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AUTHOR	Tiina Järvinen, Heli Virtanen, Satu Kajander-Unkuri, Leena Salminen
TITLE	Nurse educators' perceptions of factors related to the competence of graduating nursing students
YEAR	2021
DOI	<a href="https://doi.org/10.1016/j.nedt.2021.104884">https://doi.org/10.1016/j.nedt.2021.104884</a>
VERSION	Author's accepted manuscript
CITATION	Tiina Järvinen, Heli Virtanen, Satu Kajander-Unkuri, Leena Salminen, Nurse educators' perceptions of factors related to the competence of graduating nursing students. Nurse Education Today, volume 101, 2021, 104884. ISSN 0260-6917, <a href="https://doi.org/10.1016/j.nedt.2021.104884">https://doi.org/10.1016/j.nedt.2021.104884</a>

# **NURSE EDUCATORS' PERCEPTIONS OF FACTORS RELATED TO THE COMPETENCE OF GRADUATING NURSING STUDENTS**

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# **NURSE EDUCATORS' PERCEPTIONS OF FACTORS RELATED TO THE COMPETENCE OF GRADUATING NURSING STUDENTS**

## **ABSTRACT**

**Background:** Clinical practice, clinical nursing teaching, curricula, working experience and previous healthcare degrees are factors related to the competence of graduating nursing students from the points of view of nursing students and clinical mentors. However, nurse educators' perceptions of these factors are lacking in previous studies, despite assessing student performance and competence is a core competence and one of the main duties of nurse educators.

**Objectives:** The aim of this study was to describe nurse educators' perceptions of factors related to graduating nursing students' competence.

**Design:** The study was conducted using a descriptive qualitative approach utilising focus group interviews in data collection.

**Participants:** A purposive sample consisting of 23 volunteer nurse educators from five Finnish universities of applied sciences took part in seven group interviews.

**Methods:** Data was collected in guided, semi-structured interviews, based on a literature review of previous studies. The data was analysed using a deductive-inductive content analysis.

**Results:** According to nurse educators, six main categories describing factors related to graduating nursing students' competence were found: (1) commitment to the nursing profession, (2) experiences in healthcare, (3) learning abilities, (4) learning environments, (5) student characteristics and (6) the nurse educator's role.

**Conclusions:** To ensure the adequate competence of the graduating nursing students, students' commitment to the nursing profession and their learning abilities and should be supported, and the quality of the learning environments, especially those of study groups and successful clinical practices, should be ensured during the education.

**Keywords:** nurse educator, graduating nursing students, nurse education, competence

## INTRODUCTION

Nurses are the largest group of healthcare professionals worldwide and they are in a key position in providing ethical, effective and safe healthcare services tailored to the health needs of the population. Healthcare and nursing are changing rapidly due to new technologies, more integrated health and social care and the increased need for community-based nursing in aging western societies (WHO, 2020). Hence, it is the fundamental responsibility of nurse education to ensure the competence of graduating nursing students (GNSs). Assessment of nursing students' competence is one of the core competences of nurse educators (WHO, 2016) and one of their main duties (Salminen et al., 2013). However, research evidence on nurse educators' perceptions of the competence of GNSs is scarce. Previous studies may be lacking as nurse educators' role in assessing competence of GNSs might have been too evident. This study describes nurse educators' perceptions of the factors related to the competence of GNSs, and thus increases understanding of factors related to the competence of GNSs and thereby opens new ideas for developing teaching and clinical practices in order to ensure the competence of GNSs.

## BACKGROUND

In this study, nursing competence is defined as the sum of knowledge, skills, actions, values and attitudes (Cowan et al., 2005) and ability to apply these in various situations in the nursing profession (Meretoja et al., 2004). Nursing competence is vital for patient safety and the quality of nursing care (Aiken et al., 2017) and competence assessments are important for recognising needs for improvements from the perspectives of nursing education, employers and nurses. However, competence assessment is considered challenging since it is often done with subjective measures (Missen et al., 2016). According to self-assessments, the competence of GNSs is good (Gardulf et al., 2016; Kajander-Unkuri et al., 2014; Theander et al., 2016). But clinical mentors have been more critical in their evaluations than GNSs (Kajander-Unkuri et al., 2016) and newly graduated nurses already working as registered nurses assess their competence to be lower than that of GNSs (Theander et al., 2016).

