

The value of a blended learning supervision course at the advanced level: Supervisors' experiences

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Abstract:

Aim: To explore what experiences specialist nurses and midwives have with a blended learning course (digital course component one and physical course component two) to develop their supervisory competence.

Methods: A qualitative descriptive design with two focus group interviews (n=9) and written reflections from participants (n=70) from five courses conducted in 2021 and 2022.

Findings: Thematic analysis revealed two main themes: 1) The value of blended learning in a clinical supervision course and 2) Areas for improvement. Participants experienced a profound learning outcome through the acquisition of theoretical knowledge digitally during part one of the course, followed by in-person engagement in simulation-based learning activities in part two. Specifically, the participants gained a heightened awareness of the complexity of supervision and increased confidence in using communication tools through simulation. The challenges faced in the digital part of the course highlighted the need for technical improvements, emphasizing the importance of improving flexibility and development of an application for easy access to learning resources.

Conclusion: The findings indicate that the blended learning approach enhanced supervision competence. The online component facilitated a more profound learning experience in the in-person simulation-based course. Recommendations for improvement centered on simplifying content and introducing greater flexibility and accessibility in the digital part of the course.

Keywords: supervision course, blended learning, advanced level, digital course component, physical course component, simulation

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Sammendrag:

Hensikt: Å undersøke hvilke erfaringer spesialsykepleiere og jordmødre har med et todelt veiledningskurs; digital kursdel 1 og fysisk kursdel 2 (blended learning) for utviklingen av deres veiledningskompetanse.

Metode: En kvalitativ studie med to fokusgruppeintervjuer (n=9) og skriftlige refleksjoner fra kursdeltakere (n=70) fra fem kurs ble gjennomført i 2021 og 2022.

Resultater: Tematisk analyse avdekket to temaer: 1) Verdien av blandet læring i et klinisk veiledningskurs og 2) Områder for forbedring. Deltakerne erfarte høyt læringsutbytte gjennom å tilegne seg teoretisk forkunnskap digitalt i kursdel 1, for så å gjennomføre simuleringsbaserte læringsaktiviteter ansikt il ansikt i kursdel to. Deltakerne erfarte økt bevissthet om sin veilederrolle og følte at egen veiledningskompetanse ble styrket gjennom simulering av kommunikasjonsverktøy. Utfordringer i den kliniske settingen under kursets første del understreket behovet for noen tekniske justeringer, inkludert behov for økt fleksibilitet og en applikasjon (app) for mer tilgjengelige læringsressurser.

Konklusjon: Studien indikerer en merverdi av den pedagogiske utformingen av veiledningskurset hvor deltakerne uttrykte en opplevelse av styrket veiledningskompetanse. Forslag til forbedringer inkluderte forenkling av innholdet og mer fleksibel tilgjengelighet til kursdel 1.

Nøkkelord: Veiledningskurs, blended learning, høyere utdanning, digital kursdel, fysisk kursdel, simulering

Introduction

Compound medical challenges demand specialized competence to secure patient safety in clinical practice (DeGrande et al., 2018). Within this complex clinical setting, students also undergo practical training, and the supervision of students becomes an additional professional responsibility. Many master's programs within specialized nursing and midwifery consist of 50% training in clinical placement. Thus, student supervision constitutes a significant part of the daily work of health care professionals. Providing high-quality supervision during practical training is essential for students in postgraduate education, as it contributes to the qualification of midwives and specialized nurses in fields such as anesthetics, intensive care, operating rooms, and cancer care (World Health Organization [WHO], 2013; 2016). To ensure quality in education, recommendations have been made stating that health care professionals should have 10 credits in supervision (Universitets- og høgskolerådet, 2018).

However, health care professionals often lack the necessary competence for effective supervision, as it is not included in their formal education. Øvrebø et al. (2022) found in their review that the assessment methods and tools used to evaluate the competence of postgraduate critical care nursing students during clinical placements are unsatisfactory. Within the field of midwifery, several studies indicate the need to increase the capacity of midwifery educators and supervisors in practice (Germano et al., 2014; Krause, 2016; Srisaeng & Upvall, 2020; Folkvord & Risa, 2022).

Germano et al. (2014) identified in their online survey enablers and barriers to precepting midwifery students. Enabling factors included commitment to support the profession, interest in teaching, and patient acceptance of students. Among the barriers were the fact that midwives needed a breakdown of supervision or had poor experience with students, felt unprepared to teach, and were uninterested in teaching.

To address the need for supervision competence in a manner that is feasible given clinical staffing and economic constraints, an interprofessional supervision course has been developed. By developing a blended supervision course, many supervisors can enhance their competence within a relatively short timeframe without placing excessive burden on their daily clinical responsibilities (Hansen et al., 2011; Wallin et al., 2020). Thus, our study outlines the development of and evaluation of a blended learning supervision course, consisting of a digital part and a two-day physical attendance (Figure 1).

This study aimed to explore the experiences of specialist nurses and midwives with a blended learning course to develop their supervisory competence.

Background

The pedagogical design

Blended learning is seen as an effective learning method surpassing traditional learning methods in higher education (Edward et al., 2018; Ghazal et al, 2018; Nayar & Koul, 2020; Matsuda & Kohno, 2021; Fitzgerald et al., 2022). The term blended learning is defined as the use of traditional classroom teaching methods together with the use of online learning (Garrison & Vaughan, 2008).

