Factors that enhance midwifery students' learning and development of self-efficacy in clinical placement: A systematic qualitative review

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A B S T R A C T

Aim: To conduct a systematic review and synthesis of qualitative studies to explore the significant factors that enhance midwifery students' learning experiences and development of self-efficacy in clinical placement.
Background: Midwifery education programs leading to registration as a midwife require students to achieve academic, clinical, and professional competence. Clinical placement comprises a significant part of the program as students work and are assessed under the direct supervision of the Registered Midwife or preceptor. This learning and teaching partnership aims to enable the transfer of knowledge, skills, and behavior, i.e., competence, while providing the opportunity for students to become socialized into the midwifery practice culture. Against this background, characterized by the shortage of midwives, declining fertility rates, and a stressful environment, students learn to become a midwife and develop self-efficacy. Self-efficacy is the belief in one's ability to master challenges, which is described as a component in learning theories. There seems to be a need to identify factors that contribute to this development.
Design: A qualitative systematic literature review.
Method: A systematic database search was conducted to identify primary peer reviewed qualitative literature published between 2000 and 2021 that has explored what enhances midwifery students' learning during their clinical placement. The databases searched included CINAHL (EBSCO), Medline (Ovid), Embase (Ovid), PsycINFO (Ovid), JBI Joanna Briggs Institute (Ovid), SveMed+, and Web of Science. The search yielded a total of 354 results, of which 22 met the inclusion criteria. The relevant findings from the 22 studies were thematically analyzed and presented in the results.
Results: The analysis revealed two descriptive themes – 'A nurturing relationship' and 'Predictability in the learning process, contextual factors. In addition, one analytic theme emerged – 'Gaining access to and belonging in an enabling educational and working culture'.
Conclusion: The relationship with the preceptor is a prerequisite for midwife students learning process and achievement of self-efficacy. A learning culture appears to be the fertile ground in which midwife students thrive and where they develop the self-efficacy needed to meet the demands of clinical placement.

1. Introduction

There is a worldwide need for midwives (UNFPA, 2021), and education of midwives who provide midwife-led continuity of care is crucial for global health security. This can improve the quality of care and decrease the rates of maternal and neonatal morbidity and mortality (Nove et al., 2021). In developed countries, midwifery students must achieve designated academic requirements while completing their clinical placement, which comprises on average around 50% of the total program hours (Bradshaw et al., 2013). The quality of students' education in clinical practice is therefore as important as the classroom experience.

A report from the World Health Organization (WHO) shows that there is a high level of stress and burnout among midwives globally, as well as a shortage of staff (UNFPA, 2021; WHO, 2021), which is also highlighted in a national report from Australia (Catling et al., 2021).

There are several supervision models for clinical placement (McKellar et al., 2018; McLeod et al., 2021), and an old tradition of preceptorship is working with a senior midwife (McKellar and Graham, 2017).

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Supervision of students constitutes a large part of midwives' everyday work, but clinical preceptors have limited capacity and time to supervise students, i.e., their future colleagues, and supervision could be considered an additional workload (McKellar and Graham, 2017).

The WHO has developed core midwifery educator competencies, but varying levels of skills are taught through different pathways and due to poor-quality education and training, including supervision and mentoring (WHO, 2014). In a new strategy, the International Confederation of Midwives (ICM) has developed standards for the quality of midwifery education as well as the quality of clinical supervisors. One goal is to promote midwifery students' learning abilities and protect them against discrimination (ICM, 2021).

A lack of investment in the profession has led to unsatisfactory supervision competence among existing midwives, especially how to give feedback to students (McKellar et al., 2018). Midwives require training to enhance their ability to master their role as preceptors and thus further strengthen the students' self-confidence and increase their opportunities for learning (Zwedberg and Rosander, 2020).

According to the ICM, midwifery competence involves gaining knowledge, skills, and behavior to become an autonomous practitioner (ICM, 2019). There has been a paradigm shift towards evidence-based practice over the last quarter of a century, but implementation into midwifery practice has been slow. Midwifery care is still often based on tradition and clinical experience rather than reflection and evidence. Students in clinical placement experience inconsistencies, a gap between theory and practice, and have to conform to the clinical environment (Licqurish et al., 2013). They describe feelings of competition with peers, as well as chasing the numbers to reach the level of clinical experiences and births required for the diploma. Students have to prioritize requirements rather than focus on their learning objectives (Licqurish and Seibold, 2013).

In studies of midwifery students by Begley (2002, 2001) and Khajehei et al. (2011), it was claimed that students experience stress in midwifery clinical practice and that the change of role and entering into a new sociocultural context are demanding. Recent research results show that the situation remains challenging as students were found to have poor mental health due to bullying and being thrown into a workforce culture characterized by a lack of enculturation and a poorly prepared workplace (Arundell et al., 2018; Capper et al., 2021; Oates et al., 2019; McCarthy et al., 2018).

There is also a need to focus on challenges such as lack of application of theory to practice, and on factors that can improve learning conditions. In this context, self-efficacy is an important asset. According to Bandura, self-efficacy is confidence in one's ability to execute behaviors, reach goals, or attain levels of expected performance (Bandura, 1997). Self-efficacy affects the motivation for learning and influences human functioning (Artino, 2012). In this sense, it seems to be important to explore factors that can improve the learning conditions and development of self-efficacy.

2. Method

2.1. Aim

To conduct a systematic review and synthesis of qualitative studies to explore the significant factors that enhance midwifery students' learning experiences and development of self-efficacy in clinical placement.

The review question was: What factors enhance midwifery students' development of learning and self-efficacy in their clinical placement?

2.2. Design

A systematic literature review in accordance with Aveyard (2019) was conducted on qualitative studies describing midwifery students' positive experiences of learning and self-efficacy in their clinical placement. The PRISMA 2020 checklist, a guideline for reporting systematic reviews, was adhered to (Page et al., 2021).

2.3. Search strategy

The following databases were searched from December 2018 to January 2019: CINAHL (EBSCO), Medline (Ovid), Embase (Ovid), PsycINFO (Ovid), JBI Joanna Briggs Institute (Ovid), SveMed+, and Web of Science. Searches were updated in CINAHL and Medline in August 2021. In addition, we searched the reference lists in the included papers.

The systematic searches utilized a combination of all identified keywords and index terms using Boolean phrases (i.e., "AND" and "OR") (Aveyard, 2019) as shown in Table 1. The searches were conducted by the first author and a professional librarian at the university.

Table 1. Example of the updated search in CINAHL.

The following search terms were used: midwife student, clinical placement, learning environment, maternity ward, labor ward, midwifery, preceptor, supervision, midwife, experience, satisfaction, salutogenesis, professionalism, confident learning, student success, motivation, self-efficacy, and sense of coherence.

2.4. Inclusion and exclusion criteria

The inclusion criteria were peer-reviewed papers in English and the Scandinavian languages based on empirical studies focusing on midwifery students' clinical learning and self-efficacy. Publications were included if the context was clinical practice, the target group was

Table 1
example search strategy.