Previous studies discuss at least five factors related to GNSs' competence: (1) clinical practice (Gardulf et al., 2016; Kajander-Unkuri et al., 2014; Kajander-Unkuri et al., 2020; Thorkildsen & Råholm, 2010), (2) clinical nursing teaching (Gardulf et al., 2016), (3) curricula (Theander et al., 2016), (4) work experience and previous healthcare degrees (Gardulf et al., 2016; Kajander-Unkuri et al., 2014) and (5) age and gender (Kajander-Unkuri et al., 2014). These studies mainly apply related factors as background data, which might be the reason for the small number of investigated factors. Of these previously investigated factors, successful clinical practice enhances competence development (Gardulf et al., 2016; Kajander-Unkuri et al., 2014; Kajander-Unkuri et al., 2020; Thorkildsen & Råholm, 2010). In successful clinical practice, both the learning atmosphere and practice mentoring support students' learning (Kajander-Unkuri et al., 2014; Thorkildsen & Råholm, 2010). Furthermore, clinical nursing teaching has a positive relationship with competence (Gardulf et al., 2016), whereas curricula have an unclear relationship with competence (Theander et al., 2016). Work experience and a previous healthcare degree are both related to competence (Gardulf et al., 2016; Kajander-Unkuri et al., 2014), contrary to age and gender which are not associated with competence (Kajander-Unkuri et al., 2014).

Since earlier studies have focused on students' and mentors' perceptions, the nurse educators' perspective has been narrowly applied in previous studies on the competence of GNSs and only a few factors related to competence have been recognised. This study aims to describe Finnish nurse educators' perceptions of the factors related to the competence of GNSs.

## METHODS

### Study design

A descriptive qualitative approach utilising focus group interviews was used in this study.

### Setting

This study was conducted in Finland where nurse education is organised by universities of applied sciences (UASs) and consists of 210 ECTS (1 ECTS = 27 hours of studying) and lasting 3.5 years, leading to a qualification as a registered nurse (Universities of Applied Sciences Act 932/2014).

### Sampling

Purposive sampling was conducted based on the participants' willingness to describe factors related to GNSs' competence (Holloway & Wheeler, 2010). Nurse educators were recruited from five different UASs in Western and Southern Finland by email. The emails were sent to the heads of nursing degree programmes, who delivered the message to nurse educators in their institutions. Educators voluntarily made contact with the researcher. The only inclusion criteria applied was being employed as nurse educator in a UAS.

### Participants

In Finland, nurse educators must be registered nurses with at least three years' working experience in nursing. In addition, completed master's level studies are required (Universities of Applied Sciences Act, 2014), including a recommendation of pedagogical studies. Nurse educators mainly work as academic teachers (Salminen et al., 2013). In this study, 23 Finnish nurse educators took part. Their working experience as nurse educators varied between 1 and 36 years of experience and both genders (21 females, 2 males) were represented.

### Data collection

The data collection was conducted in 2016 and 2017 in seven focus groups, each with two to six educators. A focus group was chosen as the data collection method because it allowed the educators to speak from their perspective and share different views with each other (Holloway & Wheeler, 2010). The interviews were held in meeting rooms at the participants' universities. The interviews lasted between 42 and 63 minutes. A semi-structured interview guide was used to facilitate the conversation during the interviews (Holloway & Wheeler, 2010). The interview questions focused on the educators' experiences of the factors related to the competence of the GNSs (see Table 1).

