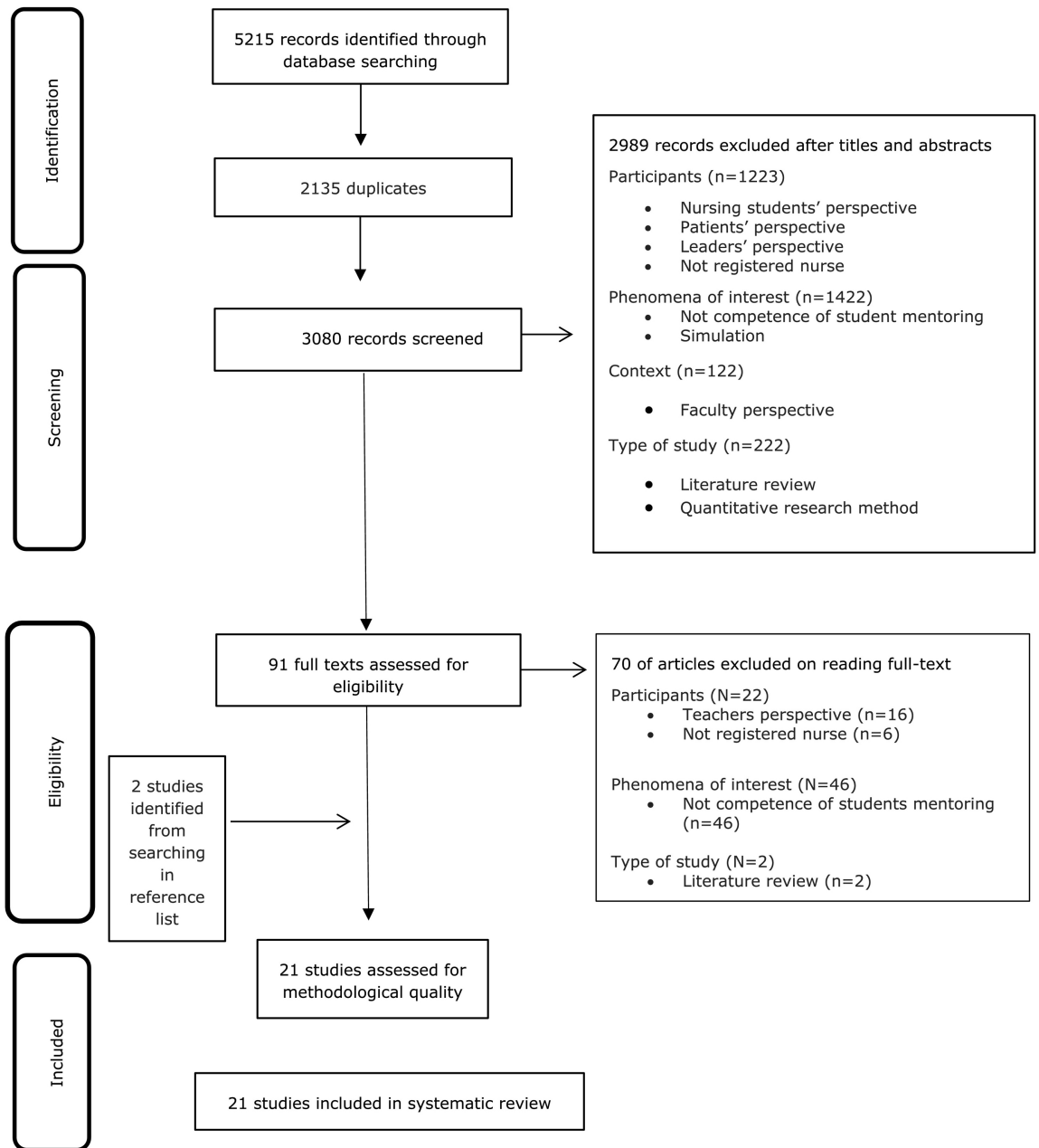


Figure 1