Search ID#	Search Terms	Search Options	Results
S16	S14 AND S15	Limiters - Exclude MEDLINE records Search modes - Boolean/Phrase	8
S15	EM 201901-	Search modes - Boolean/Phrase	951,482
S14	S8 AND S13	Limiters - Exclude MEDLINE records Search modes - Boolean/Phrase	17
S13	"self-efficacy" OR confidence OR motivation OR "student# success" OR "confident learning" OR professionalism OR "student satisfaction" OR salutogenes*	Search modes - Boolean/Phrase	473,885
S12	S11 NOT S8	Search modes - Boolean/Phrase	25
S11	S9 AND S10	Search modes - Boolean/Phrase	29
S10	experience# N2 supervis*	Search modes - Boolean/Phrase	939
S9	"midwife* " or "midwives"	Search modes - Boolean/Phrase	64,549
S8	S6 AND S7	Search modes - Boolean/Phrase	48
S7	supervis*	Search modes - Boolean/Phrase	38,148
S6	S1 AND S5	Search modes - Boolean/Phrase	399
S5	S2 OR S3 OR S4	Search modes - Boolean/Phrase	16,337
S4	preceptor* or apprenti*	Search modes - Boolean/Phrase	7921
S3	"learning environment#" N1 clinical	Search modes - Boolean/Phrase	2905
S2	"student placement#" OR "clinical placement#"	Search modes - Boolean/Phrase	6657
S1	student? N1 midwi*	Search modes - Boolean/Phrase	3189

Updated search in CINAHL august 2021.

midwifery students, and the topic addressed was learning and self-efficacy. Studies from bachelor's programs in midwifery (direct entry) as well post-graduate midwifery education were included. After an initial search, we limited the inclusion criteria to qualitative papers published after 2000. 2000 was chosen because of the change in mid-wives' role and the expectations of care to a midwife-woman partner-ship and evidence-based practice in the late 1990 s (Licqurish et al., 2013; Bayes et al., 2016).

Studies were excluded for the following reasons: not primary research, quantitative studies, mixed-methods and reviews, studies from developing countries, and research that did not include students' learning experiences related to clinical placement.

2.5. Search outcome

The search identified 354 potentially relevant publications. After removal of duplicates 207 articles were screened based on title and abstract, which led to the exclusion of another 185. The remaining 26 articles were read for eligibility, and a further 4 articles were excluded for not meeting the inclusion criteria after the two authors (Synnøve Eidsvik Folkvord and Christina Furskog Risa) had assessed the full text articles, resulting in the final inclusion of 22 articles.

The PRISMA flow diagram demonstrates the screening process (Fig. 1). Please insert Fig. 1 here.

2.6. Quality appraisal

The authors assessed the methodical quality of the included studies using the Critical Appraisal Skills Program (CASP) (Critical Appraisal, 2022) first separately and then jointly until consensus was achieved through discussion. The two authors (Synnøve Eidsvik Folkvord and Christina Furskog Risa) assessed the quality of the studies together. High quality was 'Yes' on 8 or more of the questions in the CASP. It was finally

agreed that 8 studies were of moderate and 14 studies of high methodical quality (Table 2). No studies were excluded due to low quality.

2.7. Data extraction and synthesis

A thematic synthesis in three stages as described by Thomas and Harden was performed (Thomas and Harden, 2008). Thematic synthesis is an interpretative approach that is frequently used when undertaking a review. The different stages overlapped as we moved back and forth in the process guided by discussion and analysis (Thomas and Harden, 2008). In the first stage, we individually read the articles and used line-by-line coding, organizing what we regarded as key components for students' learning processes into codes, followed by joint reflection and discussion. The second stage involved organizing the components into descriptive themes based on an independent review of the studies by the authors, followed by meetings for reflection and discussion to ensure that the themes reflected the included studies. The analysis revealed two descriptive themes. In the final stage an interpretation based on the descriptive themes went beyond the original research studies to a higher level of abstraction (Thomas and Harden, 2008). One analytical theme emerged in the process.

An example of the process is presented in Table 3.

3. Results

3.1. Themes

Two descriptive themes and one analytical theme were identified in the analysis. The first descriptive theme – 'A nurturing relationship' – describes relational factors and the midwife as a role model. The second – 'Predictability in the learning process, contextual factors' –includes organizational aspects of the collaboration between the university and

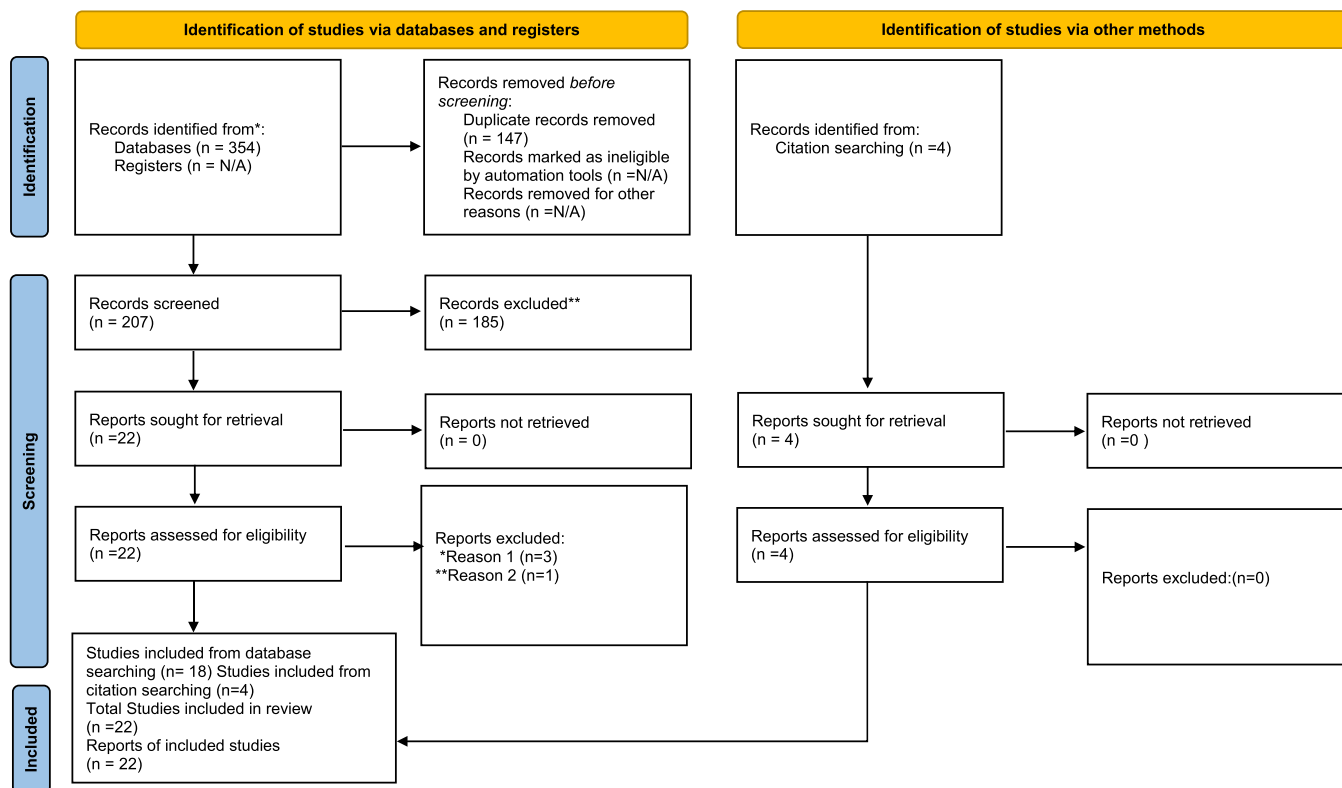**Fig. 1.** PRISMA 2020 flow diagram for new systematic reviews. *Reason 1: Not focusing on midwife students learning (n =). * * Reason 2: Low quality (n = 1) From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372: n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/.

Table 2
Quality appraisal of the included articles.