Nayar and Koul (2020) found that the students in the experimental blended learning group, using roleplay simulation combined with traditional lectures, demonstrated much better performance than those in the control group. A theoretical part combined with simulation-based learning indicates a higher learning outcome and easier transferable competence to a clinical setting (Husebø et al., 2015; Edward et al., 2018; Coyne et al., 2018). In the study by Coyne et al. (2018), study simulation videos were shown to students in a blended learning platform to increase their knowledge of family assessment, a crucial skill to ensure that nursing care is inclusive of the patient and family members as a unit of care (p.96). Results in the study indicated that this kind of teaching was highly valued. Therefore, recognizing the benefits of blended learning, we have developed a blended learning course to enhance the supervision competencies of healthcare professionals.

Development of the digital and physical components of the supervision course

An evidence-based supervision course was developed in cooperation with NettOp-UoS, the department for the development of digital learning tools at the current university, and university lecturers and the educational department at a university hospital. The purpose of the supervision course was to meet the National Curriculum Regulations for the Norwegian Health and Welfare Education (Rethos) (Ministry of Education and Research, 2023), focusing on quality in clinical placement through supervision competence.

The purpose of the digital course component was to prepare the course participants ahead of the physical attendance. The purpose of the physical course component was to conduct several collaborative learning activities to explore and apply such tools to their clinical supervision. Tveiten (2019) define supervision as a formal, relational, and pedagogical learning strategy with the purpose of strengthening the person's coping competence through dialogue-based knowledge and humanistic values (p. 22). This aspect provides the theoretical underpinning of our supervision course and was applied both in the theoretical and physical parts. Our blended learning supervision course is presented in Figure 1 below.

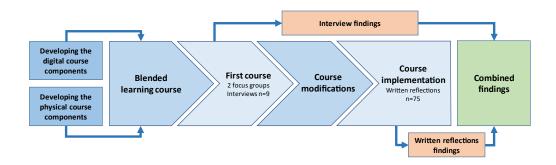


Figure 1. The blended learning supervision course.

Structure and content of the digital course component

The participants received access to the digital course component on an internal university-based platform. An introduction page gave the learner the overall course information as well as the learning outcomes

and a list of the course content. Furthermore, a welcome video pointed out the importance of the work as a supervisor and served to enhance learners' motivation to complete this course component.

The course component consisted of five chronologically ordered modules with several pages in each module. The learners navigated freely through the course modules without any prerequisites. Each module was built up the same way, which made it easier for the learner to navigate the course structure, and each started with an introduction video. The videos aimed to give the learner a brief overview of the module, followed by information about the learning objectives.

The content of the digital course was provided in several mediums: videos, text, podcasts, photos, and reflective questions. The participants had a choice of which learning strategy they preferred, in accordance with Romanelli et al. (2009), taking into consideration the several types of learners participating in the course. In addition, recognizable icons were added to help the learner memorize the course structure and repetitive learning elements.

One module mainly consisted of video simulation scenarios about the student supervisor relationship. These video scenarios aimed to build a bridge between the theoretical part and a more practical approach to the course (Bayram, 2012).

At the end of each module, the learner was given a concisely written summary to point out the most important parts of the module. As a final task, the learner received questions upon which to reflect. The answers served as a preparation for part two of the course – the physical session – and has been used as a learning element to obtain deeper knowledge (Philip, 2006).

Structure and content of the physical course component

The physical course component started with a presentation of the lecturers, expectations for the course, and sharing of earlier experiences as supervisors. Throughout the different sections, variation arose between short iterations of theory, active participation, dialogue, or simulation with reflection.

The course component started with the importance of building relationships and getting a good start. A clarification conversation about mutual expectations followed, intended to enable a safe learning environment. The purpose of this section was to give both the student and supervisor the opportunity to build relationship-promoting predictability in the learning process.

Further communication skills were emphasized through "Four Good Habits"; a structured method for effective empathic patient communication developed by Kaiser Permanente that can easily be transferred to student supervision (Krupat et al., 2006). Four Good Habits were originally developed at Kaiser Permanente for medical doctors and patient communication (Frankel, 2001; Krupat et al., 2006). Their purpose is to build trust, promote efficient conversations, show empathy, prevent misunderstanding and complaints, and improve patient satisfaction. The four habits outlined are: 1) Invest in the beginning, 2) Elicit the patient's perspective, 3) Demonstrate empathy, and 4) Invest in the end. This communication tool impacts communication and listening skills and promotes the awareness of one's own communication (Saltrøe, 2021). We assume that the model habits can be transformed and used in student supervision to enhance the building of relationships between the student and the supervisor.

In another session, the participants were introduced to the use of the TALK debrief in supervision. TALK is a framework that was originally developed in 2014 to improve patient safety and satisfaction (Talkdebrief.org, 2023). TALK is a short debrief that consists of four steps that can facilitate student-supervision: 1) Target: Participants agree on what to discuss; 2) Analysis: What helped or hindered the situation, and how we can repeat the success from the performance; 3) Learning Points: What can the participants learn from this situation? 4) Key actions: What can the participants do to improve, and who is responsible for which aspect? The value of TALK is that it enhances a positive, structured, and professional way of communication. It focuses on finding solutions rather than placing blame and identifies small objectives to pursue and follow up. TALK requires minimal training, is time efficient, and can be used in everyday work without facilitation from experts (Diaz-Navarro, 2021).