*Insert Table 1. here*

All the participants received a summary of the previous studies investigating factors related to GNSs competence (the studies included in the summary were: Gardulf et al., 2016; Kajander-Unkuri et al., 2014; Theander et al., 2016; Thorkildsen & Råholm, 2010) in order to enrich the conversation a few days before the interview (Holloway & Wheeler, 2010). The semi-structured interview guide and the summary of previous studies ensured that the group discussions answered the research question and thereby the dependability of the data (Graneheim & Lundman, 2004). All the interviews were transcribed verbatim, resulting in 164 pages of data. Saturation was evident in the data.

### Data analysis

The data was analysed utilising a qualitative content analysis in three main phases: preparation of the data, organisation of the data, and reporting of the results (Elo & Kyngäs, 2008). The preparation phase began with a brief reading of the data (Elo & Kyngäs 2008) and selecting a meaning unit (Graneheim & Lundman 2004). Words representing thoughts or ideas regarding factors related to the competence of GNSs were chosen as meaning units. The number of words in a meaning unit was not restricted. Meaning units were condensed and coded by one researcher.

The organisation phase began with a deductive content analysis utilising a structured categorisation matrix that included five factors related to GNSs competence that were investigated in previous studies: (1) clinical practice, (2) clinical nursing teaching, (3) curricula, (4) age and gender and (5) work experience and previous healthcare degrees. Codes fitting the structured categorisation matrix were organised under these categories. A deductive content analysis allowed a comparison between previously recognised factors and the nurse educators' perceptions.

Next, codes that did not fit the categorisation matrix were analysed in an inductive content analysis, which brought forth new insights from the nurse educators' perspective (Graneheim & Lundman, 2004). In the inductive analysis, codes were combined into new sub-categories. In order to avoid interpretation, only manifest content was analysed (Elo & Kyngäs, 2008). As a result of the inductive content analysis, 16 new sub-categories were found.

The results of the deductive-inductive content analysis were combined, resulting in 21 sub-categories (5 from the deductive analysis and 16 from the inductive analysis). The sub-categories were combined into six main categories (see Figure 1).

### Ethical considerations

This study was conducted according to the European Code of Conduct for Research Integrity (2017). The Ethics Committee of the University of XXX reviewed the research plan according to ethical principles and provided a statement (Statement 25/2016) before the data collection. Permission to conduct the study was sought from the UASs and was granted. The educators' participation in the study was voluntary and written informed consent was obtained from all the participants. Confidentiality, anonymity and the right to interrupt participation at any time were guaranteed. The interview recordings were kept safe throughout the research process according to the EU General Data Protection Regulation 2016/679. The data was destroyed after the study.

## RESULTS

Six main categories describing factors related to the GNSs' areas of competence were found. These were: (1) commitment to the nursing profession, (2) experiences in healthcare, (3) learning abilities, (4) learning environments, (5) student characteristics and (6) the nurse educator's role (see Figure 1).

*Insert Figure 1 here*

Figure 1. Factors related to the competence of GNSs.

### Commitment to the nursing profession

According to the nurse educators, commitment to the nursing profession includes the will to be involved in nursing, having an interest in nursing and motivation.

Students having the will to be involved in nursing are goal-orientated and enthusiastic. They have a feeling of being in the right place and they are able to picture themselves in a certain nursing



specialisation in the future. However, nursing does not have to have been a life-long dream for the students. More importantly, the commitment needs to be found during the nursing education:

‘It doesn’t matter if you always wanted to be a nurse or if you ended up in nursing education. What matters is finding an inner will to become a good nurse.’ (G1)

Having an interest in nursing means having an interest in nursing specialisations (for example, in intensive care). This supports the students’ will to be involved in nursing, increases their motivation to study and thereby enhances their competence:

‘It could be described as making choices. Choosing one’s interest and laying effort on studies supporting the interest, resulting in good a competence.’ (F2)

Additionally, motivation was described to be related to competence. But motivation often varies during education. Nurse educators underlined the importance of students receiving support in times when they had less motivation:

‘Motivation affects what you learn and what your future competence will be. Without motivation, it is very difficult to learn things.’ (C1)

‘Motivation can be found again if it is supported and pushed to the right direction.’ (A4)

### Experiences in healthcare

Experiences in healthcare include a previous healthcare degree and work experience. Students with a previous healthcare degree often have better clinical skills at the beginning of their studies and being familiar with nursing promotes their learning. However, some challenges – including overly high expectations regarding their skills and difficulties with role transitioning from a practical nurse to nurse student – were reported:

‘Of course it makes learning easier as they have experience from nursing. They are familiar with concepts and they know how to interact with patients ...’ (C3)

‘I think they struggle a lot with embracing their new role as nurse students.’ (C1)

‘I have a feeling that students with a practical nurse degree think they know more what they actually do.’ (E3)

According to the nurse educators, most students work during the summer as practical nurses or having temporary employment as a registered nurse. Work experience allows the students to gain experience in the field that supports their competence:

‘Work experience can support the competence. Meaning, if you have worked during your studies, it is quite obvious that your skills will get better.’ (C1)

### Learning abilities

Students’ learning abilities include learning attitudes and learning skills. An attitude beneficial for competence was described as an enthusiastic and humble. Learning skills were considered important as nursing studies require a high level of independence, self-directedness and the ability to take responsibility:

‘Independent studying is emphasised and will be emphasised even more in the future.

Students must have skills to control their own learning and the ability to take responsibility for it.’ (F2)

Not all nursing students share equally good learning skills as students come from different educational backgrounds. Some have a university degree while others start nurse education directly after secondary education. Students need support in developing their learning skills:

‘Nowadays we don’t have teaching of learning skills. And, if we think about various backgrounds our students come from. Their learning skills are very different ...’ (B2)

### Learning environments

Learning environments related to competence included clinical practice and study groups. In clinical practices, the atmosphere of the unit and mentoring were considered to be important. The atmosphere

should support students' learning and mentors were seen as role models. Also, mentoring skills were highlighted:

'The mentoring relationship is so important because the mentor is a role model for the student. Another important thing is how the student is met in the placement. I mean the atmosphere in the unit.' (D2)

In addition to the learning atmosphere and mentoring, nurse educators expressed their concern regarding the number of available practice places. The lack of available placements forces students to undertake placements where learning aims cannot be met. This was felt to place students in an unfair position as some students undertake better placements throughout their studies. However, the importance of the clinical practice should not be emphasised too much. According to the nurse educators, all GNSs are still qualified nurses despite the practice placements they undertake during their education:

'It [clinical practice] does not determine how good the competence is. If someone has had poorer clinical placements without any opportunities to practice your clinical skills, it doesn't mean that this person wouldn't be qualified when graduating.' (A6)

The interviewees felt that study groups (i.e. student classes) were related to competence. The atmosphere in the study group and students supporting each other were considered beneficial for competence. In particular, students experiencing challenges with motivation or learning skills benefit from a supportive study group atmosphere. In contrast, the nurse educators also mentioned that they had had experiences of negative atmospheres causing reduced motivation and negative attitude towards the studies resulting in poorer learning outcomes for all group members:

'I taught two groups from the beginning of their studies. The atmosphere in one group was enthusiastic, they studied well, and they wanted to know more. There were a few students who helped the weaker students and kept them aboard in the studies. However, in another group, the atmosphere was like, I don't know why, but if one student showed even a bit of interest, the others shot it down ... and certainly that will affect competence.' (G3)

### Student characteristics

Student characteristics included personality, age, gender, cultural background and their life situation. According to the nurse educators, students' life situation was related to competence. Having financial security, support from social networks and being in good health allowed students to concentrate on their studies. However, mental health issues and severe fatigue were described to be common among nursing students, causing challenges in completing their studies:

‘It is true that these things (stress and mental health problems) affects the students’ ability to study. I mean how well one is able manage the studies and have the strength to carry on ...’