Author	1	2	3	4	5	6	7	8	9	10	Assessment
1 Blaaka (2006)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	High
2 Boreli (2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	High
3 Bradshaw (2018)	Y	Y	Y	U	U	U	Y	Y	Y	Y	Moderate
4 Brunstad (2014)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	High
5 Brunstad (2016)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	High
6 Chenery-Morris (2014)	Y	Y	Y	Y	U	Y	Y	Y	Y	U	High
7 Chenery-Morris (2015)	Y	Y	Y	U	Y	Y	Y	Y	Y	U	High
8 Ekelin (2015)	Y	Y	Y	Y	Y	Y	Y	Y	Y	U	High
9 Embo (2010)	Y	Y	Y	U	U	Y	U	Y	Y	Y	Moderate
10 Gilmour (2013)	Y	Y	Y	Y	Y	U	U	U	Y	Y	Moderate
11 Huges (2009)	Y	Y	Y	Y	Y	Y	U	U	Y	Y	High
12 Liquerish (2008)	Y	Y	Y	Y	Y	U	Y	U	U	Y	Moderate
13 Persson (2015)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	High
14 Persson (2018)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y/U	High
15 Sidebotham (2015)	Y	Y	Y	U	Y	U	Y	Y	Y	U	Moderate
16 Thunes (2015)	Y	Y	Y	Y	Y	Y/U	Y	Y	Y	Y	High
17. Bass (2020)	Y	Y	Y	U	Y	Y	Y	Y	Y	U	Moderate
18. Bäck (2020)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y/N	High
19. Embo (2019)	Y	Y	Y	Y	U	Y	Y	Y	Y	Y/N	Moderate
20. McLeod (2021)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	High
21. Zwedberg (2020)	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	High
22. Zwedberg (2021)	Y	Y	U	Y	Y	Y	Y	Y	Y	Y/N	Moderate

Y, Yes; U, Uncertain; N, No. Screening questions: 1. Was there a clear statement of the aims of the research? 2. Is a qualitative methodology appropriate? 3. Was the research design appropriate to address the aim of the research? 4. Was the recruitment strategy appropriate to the aims of the research? 5. Were the data collected in a way that addressed the research issue? 6. Has the relationship between researcher and participants been adequately considered? 7. Have ethical issues been taken into consideration? 8. Was the data analysis sufficiently rigorous? 9. Is there a clear statement of findings? 10. How valuable is the research?

Table 3
Thematic analysis.

Articles	Subthemes	Themes	Descriptive themes	Analytic theme
1,2,3,4,5,6,7, 9,10,11,12,15,16,18,19,20,21,22	Being included and getting support, obtaining acceptance Sharing competencies and experiences	Building a supportive relationship Being seen as a part of the team Building collaborative relationships with other teachers and students	A nurturing relationship	Gaining access to and belonging in an enabling educational and working culture.
1,2,3,4,5,6,7, 9,10,11,12,14,15,16,17,18,19,20,21	Midwives involved Working with midwives, mutual respect Relational competence Philosophically aligned, promote normality	A present caring midwife Working in partnership with midwives who provide woman-centered care		
1,2.3,4,5,6,7,9, 10,11.12,15,16,17,18,19,20,21	Guiding role, functioning as a scaffold, providing a safe climate	A preceptor midwife skilled in feedback literacy and facilitating learning		
1,2,4,5,7,8 10,11,12,14,15,16,18,19,21	Having midwives with desired supervision competence, continuity	Having sufficient preceptors available- staff	Predictability in the learning process, contextual factors	
2,3,6.7,8, 9,10,15,16,17,18,19,20,21	Planning the internship periods Different models of care	Collaboration between academia and the clinical areas Experiences of continuity of care models		
2,3,4,9,15,17,18	Knowledge Simulation Skills training	Preparing students for clinical placement/internship		
2,3,4,5,6,7,8, 9,10.11,12,13,14,15,17,18,19,20,21	Culture of debriefing, feedback, and reflection, learning environment Competencies in responding to students Implementation of EBP	Preceptor competencies for following up students and engaging in structured reflection Responding to students' written reflection notes		

the clinic, as well as the midwives' competence, culture, and capacity for providing feedback in a timely and appropriate manner. The interpretation process resulted in an analytic theme that describes the factors that enhance midwifery students' learning and self-efficacy in their clinical placement: 'Gaining access to and belonging in an enabling educational and working culture'. An overview of the papers, including the main results and key aspects, is presented in Table 4. Please insert Table 4 here.

3.1.1. A nurturing relationship

3.1.1.1. Building a supportive relationship. Learning and coping in a clinical practice placement is a dynamic process in which students need support to succeed (Borrelli et al., 2017; Licqurish and Seibold, 2008). The importance of being encountered in a positive way and feeling recognition, acceptance, and respect were highlighted in several studies (Blåka, 2006; Brunstad et al., 2016; Brunstad and Hjalmhult, 2014; Gilmour et al., 2013; Thunes and Tveit Sekse, 2015; Bäck and Karlström, 2020).

Table 4
Included articles.

Author, Country, Year		Aim-objective	Results	Quality	Key aspect
1. Blaaka (2006), Norway	Qualitative case study. N = 30 First year midwife students and 7 midwives. Observation and interviews. Thematic analysis	To gain an understanding of midwife students learning process	There are three main findings in the study: Students need to feel accept, a supporting dialogue with the preceptor and to be at different places at right time. The importance of a relationship between student and preceptor and that the preceptor is a caring role model. Midwives and students need organizational facilitation for reflection.	High	Midwives are door openers for students learning situations. Relationship Reflection
2. Borelli (2017), Italy	Qualitative phenomenological approach. n = 19 third year midwife students, semi-structured interview	To gain a deeper understanding of Midwife students experiences and worries in clinical practice	There are four main findings in the study: To become a midwife; from disorientation to self-awareness and ongoing learning, clinical practice is a window of uniqueness of the midwife profession. The relationship to supervisor, continuity and feedback, and that an enthusiastic mentor is a cornerstone for the students. Students need a good start and to feel welcome. Results show the importance of bridgebuilding between theory and practice; a chicken-egg situation. The study indicates that students learn in practice in the meeting with the patient. Students need the possibility to be in a learning process where they work. There is a need for mandatory training for mentors. Students needs mentors who work evidence based.	High	A good start To build relationship, The mentor's role Continuity Reflection Evidence-based learning Mentors need competence in working with students
3. Bradshaw (2018), Ireland	Qualitative descriptive design N = 17 midwife students Focus group interviews Thematic analyse	To explore midwife student's experiences in clinical practice.	Internship in clinical placement strengthened the students' clinical skills, competence and self-confidence. Students learned by getting theory before practice and learnt by doing. A supportive learning culture and philosophy is important. The study shows the importance of organizational protected time for reflection. Students need to feel included and appreciated in a ward where they let students demonstrate their abilities. Fit challenges and continuity of assessment improves the students learning process.	Moderate	Continuity Relationship A good start
4. Brunstad/ Hjaelmhult (2014), Norway	Grounded theory, longitudinal study, n = 10 midwife students in dept interviews in first, second and third year Comparative method theoretical coding	To explore midwife students concerns in labour wards.	This ground theory shows that midwife students deal with their concerns by building relationship to the midwives. They used three strategies: Controlling vulnerability, cultivating trust and obtaining acceptance. To control vulnerability students tried to seek acceptance, by reflecting experiences and tried to dive in. To cultivate trust, they strived for good relationship and to pick pearls from midwives and by tuning in. To get access students had to take responsibility for own learning and tried to adapt. Factors that influenced students concerns in labour wards were need for dialogue, time for assessment, mutual respect, growing awareness, to be welcomed, spoken to by name, to get fit challenges, discrete assessment, time for debriefing. Students appreciated both continuity and variation of mentors. Midwives could make students feel great or insecure, and students avoided confrontation. Some students did not see the benefit of mixing academic writing and practical studies. Midwives need to be aware of student's needs.	High	Relationship, continuity, clear expectations midwives need competence on students' needs
5. Brunstad/ Hjaelmhult	Grounded theory, n = 10 students. In dept interviews in	To identify what affects learning in labour wards.	Midwives were gatekeepers for students learning. What effected	High	Relationship, learning area Good start