LØFT, a solution-focused tool in organizational and management development, was also introduced during the course (Langslet, 1999). The target of this application is to highlight what works well instead of

challenges. Midwives and specialist nurses are trained in small groups using questions from LØFT when supervising students to empower the students' self-efficacy and promote self-reflection.

The everyday work for nurses and midwives consists of advanced patient care, and supervising students is an additional function. Therefore, tools to supervise students in a good and effective way are needed. Introducing these tools was related to take charge of and promote students' rights, and to provide formal assessment of the students. Another area of focus in the course was the importance of being professional and objective in student supervision and being proficient in ethical judgement. The structure and content of the digital and physical course components are shown in Figure 2 below.



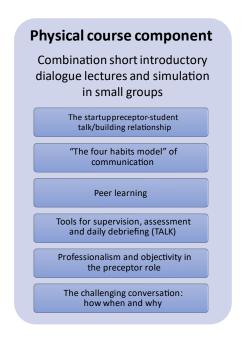


Figure 2. Digital and physical course components.

Methods

This study has a qualitative descriptive design using multiple methods collecting data from group interviews from the first course. In subsequent courses, written reflections (evaluations) from participants from five blended supervision courses were collected.

Participants and study context

The participants in this study were clinical supervisors of midwives and nursing specialists, including anesthetic, intensive care, operating room, and cancer care nurses. The nine participants in the focus groups included one male, and the others were female. Each focus group consisted of one or two midwives, one or two cancer nurses, and one or two specialist nurses (AIO).

In the written reflections, five of the participants were male, and the others were female. Around half of them were midwives, and the others were distributed among specialist cancer nurses and members of the anesthetic, surgical, and intensive care departments. A few were midwives and cancer nurses from public health services. The participants' ages varied from 30 to 60 years. Supervision experience varied from almost none to 25 years of experience. The two focus group interviews took place in two classrooms on the campus of the university. The participants sat in a half circle around a table.

Data collection and analysis

The data collection aimed to evaluate the whole supervision course. Focus group interviews were performed after the first blended supervision course. All of the participants in the first course were offered

the chance to voluntarily participate in the focus groups as well as to complete the written reflections in the first and the following four courses (in total five courses). The questions were thematically aligned in the interview guide and the reflection notes.

The focus-group interviews

The data collection took place between October 2021 and March 2022. Altogether, nine (n=9) participants gave written approval/consent for participation in an audio-recorded focus group interview. Two moderators from the course leaders were present in each group interview, which consisted of five and four participants, respectively. One moderator led the interview questions, and the other took notes. Each interview lasted approximately one hour and was conducted using an interview guide. The questions were related to the content of and how both the digital and physical course was carried out.

The written reflection notes

The written reflections were collected at the end of the physical course, in which all participants were asked to voluntary give written reflections anonymously, which also were based on the same interview guide as in the focus group.

Two focus groups (n=9), one with five participants and the other with four, were carried out after the first course, with written reflections (n=70) in the first and the following four courses. The data material was analyzed using thematic analysis (Braun & Clarke, 2021), as shown in Table 1 below.

Table 1: Overview of thematic analysis conducted in accordance to Braun & Clarke (2021)

Step one	Familiarizing with the data material: Interviews were conducted, and audio files were transcribed by the authors. Naive reading of transcribed interviews was done individually, and reflections were noted down in short notes.
Step two	Coding the data material: Codes were assigned to identify interesting features in the data material. The process involved seeking patterns in the data, accompanied by additional reflections. A digital sorting of the material was done using the assigned codes.
Step three	Sorting and searching for themes: further sorting of codes was carried out as some codes could fit into multiple categories. Sub-theme formulations were developed during the discussion on tentative themes.
Step four	Checking and refining themes: Themes were checked against the coded data and the transcribed text. This step ensured their accurate representation
Step five	Defining and naming themes: Theme formulations were progressively refined until the author group agreed on the final formulations.
Step six	Writing the analysis: the findings chapter was written, incorporating the analysis. Selected quotes from the data material were included to validate themes and emphasize the informants' perspectives. Theory was utilized to contextualize the findings within a broader framework.

To ensure trustworthiness (Korstjens & Moser, 2018) in the analysis, five out of the eight authors of this article read through all of the data material and then met to discuss and coded the focus-group interview data and the written reflections. Then three of the authors further analyzed the data, partly together and partly individually, following the discussions until consensus about the subthemes and themes were reached, exemplified in Table 2 below.