(G1)

In contrast to the student's life situation, personality, age, gender and cultural background were not considered to be related to their competence.

#### The nurse educator's role

The nurse educator's role included developing and implementing the curricula, providing learning experiences, assessing learning, providing a role model and supporting the student. For developing and implementing the curricula, nurse educators reported changes of curricula to be common. However, these changes were not considered to be related to competence of the GNSs:

‘If I think about the current curriculum and the past ones... in my opinion they all have produced the required competence.’ (E2)

Learning experiences enhance students' competence, especially when they are successful. Successful learning experiences referred to experiences in which the students gained confidence, and which promoted learning. Nursing students need challenges that are not too demanding nor too easy, in order to develop their competence:

‘Different learning experiences, even the bit challenging ones, are valuable during the studies. Those will increase the confidence to enter various situations in real-life nursing.’

(C3)

Assessing learning is one of the core duties in a nurse educator's work. However, assessing learning with grades seems to have a complicated relation with competence. The interviewed educators reported that some students are theoretically talented, but they might be weaker at interpersonal skills, which are challenging to assess and included in course grading:

'One can perform well in theoretical studies, but on other areas, such as interpersonal skills, the competence can be poorer.' (A1)

The nurse educators felt that having the responsibility to support the students' learning and provide a role model for them. Providing a role model included sharing expertise with the students and presenting the nursing profession and healthcare field to the students:

'I think we are able to affect students' attitude by being a role model and showing the students that we are proud of being nurses.' (G2)

## DISCUSSION

This study aimed to describe nurse educators' perceptions of factors related to the competence of GNSs. Applying nurse educators' perceptions was shown to be beneficial for investigating factors related to GNSs' competence as several related factors were found. New insights into the existing knowledge concerning commitment to the nursing profession, learning abilities, learning environments, experiences in healthcare and the nurse educator's role were brought up.

Commitment to the nursing profession of nurse students should be supported during the education by increasing will to be involved in nursing, finding own interests in nursing and supporting motivation. Previous studies suggest improving quality of teaching, empowering students and helping them to create positive attitude toward nursing increase motivation (Saeedi & Parvizy 2019). Beside these, students should be supported to find their own interests in nursing thereby increasing the commitment to the nursing profession and enhance their competence. Nurse educators and clinical practice mentors are in a key position supporting students to find their interests in nursing and motivating them. However, large

numbers of students may cause challenges for providing individually tailored support. Most likely, the number of students is not going to decrease as countries suffering from staff shortages in nursing are recommended to invest in nurse education (WHO 2020). Instead, nurse educators need improved methods to offer personal guidance during the studies and individual support.

The educators emphasised the students' learning abilities, including learning skills and self-directedness, but according to them, not all students had equally good learning skills. Learning skills might also affect students' motivation, as motivation is increased by empowering academic achievements (Saeedi & Parvizy 2019). Students might not be able to achieve such achievements, if their learning skills are inadequate. There is a need to support students in developing their learning abilities by increasing the teaching of learning skills and supporting self-directed learning. Small study groups and academic literacy support sessions have been recognized as successful supportive interventions (Ooms. et al., 2013). Some evidence exists for improving study skills, but according to our study the challenge of unequal learning skills remain in nurse education. Implementation of supportive interventions should be taken to consideration in the curriculum.

This study supports the importance of successful clinical practice, especially the importance of the learning atmosphere and mentoring (Kajander-Unkuri et al., 2014; Thorkildsen & Råholm, 2010). However, some challenges with these existed. Additionally, the educators expressed concerns regarding the number of practice placements available compared to the number of nursing students. The same challenges have been recognised in many Nordic countries (Henriksen et al., 2020). These challenges put students in an unfair position. Still, according to the nurse educators, GNSs were well-qualified registered nurses despite the quality of their practice placements. This however, conflicts with previous studies (Kajander-Unkuri et al., 2014; Kajander-Unkuri et al., 2020) that highlighted the importance of clinical practice. There is a need for further discussion on the goals of the students' learning with educators and mentors. Assessment of the quality of the practice environments and thereby investments to improve clinical practice placements should be conducted. Also, the number of placements should be increased. Ensuring good clinical practice placements as learning environments could support commitment to the

nursing profession by increasing students' motivation, their will to be involved in nursing and in finding their interest in nursing, and thus result in better competence.