Table 4 (*continued*)

(2016), Norway	first, second and third year, and focus group interviews		learning for students, was to feel welcomed, valued and included. Students learned by getting responsibility in fitted challenges by facilitated learning. When midwives took time to reflection, feedback, follow-up, they were seen as good supervisors. Debriefing with midwives and other students after acute situations helped them to process. Students preferred guiding and discrete supervision in front of the patients.		Writing reflection Midwives need competence on student needs.
6. Chenery-Morris (2014), England	Ethnographic approach N = 4 mentor interviews, focus group semi structured interviews with n = 11 midwife students, Theoretical framework: Bernstein pedagogical discourse	To explore how assessment/ grading affects the relationship between student and mentor	Grading/assessment did not have effect on the relationship, but rather the curriculum, the pedagogy and the evaluation. Clear anticipation is important for the students learning. Midwives need competence on how to give feedback and what is expected of the students. Cooperation between school and clinical placement is needed. Students are at the mercy of who they go with, how available the mentor is, if there is dialogue, how the relationship to mentor is, and the continuity of supervisor.	Moderate	Relationship, continuity, feedback mentors need competence and understanding of grading.
7. Chenery-Morris (2015), England	Qualitative case study, n = 15 mentor interviews and n = 51 student focus group interviews from each year. Deductive and inductive approach of analysis	To explore the importance of continuity of mentorship for learning	Continuity of mentorship is essential for learning and for building relationship. Continuity helps the mentors to be able to nurture the students. Mentors appreciate to work with students from different year. It is easier to achieve continuity in the community. Mentors needed to work long enough periods with students and knowledge of how to be able to grade their practice. Students benefit from more supervisors and different clinical workplaces.	Moderate	Supervisor competencies, continuity of mentorship is essential
8. Ekelin (2016), Sweden	Qualitative, Inductive approach Analysis of 388 written reflections, cohort of n = 18 midwife students Burnards qualitative content analysis	To explore content and feedback in written notes	Gibb's method helps students in grading, to assess own actions, promotes communication, and put words on emotions, Written reflections make students active in transition to midwifery competence with five categories: Evaluations, own actions, communication, own emotions and insights. There was a development from reflections of fragments of care to more holistic care. Feedback from supervisors is important for skills accumulation and consolidation of knowledge. Mentors need to be aware of the importance of their feedback and supported in how to provide feedback.	High	Initiate reflection Supervisors need competence
9. Embo (2010), Netherlands	Content analysis and Comparative method N = 23 1. year students, n = 10 third year students Focus group interview, thematic analysis	To explore students' perceptions about an assessment and feedback instrument	The feedback instrument stimulates student's reflection, self-assessment and formative assessment. The importance of feedback from å motivated and well competence supervisor is crucial. MAFI instrument with 24 competencies and 6 roles of midwifery is a valuable tool for supporting formative learning and makes the students take responsibility for own learning. Continuous training made progress in writing. The relationship to the supervisor was important for how the supervisors	Moderate	Relationship, Reflection Formative learning Self-assessment feedback is important Supervisors need more competence

Table 4 (*continued*)

			took interest for the students learning. Supervisors needed more competence in how to give feedback.		
10. Gilmour (2013), Australia	A descriptive qualitative approach N = 17 students, focus group interviews on different cohorts/different placements. Integrative analysis process	To explore midwife students' experiences of two different undergraduate models of clinical placement	The student role, facilitated learning, belonging to the team The findings of this study shows that what is important for students learning is the relationship to the midwife they work with rather than different models of clinical placement. Three main themes were found: Student role, facilitated learning, belonging to the team. Clinical placement helped the students to put theory into practice when the midwives gave them responsibility and the opportunity to participate. The students' progress was related to how supported they felt. Students needed continuity and to be included and to have good relationship with midwives. The study shows the impact of midwives who are motivated to teach and facilitate.	Moderate	Building relationship, belonging to the team, facilitated learning Supervisors' role continuity
11. Huges (2011), England	Qualitative longitudinal cohort study of N = 58 midwife students Focus groups Thematic analysis	To explore midwife students' experience of mentors and	Midwives play an essential role in how students will practice as qualified midwives; they are good or bad role models. Midwives are cornerstones for students. The study shows the importance of relationship between students and mentors and of qualified mentors to make students success, mentor must have realistic expectations of the student. Continuity is important to see the students' progress.	Moderate	Relationship The role of the mentor Continuity
12. Licquerish (2008), Australia	Grounded theory Epistemological approach N = 8 midwife students' cohort in dept interviews Constant comparative method	To explore midwife students' experience of the role of the preceptor and the student's development of competence.	The findings show the impact of the preceptors therapeutic interpersonal and clinical characteristics. Students benefit from hands on learning and time for reflection Students prefer a workplace culture where they get the opportunity to have responsibility under supportive supervision, and to work with midwives who loves to teach and have a philosophy they admire.	High	Relationship to mentor promotes the feeling of safety and learning. Relationship is a complex process
13. Persson (2015), Sweden	Qualitative deductive approach, Bloom's taxonomy Analysis of written reflections, cohort of n = 18 midwife students	To evaluate learning process during clinical practice	A learning process. Reflection helps the student to incorporate theory and clinical practice. Written reflections help the students to reflect in a structured way, and promotes a learning process both trough cognitive and psyco-motor learning the supervisor can understand the students' needs	High	Reflection,
14. Person (2018), Sweden	Inductive method, deductive design, n = 19 midwife students in their last clinical placement, interviews, thematic content analysis	To examine how midwife students experienced the writing of daily reflections	Daily writing og reflection helps students to follow own personal and professional development. Strengthen self -confidence. Students need to learn how to write, Writing takes time, promotes communication with supervisor, students need commitment and feedback from supervisor is crucial,	High	Learning process, self-awareness reflection
15. Sidebotham (2015), Australia	Descriptive exploratory quality design N = 56 midwife students from second and third year of bachelor of midwifery, anonymous survey	To examine midwife students' experiences to identify barriers and enablers to success in learning.	Early onset of hands-on midwifery practice and continuity of care provided students to link theory to practice. A clearly articulated philosophy and woman centred care helped students to achieve	Moderate	Continuity relationship

Table 4 (*continued*)