Table 2: Example of the analytical process

Aim: To explore what experiences specialist nurses and midwives have with a blended learning course for the development of their supervisory competence.				
Data	I think these days have been great, and it's good to have had the digital course first [before the face-to-face simulation]. Then everyone starts at the same level.	I have become more aware of my role as a supervisor and how I can look after and lift the students' achievement; there are many supervision tools that I take with me as a supervisor.		
Codes	Participants starts at the same level Preparedness	More aware of the supervisors' role Acquire supervision communication tools		
Subthemes	Beneficial digital preparation in advance of simulation-based activities	Acquiring strengthened supervision skills through in-person simulation		
Theme	Values from blended learning in a clinical supervision course			

Ethical considerations

This course was developed by the authors of this study and was approved by the subsequent university and The Norwegian Centre of Research Data (NSD), No. 589975. Several of the authors ran the blended learning course. The interview participants received an information letter describing the project's aims and focus. Both participation in the focus group and written reflections were voluntary, with the possibility to withdraw participation at any time without any consequences. The audio tapes and written reflections were transcribed verbatim. The audio recordings were stored according to the university's ethical regulations.

Findings

Two themes were identified from the thematic analysis of the focus groups and written reflections:

- Theme 1: Values from blended learning in a clinical supervision course, with two subthemes.
- Theme 2: Potential for improvements of the blended learning course in clinical supervision, with three subthemes (Table 3).

Theme 1. Values from blended learning in a clinical supervision course

The findings indicated a positive evaluation of the content in the supervision course. The participants expressed that the digital and the physical parts were useful and successfully carried out. The value of blended learning in a digital supervision course included beneficial digital preparation before in-person simulation, resulting in an overall strengthening of their supervision competence.

Subtheme 1: Beneficial digital preparation in advance of simulation-based activities.Our findings indicate that the digital part of the supervision course offered useful preparation in advance of the face-to-face simulation-based activities. More specifically, the participants experienced learning transmission from the digital part to the physical part of the course. This resulted in a general opportunity to raise consciousness of how to be a good supervisor.

Table 3. Themes and subthemes from the focus-group interviews and the written reflections

Theme	Subtheme
Theme 1	Subtheme 1
Values from blended learning in a clinical	Beneficial digital preparation in advance of
supervision course	simulation-based activities
	Subtheme 2
	Acquiring strengthened supervision skills through in-person simulation.
Theme 2	Subtheme 1
Potential for improvements of the blended	Difficult contextual conditions in clinical
learning course in clinical supervision	settings
	Subtheme 2
	Need for simplification of content and
	technical adjustments
	Subtheme 3
	Need for more intertwined course parts

Through clinical examples and varied learning modalities such as written text combined with audiovisual examples like images and videos, the participants found that they could visualize the theoretical part and it was easier to relate to. The combination of text and film sessions stimulated them to stop, think, and reflect.

"A combination of being able to read, listen, and watch films was very good. So, I felt there was good academic input from the digital course." (Focus group 1)

The participants expressed that the digital part resulted in all participants perhaps sharing a slightly more similar theoretical starting point in supervision, despite varying amounts of clinical supervision experience. This could make it a little less scary than attending the face-to-face simulation in part two.

"I think these days have been great, and it's good to have had the digital course first [before the face-to-face simulation]. Then everyone starts at the same level." (Focus group 1)

Some participants in the written reflections wanted the possibility to watch the digital course component several times in order to repeat the content. One said, "Great digital part, well arranged and relevant topics" (written reflection).

Findings from several of the written reflections emphasized the significance of the digital preparation ahead of the simulation-based activities. The videos of role play and communication strategies were highlighted.

Subtheme 2: Acquiring strengthened supervision skills through in-person simulation. Overall, our findings indicate that the participants experienced deeper knowledge and hands- on skills, resulting in an overall strengthened supervision competence. Several participants found after the simulation that they understood more clearly the important role they had as a student supervisor. The use of communication tools such as TALK debrief and LØFT in simulation, in which they played the role as a supervisor, student, and/or observer, gave new insights and the feeling of hands-on experience.

"I have become more aware of my role as a supervisor and how I can look after and lift the students' achievement; there are many supervision tools that I take with me as a supervisor. That's what I wanted as an outcome of the course too, supervision tools." (Focus group 1)

All participants expressed a clear expectation to learn new tools for communication relevant to supervision but experienced it as demanding to simulate in scenarios. Nevertheless, the learning effect was experienced as great, so they felt the effort during the simulation was worth it.

"You miss this as a supervisor, thinking about which tools we can use. Now we got to test them ourselves, or observe that others use them, and discuss them [the tools]." (Focus group1)

The communication tools were experienced as easy to transfer to a clinical setting and were evaluated as highly relevant in most of the written reflections. This indicates that most of the participants found that blended learning stimulated a deeper knowledge of supervision skills.

Theme 2. Potential for improvements of the blended learning course in clinical supervision

Some suggestions were identified to improve the course, such as difficult contextual clinical conditions, a simplified digital part, and the need for more intertwined course modules.

Subtheme 1: Difficult contextual conditions in clinical settings

Leaders from the education department at the university hospital agreed that the participants would be allocated time at their workplace to complete the digital module. The participants had been given permission to complete the course during their work hours, but experienced that there was no time set (the estimated time consumption was three hours). Consequently, they had to complete it between all regular work tasks or after work. In addition, there were few offices for this purpose in an intensive care unit or maternity ward. Following this experience, the learning environment was characterized by frequent interruptions.