In addition to clinical practice, this study highlighted the significance of study groups as a factor related to competence. This an interesting finding since previous studies rarely discuss the relationship between study groups and competence during nurse education, even if the importance of the atmosphere has been recognized in clinical practice (Kajander-Unkuri et al., 2014; Thorkildsen & Råholm, 2010) This study suggests a supportive and motivating atmosphere in the study groups should be ensured during the nurse education. Nurse educators should pay attention to the atmosphere in study groups and intervene if negative attitudes are recognised.

Compared with the results from previous studies, a new insight concerning experiences in healthcare was found. Previous healthcare degrees have been seen as a positive factor related to competence according to students' self-evaluations (Gardulf et al., 2016; Kajander-Unkuri et al., 2014). However, in this study, this relationship was not entirely positive as some students with a practical nurse degree experienced challenges in role transitioning and some issues with their attitude were described by nurse educators. One solution for these challenges could be to offer support in role transitioning at the start of studies.

Lastly, nurse educators are in a key position in nurse education and they play a major role in relation to the competence of GNSs (WHO, 2016). The educators' role has been regarded as so self-evident that few studies even mention it. In this study, the nurse educators described their role as being role models, supporters of the student's learning path and that they faced some challenges with assessing students' competence. However, they did not mention their own competence as a factor related to the competence of the GNSs. In one recent study, it was found that GNSs who assessed their own competence to be high also assessed the competence of their educators to be high (Salminen et al., unpublished results). This is notable because students so often criticise their educators (Salminen et al., 2013).

The results from this study open new ideas for future research. First, more research on how to provide personal guidance and support students' learning abilities including self-directed learning is needed for developing effective supportive interventions considering large number of students. Secondly, the

relationship between learning abilities and commitment to the nursing profession and how these affect competence should be established. Thirdly, further research is needed on how a positive atmosphere in a study group is created and how it could be supported during the education. Finally, challenges in the role transitioning from being a practical nurse and becoming a nursing student should be investigated further.

### LIMITATIONS

There are some strengths and limitations concerning data collection and analysis. First, applying focus groups as data collection method resulted a rich discussion during the interviews and a clear saturation was evident in the data. However, the semi-structured interview guide combined with a summary of previous studies might have imposed too much structure and steered the discussions towards certain topics. Secondly, the analysis was successfully conducted with the chosen method, as the deductive content analysis supported previous study findings and the inductive content analysis brought forth new insights. As a limitation, the analysis was mainly conducted by one researcher, but the analysis process and preliminary results were discussed and approved by the research team. Despite some limitations, applying nurse educators' perceptions increased the understanding of factors related to competence of GNSs, opened new ideas for future research and improvements for nursing education.

### CONCLUSIONS

Six main categories describing factors related to the GNSs' areas of competence were found in this study: (1) commitment to the nursing profession, (2) experiences in healthcare, (3) learning abilities, (4) learning environments, (5) student characteristics and (6) the nurse educator's role. The competence of GNSs is related to their commitment to the nursing profession, their learning abilities and learning environments. These factors should be supported during nurse education by supporting the motivation of the students, helping students to find an interest in nursing, ensuring successful clinical practices, offering teaching in learning skills, supporting self-directedness and ensuring a positive atmosphere in study groups. Still, further research with objective measures for these factors and the development of effective interventions



is needed. Also, nurse educators' perceptions of nursing students' competence should be applied more as assessing competence is one of the main duties of the nurse educators.

### FUNDING

This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

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