	n = 16 students in focus groups Template analysis using five senses framework		connection. Early engagement and sense of purpose is important. Students need sense of professional identity.		
16. Thunes (2015), Norway	Qualitative study, narrative research with roots in hermeneutics, n = 6 students in two hospitals, thematic analysis	To get a better understanding of students first encounter with the maternity ward, and what was essential to students learning	Crucial for a good learning area was the way students were received and that they had a plan for clinical practice. Expectations needed to be clarified. The relationship to the mentors was crucial.	High	A good start. A good learning environment influences students learning process.
17. Bass (2019), Australia	Qualitative cross-sectional design study, 27students I focus groups, thematic analysis	To determine how reflective capacity in midwife students was developed, and their own perception of learning activities that build reflection capacity.	Structured reflective activities combined with holistic model develop reflection. Midwives' attitudes against reflection and their feedback affects students' engagement and motivation with reflection. Alignment with woman centred philosophy generates midwifery knowledge. Structured Reflection activity, using a holistic model, with engaged midwives/ teachers, using woman centred midwifery philosophy. Providing a bridge between midwifery knowledge and actual experience in practice. The model teaches students to think holistically in a reflexive way about everybody in different perspectives.	Moderate	Space within a circle of trust, deep personal learning, consistency of application by skilled facilitators, integration and connection.
18. Bäck (2020), Sweden	Qualitative design, n = 216 students, n = 401 comments, content analysis,	Describe factors that increase and decrease confidence for midwifery students	Supervision and relationship with midwives were most important to develop confidence. Further it was important to be prepared before clinical placement, and students needed time to reflection. Personal factors could affect professional confidence	High	Supervision, relationship to preceptor reflection, prepared before clinical placement, reflection, personal factors
19. Embo (2019), Belgium	Qualitative study, semi structured group discussions, n = 20 students, thematic analysis	To improve understanding and regulating midwifery students learning by exploring factors that promote or inhibit the capacity to independently self-regulate learning	Social transactions (with mentors, teachers, students, peers, personal environment, coaches and curriculum managers) were promoting to independently self-regulate learning. Midwives' guidance, behaviours, and beliefs was seen as paramount. Development of resilience to cope with differences in practices was important.	Moderate	Workplace learning, competency development, complex interplay, co-regulated learning
20. McLeod (2021), Australia	Descriptive qualitative design, open ended survey questions, thematic analysis, n = 43 students, n = 13 preceptors,	To explore students and their preceptors experience of CSS.	Clinical school supervising model (CSS)with supervision from both academic teachers and preceptors who were committed and prepared, supported students' sense of belonging, facilitated consolidation of knowledge, reflective (higher order thinking practice, and transition to graduate nurse/ midwifery.	High	Sense of belonging, Consolidation of knowledge, reflective practice, transition
21. Zwedberg (2020), Sweden	Qualitative cross-sectional design study, n = 108 final year students, thematic analysis	To explore experiences of final year students during internship, and experience of other pedagogical learning experiences.	Preceptors ere crucial role models. The most optimal setting was if preceptors were selected, trained in learning outcomes, gained knowledge, encouraged students. was available for questions and was supported in their role as preceptors.it was also essential to have the trust of the preceptor. Having several preceptors could be positive and then made students able to impersonate the behaviours admired.	moderate	The role of the preceptor, providing supervision of qualified skilled and willing preceptors, the chemistry between student and preceptor
22. Zwedberg (2021), Sweden	Qualitative approach, deductive content analysis, n = 15 students in a peer learning model	To explore how students experienced peer learning in clinical placement in obstetric unit.	Students shared skills, thoughts, ideas, experiences and knowledge, and took responsibility for their peers on equal level. They worked independently without preceptors. Peer learning had positive	Moderate	Working with others, critical enquiry and reflection, Communication and articulation of knowledge, understanding and skills. Managing learning, self and peer assessment

Table 4 (*continued*)

	consequences as an educational model in the clinical context in obstetric units.

3.1.1.2. Being seen as part of the team. Being seen as part of the team both socially and professionally is important (McLeod et al., 2021; Borrelli et al., 2017; Licqurish and Seibold, 2008; Blåka, 2006; Gilmour et al., 2013; Thunes and Tveit Sekse, 2015; Bäck and Karlström, 2020; Bradshaw et al., 2018a; Sidebotham et al., 2015a; Zwedberg et al., 2020, 2021; Chenery-Morris, 2014, 2015; Embo et al., 2010; Embo and Valcke, 2019; Hughes and Fraser, 2011). A positive learning and relational environment encourages students to develop clinical skills. Feelings of joy and satisfaction in practice are important for building relationships (Brunstad et al., 2016; Embo and Valcke, 2019; Hughes and Fraser, 2011). Students appreciate that someone remembers their name, greets, and includes them in the report (Gilmour et al., 2013).

3.1.1.3. Building collaborative relationships with other teachers and students. The results highlight the importance of building relationship with midwives, other students, and teachers during the clinical placement (McLeod et al., 2021; Borrelli et al., 2017; Brunstad et al., 2016; Brunstad and Hjalmhult, 2014; Gilmour et al., 2013; Bäck and Karlström, 2020; Bradshaw et al., 2018a; Sidebotham et al., 2015a; Chenery-Morris, 2015; Embo et al., 2010; Embo and Valcke, 2019). Zwedberg (Zwedberg et al., 2021) identified peer learning opportunities in obstetric units. Students shared competence, experiences, and became more independent (Zwedberg et al., 2021). It could be positive to come to school in the middle of practice to discuss things with other students and teachers (Gilmour et al., 2013). Midwifery students also used social media to share experiences and help each other with academic tasks (Brunstad et al., 2016; Sidebotham et al., 2015a).

3.1.1.4. A present, caring midwife. The characteristics of the preceptor midwives are significant for how the students progress (Licqurish and Seibold, 2008; Brunstad et al., 2016; Brunstad and Hjalmhult, 2014; Gilmour et al., 2013; Hughes and Fraser, 2011), and it is important that the midwife is available and involved in students' learning objectives (McLeod et al., 2021; Borrelli et al., 2017; Licqurish and Seibold, 2008; Blåka, 2006; Gilmour et al., 2013; Thunes and Tveit Sekse, 2015; Bäck and Karlström, 2020; Bradshaw et al., 2018a; Sidebotham et al., 2015a; Zwedberg et al., 2020, 2021; Chenery-Morris, 2014, 2015; Embo et al., 2010; Embo and Valcke, 2019; Hughes and Fraser, 2011). The students need midwives who take responsibility, want the students to do well, and motivate them to learn on their own (Borrelli et al., 2017; Licqurish and Seibold, 2008; Gilmour et al., 2013; Thunes and Tveit Sekse, 2015; Embo et al., 2010).

3.1.1.5. Working in partnership with midwives who provide woman-centered care. Working with rather than for a midwife provides the experience of being an equal partner, where good chemistry, flexibility, and speaking positively to each other are important (Licqurish and Seibold, 2008; Gilmour et al., 2013; Bäck and Karlström, 2020; Zwedberg et al., 2020). Students are inspired by midwives who are philosophically aligned with woman- centered care, and who model the type of practice they have become familiar with through their learning, which links theory and practice (Licqurish and Seibold, 2008). Midwives who promote normality and want to be an advocate for the woman are considered good supervisors (Licqurish and Seibold, 2008; Gilmour et al., 2013; Sidebotham et al., 2015a; Hughes and Fraser, 2011). This development of relational and professional midwifery competence and skills can only be achieved through participation in a clinical placement, preferably with continuity of care models (Sidebotham et al., 2015a).

3.1.1.6. A preceptor midwife skilled in feedback literacy and facilitating learning. Midwives need time as well as skills in counselling and providing feedback (Licqurish and Seibold, 2008; Brunstad et al., 2016; Brunstad and Hjalmhult, 2014; Bäck and Karlström, 2020; Bradshaw et al., 2018a; Embo and Valcke, 2019; Persson et al., 2018; Sidebotham et al., 2015b), and a preceptor asking the right questions encourages reflection (Borrelli et al., 2017; Hughes and Fraser, 2011). Several studies argued for the importance of teaming up with a midwife who works in a knowledge-based manner and who reflects on her/his own actions (Bäck and Karlström, 2020; Sidebotham et al., 2015a; Hughes and Fraser, 2011). Students need guidance, not control, and midwife preceptors who remain calm and create a relaxed atmosphere (Bäck and Karlström, 2020; Hughes and Fraser, 2011). Positive experiences were strongly related to gradually being delegated responsibility and being involved in decision-making (Licqurish and Seibold, 2008; Brunstad et al., 2016; Bradshaw et al., 2018a; Embo and Valcke, 2019; Zwedberg et al., 2021).

The experience of dealing with challenges endows confidence and a sense of mastery (Borrelli et al., 2017; Bradshaw et al., 2018a; Embo and Valcke, 2019), where mastering small or large assignments leads to optimism (Brunstad et al., 2016; Bäck and Karlström, 2020; Embo et al., 2010; Persson et al., 2018, 2015; Ekelin et al., 2016).