"We were often interrupted (when we took the digital part), as we don't have an office, then a colleague suddenly wonders what you are working on, and you are interrupted again." (Focus group 2)

The feeling of not having sufficient time to complete the digital course meant that the focus was on getting through rather than understanding the content.

"I skipped the reflection questions (in the digital course), I didn't know how long the digital course would take and how much time I had." (Focus group 2)

Another participant emphasized that it is the manager's responsibility to prioritize time to complete the digital course if participation in the supervision course has been approved. This was emphasized as an important measure to ensure that the experience of participating in the supervision course did not become an additional burden for already busy health care professionals.

"I spent some time [on the digital course], I had the opportunity to do so, but I can imagine that it will be a nightmare if many people are going to take this supervision course, that they will not have time for the digital part. The managers [in the ward] must prioritize time for this [the digital course component]" (Focus group 1).

The participant underlined the importance of the manager's responsibility and the need for enhanced supervision competence. This was in line with written reflections in which several individuals suggested prioritized time for the digital course component.

Subtheme 2: Need for simplification of content and technical adjustments

The findings revealed a need for simplification and technical adjustments in the digital course component. One participant stated that it was impossible to stop the digital course and start at the same place later. This was misunderstood by the participant but revealed that there was a need for simplification. Another participant said that a paper printout would be necessary to make notes and to repeat the content.

One participant felt that the audio file took longer to listen to than the amount of time spent reading the text herself, which made her skip the audio file. Another participant did not understand that she could choose between reading the text herself or listening to an audio file through which the content was read aloud.

"We learn differently. But it was difficult to understand it (the choice between reading or listening). First there was video and then text. Afterwards I understood that it was the same, that it was repeating itself" (Focus group 2).

Some participants experienced the theoretical framework from which the supervision originates as unimportant to how they should develop their skills as a supervisor. This resulted in a lack of motivation for the theoretical sessions in the course.

"It was a bit theoretical. I thought when I started it [the digital course component], that oh, is it going to be like this for three hours? But it picked up, with movies and such. But I started like this, oh my. But we don't need this to supervise! Who has said what about supervising, it is not important in practice, rather more about supervision skills." (Focus group 2)

Another participant highlighted the desire to develop the digital part into an app in which the tools could be found and expressed that this could make transferability to clinical supervision easier. An application (app) could have been easier to use instead of the provided pocket version of the communication strategies (TALK) (Focus group 2).

Subtheme 3: Need for more intertwined course parts

Some of the participants experienced repetitions between the digital course component (part one) and the physical course component (part two) as annoying and unnecessary, for example that the same film clip was shown both in the digital part and part two. One participant (D1) stated that there should have been a summary from the digital course component in the beginning of the physical course component, which could optimize the learning transition between the two course parts.

Ultimately, some participants had taken the digital course component several weeks ahead of the physical course component, while others completed it close to the physical course. This showed that the participants had different needs for repeating the content of the digital course component.

"You have seen those films before (on the digital course), but then we watched the films again in course component two. Then I thought it was unnecessary to have seen those films before and spend time on them again (..)." (Focus group 1)

To improve the transition from the content of the digital to the physical course component, several participants suggested a course booklet. Then they could have written questions for the course instructor or their own reflections, which could have raised the learning value of the digital course component.

"I may be a little old-fashioned in this digital age, but I would have liked to receive a booklet, where something is written... then I can include it in the physical part two, make notes, use the booklet in practice again afterwards, so I would have preferred that, something on paper" (Focus group 2).

Another participant partial agreed and commented:

"I love all things digital. But agree that to get something on paper, where you could comment and underline, and brought it these two days (course part two), we would have had a different prerequisite." (Focus group 2)

Some participants in the provided written reflections expressed that the duration of the digital course component was too extensive. This combined with the difficulty of finding the right timing was a great challenge for the participants.

Discussion

The aim of this study was to explore what experiences specialist nurses and midwives have with a blended learning course for the development of their supervisory competence. The overall findings indicate that the participants perceived the content and the design of the course as relevant and engaging. As a result, they experienced an improvement in their supervision competence. They felt empowered in their role as supervisors due to various learning strategies, which included acquiring theoretical knowledge about supervision and training in several communication tools, such as Four Good Habits, TALK debrief, and LØFT, through simulation.

Values from blended learning.

The course was overall positively evaluated, and the participants expressed useful learning outcomes as they learned to use several communication tools through simulation and indicated a feeling of enhanced supervision competence. The use of a digital course component seemed to play a key role in the participants' preparation for the physical course component. The main purpose of the digital part was to ensure that the participants were prepared for the physical part and had a mutual understanding of the theoretical basis of supervision. This is in line with Jølstad et al. (2019), who found that, by introducing clinical supervision theories and models, clinical supervisors (CS) developed new competence to foster the students' reflections on their own professional practice. Our supervision course was anchored in clinical supervision theory in both course components (Tveiten, 2019). To increase sustainability, the course was also developed in accordance with the Norwegian National Qualifications Framework for lifelong learning (NKR) (Ministry of Education and Research, 2014). That way, the sessions in our course could be used to further increase understanding by both focusing on areas that participants found challenging as well as the parts of the course that required a more practical approach to the subject content, such as how to communicate with students through simulation.