Feeling safe increases the trust students need to learn (Borrelli et al., 2017; Blåka, 2006; Bäck and Karlström, 2020; Embo and Valcke, 2019; Hughes and Fraser, 2011), and they require praise and encouragement from the preceptor, not being talked down to (Licqurish and Seibold, 2008; Brunstad and Hjalmhult, 2014; Bäck and Karlström, 2020; Chenery-Morris, 2014; Hughes and Fraser, 2011).

Being a step ahead is important for enabling the student to face challenges (Licqurish and Seibold, 2008; Bäck and Karlström, 2020; Embo and Valcke, 2019; Zwedberg et al., 2021), and a preceptor who knows the student's resources is able to facilitate appropriate learning situations that the student can master (Blåka, 2006; Brunstad et al., 2016; Gilmour et al., 2013; Bäck and Karlström, 2020; Sidebotham et al., 2015a; Hughes and Fraser, 2011). Supervision includes both taking responsibility for the students' progress and protecting them from situations that they should not be exposed to (Brunstad et al., 2016; Sidebotham et al., 2015a).

3.1.2. Predictability in the learning process- contextual factors

The importance of the organization or workplace and preceptor midwives being prepared for students to arrive was highlighted in several studies (McLeod et al., 2021; Borrelli et al., 2017; Brunstad and Hjalmhult, 2014; Bäck and Karlström, 2020; Bradshaw et al., 2018a; Chenery-Morris, 2014). An early introductory conversation with the preceptor and the lecturer creates predictability in the learning situation (McLeod et al., 2021; Borrelli et al., 2017; Thunes and Tveit Sekse, 2015; Bäck and Karlström, 2020; Zwedberg et al., 2020). Here, the student's needs, knowledge, previous clinical experience, learning goals, plans for achievement, mutual expectations, and obligations should be clarified (McLeod et al., 2021; Brunstad et al., 2016; Zwedberg et al., 2020; Chenery-Morris, 2015).

3.1.2.1. Having sufficient preceptors available - staff. The organization needs to have enough midwives with the desired supervision competence available to act as preceptors so that ideally students will have continuity with just one or two midwives (McLeod et al., 2021; Borrelli et al., 2017; Licqurish and Seibold, 2008; Brunstad and Hjalmhult, 2014; Gilmour et al., 2013; Bäck and Karlström, 2020; Bradshaw et al., 2018a; Sidebotham et al., 2015a; Chenery-Morris, 2014, 2015). This is

of significance, especially in initial clinical placements (Hughes and Fraser, 2011), and for following up and assigning students. It provides a sense of reassurance (Borrelli et al., 2017) and is important for validity in the evaluations of the students (Chenery-Morris, 2015). Senior as well as junior midwives as preceptors might also be of significance in preceptor teams. One study pointed out that midwifery students appreciated being supervised by junior (newly qualified) midwives because they are more easily able to understand and identify with the students' learning and feelings (Gilmour et al., 2013). Later in the midwifery learning trajectory, the students see the benefit of being exposed to different midwives' ways of working and able to pick pearls of wisdom from several midwives (Brunstad and Hjalmhult, 2014; Gilmour et al., 2013; Chenery-Morris, 2015; Hughes and Fraser, 2011; Zwedberg et al., 2021).

3.1.2.2. Collaboration between the academic and the clinical arenas. Bradshaw et al (Bradshaw et al., 2018a). pointed out that challenges related to clinical placements might be solved if the practice period is well planned and sufficiently long. Bonding influences the evaluation in a positive way, as well as how the learning goals are achieved (Chenery-Morris, 2014, 2015; Embo and Valcke, 2019). There must be sufficient time to build relationships and for reflection (Bäck and Karlström, 2020; Zwedberg et al., 2021; Bradshaw et al., 2018b).

During the practical assessment process both the students and their preceptors find it important to have three-way collaboration between the student, the midwife preceptor, and the university lecturer. This is essential to resolve any questions and confusion about the assessment criteria (McLeod et al., 2021; Chenery-Morris, 2014, 2015; Embo and Valcke, 2019). Attending reflection groups together with a main supervisor who has knowledge of educational goals is appreciated by students. They learn by reflecting together after eventful situations (Bäck and Karlström, 2020; Sidebotham et al., 2015a).

3.1.2.3. Experiences of continuity of care models. Midwifery students who have gained experience of care models such as caseloading where they follow women through pregnancy, childbirth, and the postnatal period consider this education very meaningful and most positive (Borrelli et al., 2017; Sidebotham et al., 2015a).

3.1.2.4. Preparing students for clinical placement/internships. Students report the need for a theoretical basis in advance of practice so that they can link Evidence Based Practice (EBP) to understanding in learning situations (Borrelli et al., 2017; Licqurish and Seibold, 2008; Bäck and Karlström, 2020; Bradshaw et al., 2018a; Sidebotham et al., 2015a; Ekelin et al., 2016). Sidebotham et al (Sidebotham et al., 2015a). studied the practical experiences of midwifery students after undergoing the "Five senses of success" teaching program. The program focused on comprehensive midwifery care, developing a midwifery identity, the importance of continuity of midwifery care, and translating theory into EBP. Students are more prepared for clinical practice and motivated to meet academic requirements if they have a good relationship with and support from midwives, teachers, and fellow students.

Gaining skills through hands on training and participation in simulation prior to practice is necessary for developing a sense of capability (Licqurish and Seibold, 2008; Bäck and Karlström, 2020; Sidebotham et al., 2015a). In the clinic they first learned from observing others, through the apprentice–master model, followed by first-hand experiences of doing things themselves (Blåka, 2006; Brunstad and Hjalmhult, 2014; Sidebotham et al., 2015a).

A clinical placement can be stressful, and students had to plan carefully and make tough choices to manage their family and achieve a work- life balance. Forgoing leisure time, paid work next door, and accepting an inferior financial situation was undesirable, but necessary (Bradshaw et al., 2018a; Sidebotham et al., 2015a).

3.1.2.5. Preceptor competencies for following up students and engaging in structured reflection. The students desire clear, constructive feedback during their practical training (Borrelli et al., 2017; Brunstad and Hjalmhult, 2014; Bäck and Karlström, 2020). Debriefing or reviewing learning situations by talking about, analyzing, and focusing on learning, as well as specific areas for improvement(Licqurish and Seibold, 2008; Bäck and Karlström, 2020; Hughes and Fraser, 2011), especially immediately after events, promotes learning (Brunstad et al., 2016; Bradshaw et al., 2018a; Sidebotham et al., 2015a). Reflection helps the students to take responsibility for their own learning, but this is dependent on good communication between the student and midwife (Bäck and Karlström, 2020; Chenery-Morris, 2014).

Students introduced to the Clinical School Supervision (CSS) model, a structured model of reflection, reported that it facilitated consolidation of knowledge, reflective practice, and transition into a new role (McLeod et al., 2021). The supervision model is based on collaboration and shared responsibility, where academic educators and clinical preceptors are co-located in the clinical placement. In this supervision model, preceptors also felt more supported in their role. Students introduced to the Bass Model of Holistic Reflection developed reflective capacity in a safe space, integration, and trust encouraged by skilled facilitators, in addition to self-awareness and a linking of midwifery knowledge with experiences in practice (Bass et al., 2020).

3.1.2.6. Responding to students' written reflection notes. Written reflection notes help students to see their own strengths, weaknesses, and to evaluate themselves. Writing enables students to discover the consequences of their own actions and put emotions into words (Embo et al., 2010; Persson et al., 2018, 2015; Ekelin et al., 2016). Feedback from midwives and teachers is necessary for notes to have any value (Brunstad et al., 2016; Embo et al., 2010; Persson et al., 2018; Ekelin et al., 2016; Bass et al., 2020). Using Gibb's reflection model, students gradually develop complex cognitive and psychomotor learning (Persson et al., 2015) and become aware of nonverbal and verbal communication in clinical situations via their own reflections (Ekelin et al., 2016).

Students introduced to the Midwifery Assessment Feedback Instrument (MAFI) described it as supportive. In this supervision model, students experience supportive formative learning and ongoing feedback from their preceptors. The written feedback enhanced reflection and facilitated self -directed learning (Embo et al., 2010). Writing notes has an impact on students' progression in the learning process but requires time and training to write in a structured way. At the same time, midwives need training in giving feedback on the structured reflection notes (Embo et al., 2010; Persson et al., 2018; Ekelin et al., 2016).

During their studies students see increasing benefit from reflection notes and after their education realize the contribution to both reflection on their own practice and maternity care in general. The midwives' attitudes towards the reflection notes influence how much the students write, and students tend to write more when working with midwives who have a reflective approach to practice (Persson et al., 2018).

3.2. Synthesis

3.2.1. The analytic theme

3.2.1.1. Gaining access to and belonging in an enabling educational and working culture. The following synthesis emerged as a result of the analysis of the descriptive topics 'A nurturing relationship' and 'Predictability in the learning process-contextual factors.

The synthesis provides an understanding of the development of learning and self-efficacy in a maternity clinical placement that depends on gaining access to and belonging in an enabling educational and working culture. The interpretation process went beyond the descriptive themes in the existing literature to obtain interpretive constructs, explanations, and hypothesis (Thomas and Harden, 2008).

This can be characterized as recognizing the approaches/attitudes, and foreseeable environment/climate that create psychological safety and enable students to optimize their growth potential and handle challenges. The main factor that seems to have a crucial impact on midwifery students' learning and self-efficacy is the relationship with the preceptor. Self-efficacy is an interpretation, as we found that gaining confidence and having belief in becoming a professional also lie in the eyes of others, which is of significance for students' learning processes. Amid the chaos and stress of the surrounding context, motivational factors that the midwifery students find meaningful include small things such as a friendly smile, being remembered by name, and feeling welcomed. Other important factors are receiving constructive feedback, being acknowledged as having the capacity to grow, being recognized, and strengthened by midwives' belief in their ability to succeed in clinical practice (Wenger, 1998; Aune et al., 2011),

The preceptor midwife is a significant contributor to how students achieve the learning objectives. The relationship must be personal, mutual, and based on interpersonal values such as kindness, and the desire for the other to do well. Only then will the preceptor gain access to the student's experiences and perspectives. The student is dependent on a preceptor who stimulates professional development, protects, and has a trusting attitude. The preceptors' skills preceptor and demonstrations of midwifery care aligned with midwifery philosophy, such as promoting natural processes, encourage the student to see her as a role model. The midwife preceptor's competencies include enabling reflection as well as being a scaffold for the student by providing situations in which the student can gradually master the trajectory of becoming a skilled midwife. Trust is a prerequisite for feedback and building such a relationship is necessary for learning (Hunter et al., 2008; Boud and Molloy, 2013). A midwife who knows the student personally and has created trust can then push her/him to achieve new goals regarding advancing midwifery competence in a supportive atmosphere.

Other factors that have an impact on students' learning and self-efficacy are related to an enabling educational and workplace culture. This can be understood as a safe environment with qualities and resources that promote students' personal and competence development. Learning and self-efficacy seem to depend on a good start in which learning objectives and expectations are clarified, as well as how students can take charge of and be actively involved in their own learning supported by preceptors and teachers. The students need to be aware of their responsibility to be proactive, gain access, collaborate with, and also learn with and from other students and team members. The workplace should have a learning culture in which feedback and communication are of significance for workplace learning as well as patient safety, in addition to being a place where future midwives want to work. Joint capacity building between the educational institution and the workplace is needed for students to become future midwives and for preceptors to build competence in supervision.

The significance of an educational and working culture enabling access and belonging is highlighted because such a learning environment can enhance midwifery students' learning and self-efficacy in a clinical placement, and lifelong learning.

4. Discussion

The findings of this review underline the importance of gaining access to and belonging in a clinical placement. Factors that contribute to a feeling of access and belonging are well-chosen words, being met with a smile, being remembered by name, and being seen as having the capacity to grow, reflecting a growth mindset pertaining to learning (Yeager and Dweck, 2020a, 2012) Making time and space for daily debriefing or reflection can contribute to enhancing learning and developing self-efficacy in a clinical placement. Gaining access to and belonging can also be understood in the light of the study by Ahmadi et al., who found that the preceptors' attentiveness and willingness to help the students gain confidence and reduce fear is of significance from

the students' perspective (Ahmadi et al., 2018). In the following, we will discuss how this can be achieved, despite the complexity in the stressful maternity clinical placement arena.

A safe psychological climate where students dare to show vulnerability and uncertainty can lead to confidence, prevent stagnation, and give a feeling of being in a place of opportunities (Edmondson, 1999). This resonates with Pront's result in her study of a learning-focused supervision/preceptoring model in healthcare, which revealed the significance of partnering, enabling, nurturing, and facilitating meaning (Pront et al., 2016). According to the ICM global standards for midwifery education, students ought to be in a supportive learning climate (ICM, 2021). The preceptor, who can be viewed as a part of the students' learning climate, therefore needs to put herself into the students' place and situation, which might be considered a form of holistic meta-supervision. In order to promote students' mental well-being, preceptors require self-reflection, and a compassionate, empathic manner (Oates et al., 2019). According to Jefford et al (Jefford et al., 2021)., gaining access to learning situations is also a balance between providing students with challenges, care, and support. Feedback tailored to students' maturity and readiness, as well as a mutual relationship can lead to safe practice that promotes development. A good start where the expectations of the student, preceptor, and lecturer are clarified reflects the results in Hauck's article, where challenges can be prevented by building a confident relationship (Hauck et al., 2017).

The findings of this review show that students need sufficient time for self-reflection to develop an understanding of their new profession. Reflection, both written and oral, is crucial for students' learning outcomes and should be a priority in supervision. According to Ekelin et al (Ekelin et al., 2016)., students are inspired by preceptors who provide constructive feedback. In line with the results, students need to be prepared for practice by providing them with theoretical teaching and learning frameworks such as skills training and self-reflection to make them aware of their own strengths and limitations. However, to promote learning writing and written responses to reflection must be taught. Lecturers could support preceptors in how to provide feedback, and preceptors should have available time to integrate these feedback skills into their daily practice. This demonstrates the importance of cooperation in broadening the understanding of a person aiming to learn at a higher level (Yeager and Dweck, 2020b). To support this learning process, different linguistic and cultural tools may be used to promote understanding (Thoresen and Norbye, 2021).

The need for preceptor continuity is also highlighted in a study by Amsrud et al. (2019) who studied nursing students' development of resilience. Resilience was not a topic in our review, but it might be related to self-efficacy. We do not regard resilience and self-efficacy as inborn personal traits, but something that can be developed in contextual and dynamic processes. Our finding of the importance of feedback and relationships can be viewed as the catalyst in the development of self-efficacy, which agrees with Amsrud et al.'s finding that the learning culture is the catalyst for the development of resilience.

A good learning culture requires workplace affordance that facilitates conditions, such as time and competence, for feedback conversations. Due to workplace complexities, feedback is often given through occasional encounters, which can have a crucial impact on students (Noble et al., 2020). The continuity of preceptors who know the learning objectives and follow the student enhances her/his capacity for development. By giving increased responsibility as the student progresses, the preceptor follows Vygotsky's notion of being in a zone of proximal development (Vygotsky and Cole, 1978). A shortage of midwives and lack of supervision competence could lead to stagnation in the learning process due to fewer student encounters. Occasional preceptors might not have the necessary insight into the student's learning process and progress, thereby missing learning and feedback opportunities (Noble et al., 2020).