By making the theoretical basis available digitally before the physical sessions, our participants could study the material when it suited them best and at their own pace. This method aligns with Janes et al. (2023), who claim that blended learning is flexible and cost-effective. To promote learning transmission between the two course components, the digital part of our study had defined learning outcomes that made the participants aware of what they should learn within each component to be prepared before the next part of the course.

Findings in our study indicated bridging between the digital and the physical course components of the supervision course. Combining theoretical knowledge with in-person simulation seemed to stimulate deeper learning of supervision skills, providing participants with practical exposure to the communication strategies learned in the theoretical training. This is in line with Nayar and Koul (2020), who found that experimental blended learning resulted in much better performance than within traditional learning. Specifically, our participants highlighted the simulation of various communication tools as clinically relevant, as they were practical and fit into the assessment of students they supervised (an example is TALK debrief). The group discussions in the physical course component were also based on questions that the participants had individually reflected on within the digital component. These findings are consistent with other research that recommend blended learning in higher education (Nayar & Koul, 2020; Matsuda & Kohno, 2021; Fitzgerald et al., 2022).

Supervisor skills are significant to the quality of supervision (Jølstad et al., 2019). Findings in our study indicate that a blended learning course could empower clinical supervisors' skills by using communication tools such as Four Good Habits, TALK debrief, and LØFT, especially when supervision becomes challenging. However, Jølstad et al. (2019) revealed a lack of clinical supervision competence among clinical supervisors. Supervisory skills and competencies are related but have distinct differences. The main difference is that supervisory competence is far broader than a supervisory skill (Ministry of Education and Research, 2014). A competence is a combination of knowledge, one or more skills, and certain attitudes or personal traits. Skills are more specific in defining exact abilities. As we see it, participants in our study were able to enhance their supervisory competence through increased theoretical knowledge and practical skills.

In addition, our participants expressed a sense of deeper knowledge after simulating several student-supervisor scenarios using communication tools. In the debriefing session, the participants reflected on how the communication tools empowered them when supervising their students. Reflective skills and theoretical knowledge are key factors in recognizing coherence between theoretical and practical competence (Hatlevik, 2012). However, Graham and O'Brian (2020) emphasize that reflection is a complex concept that is challenging to operationalize for students in clinical placement and refer to the need for protected reflective time to foster a supportive learning environment. Thus, Fowler (2011) states

that reflection can occur outside of clinical supervision, but clinical supervision cannot exist without reflection.

Potential for improvements

Potential for improvements were identified by the participants in our study. The findings emphasized the necessity of simplifying and making technical adjustments to the digital course component of the supervision course. To accommodate individuals with reading disabilities, an option was provided to choose between reading the content online or listening to an audio player displayed at the top of each page, as suggested by Nayar and Koul (2020). However, it was observed that some participants misunderstood this feature, indicating the need for improved clarification and explanation. Moreover, some of the participants held that the theoretical part of the digital course component was not needed, as they were primarily interested in acquiring practical communication tools. This indicates that some of the clinical supervisors did not agree on the importance of a theory-based course.

The purpose of using repetitions between course component one and two was to bridge the two course components and to avoid the assumption that it was two separate courses. Despite this effort, some participants found this to be annoying and unnecessary. Meanwhile, it was suggested that a summary from the digital course component in the beginning of the physical course component could serve as an optimal transition between the two course components. This should be taken into consideration when designing blended learning courses. Challenges with blended learning are often related to technical issues such as unreliable, interrupted internet streaming, echoing of the video and also authenticity in scenarios (Kelly et al., 2020).

One important purpose of the digital course component in our study was cost effectiveness; the participants should be allocated time to perform the digital part during their working hours in order to use minimal time away from work. Romanelli et al. (2009) state that participants should have the opportunity to choose how they want to consume the content of digital lessons due to several types of learners. Additionally, in our study, this was intended to increase the scope of digital resources and provide greater utilization of the cost of developing such content. To some extent, this was realized, but several of the participants did not get time set aside for it at work and experienced several interruptions during the digital course component. Providing sufficient time to perform the digital part was not prioritized by their managers due to a busy clinical setting, which represented a challenge for our participants. This is in line with Jølstad et al. (2017), who state that it is problematic for nurse specialist students and their supervisors to prioritize time for reflection on clinical experiences. As this need was not met to a full extent, the participants in the focus group interviews and the written reflections suggested offering prioritized time for the digital course component in our study. The lack of allocated time for the digital component reveals that it is difficult for managers to prioritize time for employees' acquisition of supervision competence in a busy clinical arena. We have developed and evaluated a flexible supervision course utilizing a blended learning design, with the potential to serve as a model or inspiration for the creation of similar courses in the future.

Limitations

Written reflections were short and to the point, although the participants in the focus groups gave more in-depth reflections. The written reflections were anonymous and were in line with information given in the focus group interviews. One bias was that the course leaders also were those who conducted the focus groups; this could have influenced the participants' reflections and comments. Additionally, some of the course leaders were previous colleagues. Nevertheless, this might be seen as co-creation of knowledge, as course holders and participants felt confident with each other and together participated in the development and evaluation of a new supervision course.

Conclusion

This study explored a blended learning supervision course, conducted by means of focus group interviews and written reflections. The overall findings indicate that the blended learning approach enhanced supervision competence, as the online component facilitated a more profound learning experience during the in-person simulation-based course component. Potential for improvements were mostly due to the difficult contextual conditions in the clinical settings. The participants underlined the importance of a manager's responsibility and the need for enhanced supervision competence. The need for simplifying of content and technical adjustments and more intertwined course components were also identified. Hence, a desire to develop the digital course component into an app through which the tools could be found was suggested. The participants held that this made transferability to clinical supervision easier. We have outlined the content and the pedagogical design and thereby hope that our flexible supervision course contributes to enhance the development of the supervision competence needed in the clinical arena.

Conflicts of interest

None

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References

- Bayram, L. (2012). Use of Online Video Cases in Teacher Training. *Procedia Social and Behavioral Sciences*, 47, 1007-1011. https://doi.org/10.1016/j.sbspro.2012.06.770
- Braun, V. & Clarke, V. (2021). Thematic Analysis. A Practical Guide. SAGE Publications
- Coyne, E., Frommolt, V., Rands, H., Kain, V., Mitchell, M. (2018). Simulation videos presented in a blended learning platform to improve Australian nursing students' knowledge of family assessment. *Nurse Education Today, 66*, 96-102. https://doi.org/10.1016/j.nedt.2018.04.012
- DeGrande, H., Liu, F., Greene, P. & Stankus, JA. (2018). Developing professional competence among critical care nurses: An integrative review of literature. *Intensive & Critical Care Nursing*, 49, 65-71. https://doi.org/10.1016/j.iccn.2018.07.008
- Diaz-Navarro, C., Leon-Castelao, E., Hadfield, A., Pierce, S., & Szyld, D. (2021). Clinical debriefing: TALK© to learn and improve together in healthcare environments. *Trends in anaesthesia & critical care, 40,* 4-8. https://doi.org/10.1016/j.tacc.2021.07.004
- Edward, C. N., Asirvatham, D., & Johar, M. G. M. (2018). Effect of blended learning and learners' characteristics on students' competence: Empirical evidence in learning oriental music. *Education and Information Technologies*, *23*, 2587–2606.
- Fitzgerald, D. A., Scott, K. M., & Ryan, M. S. (2022). Blended and e-learning in pediatric education: harnessing lessons learned from the COVID-19 pandemic. *European Journal of Pediatrics, 181*(2), 447-452. https://doi.org/10.1007/s00431-021-04149-

- Folkvord, SE & Risa, CF (2023). Factors that enhance midwifery students' learning and development of self-efficacy in clinical placement: A systematic qualitative review. Nurse Education in Practice, 66, January 2023, 103510. https://doi.org/10.1016/j.nepr.2022.103510
- Fowler, J. (2011). Supporting self and others: from staff nurse to nurse consultant. Part 5: Clinical supervision. *British Journal of Nursing*, *20*(13), 830-830. https://doi.org/10.12968/bjon.2011.20.13.830
- Frankel, R. M., & Stein, T. (2001). Getting the most out of the clinical encounter: the four habits model. *Journal of Medical Practice Management*, *16*(4), 184-191.
- Garrison, D. R., & Vaughan, N. D. (2008). Blended Learning in Higher Education: Framework, Principles, and Guidelines. Jossey-Bass.
- Germano, E., Schorn, M. N., Phillippi, J. C., & Schuiling, K. (2014). Factors that Influence Midwives to Serve as Preceptors: An American College of Nurse-Midwives Survey. *Journal of Midwifery & Women's Health*, 59(2), 167-175. https://doi.org/10.1111/jmwh.12175
- Ghazal, S., Al-Samarraie, H., & Aldowah, H. (2018). "I am Still Learning": Modeling LMS Critical Success Factors for Promoting Students' Experience and Satisfaction in a Blended Learning Environment. IEEE access, 6, 77179-77201. https://doi.org/10.1109/ACCESS.2018.2879677
- Graham, M. M., & O'Brien, B. (2020). Guided group reflection: A question of organisation and support for baccalaureate nursing students: Part1. *Nurse Education in Practice*, 44. https://doi.org/10.1016/j.nepr.2020.102754
- Hansen, BS., Gundersen, EM. & Bjørnå, GB. (2011). Improving student supervision in a Norwegian intensive care unit: A qualitative study. *Nursing & Health Sciences, 13,* 255-261. https://doi.org/:10.1111/j.1442-2018.2011.00609.x
- Hatlevik, RIK. (2011). The theory-practice relationship: reflective skills and theoretical knowledge as key factors in bridging the gap between theory and practice in initial nursing education. *Journal of Advanced Nursing*, 68(4), 868-877. https://doi.org/10.1111/j.1365-2648.2011.05789.x
- Husebø, S. E., O'Regan, S., & Nestel, D. (2015). Reflective Practice and Its Role in Simulation. *Clinical simulation in nursing*, 11(8), 368-375. https://doi.org/10.1016/j.ecns.2015.04.005
- Janes, G., Ekpenyong, M. S., Mbeah-Bankas, H., & Serrant, L. (2023). An international exploration of blended learning use in pre-registration nursing and midwifery education. *Nurse Education in Practice*, 66, 103514-103514. https://doi.org/10.1016/j.nepr.2022.103514
- Jølstad, A. L., Røsnæs, E. R., Severinsson, E., & Lyberg, A. (2019). A Paradigm Shift in Nurse Specialist Clinical Supervision—Implementation of a Competence Program. *SAGE Open Nursing*, *5*, 2377960819844366. https://doi.org/10.1177/2377960819844366
- Kelly, M., Lapkin, S., McGrath, B., Holloway, K., Nielsen, A., Stoyles, S., Campbell, M., Dieckmann, N. F., & Lasater, K. (2020). A Blended Learning Activity to Model Clinical Judgment in Practice: A Multisite Evaluation. *Clinical simulation in nursing*, 43, 10-16. https://doi.org/10.1016/j.ecns.2020.03.006
- Korstjens, I., & Moser, A. (2017). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120-124. https://doi.org/10.1080/13814788.2017.1375092
- Krause, S. A. (2016). Precepting Challenge: Helping the Student Attain the Affective Skills of a Good Midwife. *Journal of Midwifery & Women's Health*, *61*(S1), 37-46. https://doi.org/10.1111/jmwh.12517
- Krupat, E., Frankel, R., Stein, T., & Irish, J. (2006). The Four Habits Coding Scheme: Validation of an instrument to assess clinicians' communication behavior. *Patient Education and Counseling*, 62(1), 38-45. https://doi.org/10.1016/j.pec.2005.04.015
- Langslet, G. J. (1999). LØFT: løsningsfokusert tilnærming til organisasjonsutvikling, ledelsesutvikling og konfliktløsning. Ad notam Gyldendal.