Students preferred being with midwives who provide "woman-centered" care, which is in line with the findings of earlier studies

(Carter et al., 2015; Sidebotham, 2014). Students who have the opportunity to practice with a preceptor in a therapeutic presence and non-intervention context develop self-efficacy and belief in their ability to perform these hallmark behaviors (Jordan and Farley, 2008).

Therefore, new midwifery education models, such as the Midwife caseloading program, can enhance midwifery students' learning and self-efficacy (Lewis et al., 2008). The model enables midwifery students to provide continuity of care, exercise decision making, and become prepared for autonomous practice while being supervised. The model has been positively evaluated by students, women, and mentors, but requires preparation, collaboration, and communication.

Another model to complete continuity of care experiences (COCE) has benefitted women and students (McKellar and Graham, 2017). Students report that the model makes it easier to convert theory to practice and become fit for the profession.

To develop a supportive feedback culture during a challenging workday, sometimes little things can turn students' feelings from despair to a sense of hope and self-efficacy. Midwives must be made aware of how they can contribute to encouraging the student, while at the same time maintaining their preceptor role. These small things are aimed at strengthening, supporting, and bringing out the best in the student.

One main finding was that reflection is significant for students' learning. Although reflection takes time, a short debriefing, which might turn a bad day into a growth experience, can be followed up by deeper reflection at a later stage. Findings show that students need time for reflection, especially directly after difficult situations (Arundell et al., 2018). Therefore, the question is how can this be accomplished? A possibility is to use the clinical debriefing tool Target, Analysis, Learning, Key (TALK) actions to enhance the students' performance and self-efficacy. TALK is a guided reflection tool to improve patient safety and contribute to a supportive culture, but it can easily be used in student supervision. It takes around 5–15 minutes and is an inexpensive, time-saving tool (Tannenbaum and Cerasoli, 2012). A short debriefing where the student is enabled to talk about something that is very important to her/him, obtain support, and be met can promote her/his sense of manageability, meaningfulness, and comprehensibility (Antonovsky, 2005).

Studies have shown that workplace challenges affect the climate at the clinical unit and students' confidence. Conflicts among staff hierarchies and tension between differing philosophies of care, especially between the midwife led and obstetric ward, can affect the midwives' own confidence and capacity to supervise students (Bedwell et al., 2015). When midwives have high workloads, the students often feel that they are a burden. The large number of students in the labor ward and the fact that midwives rarely get an exemption from supervision also affect midwives' willingness to supervise students (Green and Baird, 2009). Students are at different levels, and there must be organizational support for preceptors. Time should be specifically allocated for supervision, and the whole organization should be involved in the teaching and learning process (Carlson et al., 2010).

The theoretical perspective of salutogenesis (Antonovsky, 2005) can be used as a framework for understanding the results of this review. The concepts of comprehension, manageability, and meaningfulness that are summarized into an experience of coherence align with key parts of our results. Antonovsky's theory highlights the overall view of the human being and the necessity of relationship as a learning resource that provides the experience of coherence. The results of this review show that midwifery students can be helped to activate the necessary resistance resources to meet the stressors they encounter in midwifery education through, among other things, small gestures. Periods of stress can challenge our comprehensibility, manageability (Prinds et al., 2022), and ideal of meaningfulness. Knowing that the relationship with the midwife is a resource for coping with the stressors gives students a sense of manageability.

Simulation training might strengthen the students' preparedness for clinical placement, reduce stress, and promote self-efficacy, (Vermeulen et al., 2017), thus bridging the gap between theory and practice. Simulation with debriefing and an appraisal inquiry can promote learning through reflection (Longworth, 2013). Students also experience that the working culture and midwives' attitudes influence learning, while midwives who work in an evidence-based manner are instrumental in linking theory and practice (Licqurish et al., 2013). This is supported by Lange's study, where the results show the importance of collaboration between the university and clinic (Lange and Kennedy, 2006).

In an enabling educational and working culture, the ability to gain support from and connection with peers also increases the students' self-efficacy (Barimani et al., 2022). According to Barimani (Barimani et al., 2022), and Jordan (Jordan and Farley, 2008), peer learning, critical reflection with classmates and building relationships with the team as well as the preceptor are highly valued, which is in line with our findings.

Approximately 50% of the midwifery program comprises clinical placement, and in this context, students are dependent on a preceptor who gives support, is available, and willing to share knowledge (Griffiths et al., 2020). In an enabling educational and working culture preceptors are fundamental in students' learning process. Midwives are strong role models and can give students valuable support and inspiration to practice midwifery at the highest possible level (Jordan and Farley, 2008). At the beginning of their clinical placement some students appreciated being close to their preceptor and having a high degree of continuity. This is acknowledged in earlier research (Hallam and Choucri, 2019). What might be an issue is that midwives' educational role could be taken for granted and that preceptors are not taught to perform this role. Therefore, preceptors' confidence in their role must be strengthened by support from the organization (Zwedberg and Rosander, 2020). According to Zwedberg (Zwedberg and Rosander, 2020) and McKellar (McKellar et al., 2018), valuing clinical supervision is important. Despite different models, collaboration between the university and the clinic placement is the most significant factor for ensuring that supervisors understand both academic and practical competence. Preliminary results from an innovative blended supervision course with simulation training aimed at increasing supervisor competence at the nursing specialist and midwifery level was positively evaluated and successful (Folkvord et al. unpublished material). However, research on preceptor programs that can enhance preceptors' competence is scare (Ball et al., 2022).

4.1. Strength, impact, and limitations

The reviewed studies were published between 2006 and 2021 and have international transferability. Most of the researchers were midwives, which strengthens reliability. The findings represent midwifery students' experiences in different countries and maternity care organizations, including Italy, Sweden, Australia, the UK, Norway, the Netherlands, Ireland, and Belgium. The results may be more relevant today due to the global shortage of midwives. As a response to the staff shortage, more midwifery students are being educated, so building relationships might be difficult because preceptors have to supervise more students. The results of this review highlight relationships and microskills, which might be achieved despite the demands of everyday practice.

Relevant studies have been missed despite broad searches and only reviewing qualitative studies. The authors are an experienced clinical preceptor and an academic midwife; thus, their prior understanding of the context might have affected the results.

5. Conclusion

The evidence from this review identified several factors that enhance and influence midwifery students' learning and self-efficacy in a

maternity clinical placement.

Two descriptive themes and one analytical theme emerged from the analysis. The relationship with the clinical preceptor in an enabling educational setting/workforce culture characterized by confidence was found to be the cornerstone for the learning process and self-efficacy. The continuity of the preceptor gives students a sense of security, access, and belonging, which are significant prerequisites for dealing with challenges and demands. Reflection, predictability, and a clear relationship between theory and practice promote learning. Midwifery students need to be supported and empowered by committed midwife preceptors who are conscious of the philosophy of midwifery and who have supervision competence. The results from this study might contribute to the development of supervision strategies and competence enhancement among preceptors, thereby increasing midwifery students' learning opportunities and self-efficacy. However, the need for close collaboration with the academic institution is important. The learning processes take place in two arenas – in the workplace and the academic arena – and continuity through sufficiently long internship periods is crucial. The latter depends on the availability of experienced midwives because it takes place alongside the ordinary midwifery workload. The organizational attitude to providing a culture of feedback literacy is seen as a collective skill. To make the most of the students' learning opportunities, it is necessary to develop preceptors' skills, a culture of safety, and an enabling, supportive organization.

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Not applicable.

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