- Matsuda, M., & Kohno, A. (2021). Development of a blended learning system for nurses to learn the basics of psychoeducation for patients with mental disorders. *BMC Nursing*, 20(1), 1-164. https://doi.org/10.1186/s12912-021-00677-1
- Ministry of Education and Research (2016). *Culture for quality in higher education*. (Meld.St.16). https://www.regjeringen.no/contentassets/aee30e4b7d3241d5bd89db69fe38f7ba/no/pdfs/stm201620170016000dddpdfs.pdf
- Ministry of Education and Research (2014). *National Qualifications Framework for lifelong learning* (NKR).
 - https://www.regieringen.no/globalassets/upload/kd/vedlegg/kompetanse/nkr2011mvedlegg.pdf
- Ministry of Education and Research (2019). National Curriculum Regulations for Norwegian Health and Welfare Education (RETHOS). https://www.regjeringen.no/no/tema/utdanning/hoyere-utdanning/utvikling-av-nasjonale-retningslinjer-for-helse--og-sosialfagutdanningene/id2569499/
- Nayar, B., & Koul, S. (2020). Blended learning in higher education: a transition to experiential classrooms. *International journal of educational management, 34*(9), 1357-1374. https://doi.org/10.1108/IJEM-08-2019-0295
- Philip, L. (2006). Encouraging reflective practice amongst students: a direct assessment approach. *Planet*, *17*(1), 37-39. https://doi.org/10.11120/plan.2006.00170037
- Romanelli, F., Bird, E., & Ryan, M. (2009). Learning Styles: A Review of Theory, Application, and Best Practices. *American Journal of Pharmaceutical Education*, 73(1), 9-9. https://doi.org/10.5688/aj730109
- Saltrøe E, Aas M, Just Andersen B. Sykepleieres vurderinger av kurset «Fire gode vaner» en tverrsnittsstudie. *Sykepleien Forskning*, *16*(87671):e-87671. https://doi.org/10.4220/Sykepleienf.2021.87671
- Srisaeng, P. & Uppvall, MJ: (2020). Looking toward 2030: Strengthening midwifery education through regional partnerships. *Journal of Advanced Nursing*, *76*, 715-724. https://doi:10.1111/jan.14015
- Universitets-og høgskolerådet. (2018). *Veiledende retningslinjer for utdanning og kompetansevurdering av praksisveiledere i helse- og velferdstjenesten*. https://www.uhr.no/temasider/nasjonale-retningslinjer-for-praksisveiledere-i-helse-og-velferdstjenestene/
- Talkdebrief. (2023). https://www.talkdebrief.org/
- Tveiten, S. (2019). *Veiledning mer enn ord. Pedagogikk, Yrkes- og utdanningsveiledning*. Vigmostad & Bjørke AS
- Wallin, K., Hörberg, U., Harstäde, CW., Elmqvist, C. (2020). Preceptors' experiences of student supervision in the emergency medical services: A qualitative interview study. *Nurse Education Today*, *84*, 104223 https://doi.org/10.1016/j.nedt.2019.104223
- World Health Organization. (2013). *Transforming and scaling up health professionals'education and training*. https://www.ncbi.nlm.nih.gov/books/NBK298953/pdf/Bookshelf NBK298953.pdf
- World Health Organization. (2016). *Nurse educator core competencies*. https://apps.who.int/iris/bitstream/handle/10665/258713/9789241549622-eng.pdf
- Øvrebø, LJ., Dyrstad, DN & Hansen, BS. (2022). Assessment methods and tools to evaluate postgraduate critical care nursing students' competence in clinical placement. An integrative review. Nurse Education in Practice, 58, 103258. https://doi.org/10.1016/j.nepr.2021.103258