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Title: QUALITATIVE STUDY OF SOCIAL AND HEALTHCARE EDUCATORS' PERCEPTIONS OF **THEIR** COMPETENCE IN EDUCATION

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What is already known on this subject

- Competent educators are needed to ensure that social and healthcare professionals are effective.
- High attrition rates of healthcare staff, reductions in psychological wellbeing and increasing incidence of stress in healthcare students' last year are all raising pressures for social and healthcare educators to provide effective support and guidance for students in their professional growth.

What this study adds

- The findings have social value in identifying requirements to improve social and healthcare educators' competence.
- The educators' competence was defined as a multidimensional construct.
- Educators recognized the need for developing competence in innovation to meet rapid changes in a competitive and increasingly global socio-political environment.
- Enhancement of adaptability to rapid changes was recognized as a necessity.
- The stakeholders need to establish, maintain and strengthen collaborative strategies to provide effective, adaptable support systems, involving educators and students, in their working practices.

Abstract

Background: Competent educators are needed to ensure that social and healthcare professionals are effective and highly competent. However, there is too little evidence-based knowledge of current and required enhancements of educators' competences in this field.

Aim: To describe social and healthcare educators' perceptions of their competence in education.

Design: The study had a qualitative design, based on interviews with educators and rooted in critical realism.

Participants: Forty-eight participants were recruited from seven universities of applied sciences and two vocational colleges in Finland, with the assistance of contact persons nominated by the institutions. The inclusion criterion for participation was employment by an educational institution as a part-time or full-time, social and/or healthcare educator.

Methods: Data were collected in February-April 2018. The participants were interviewed in 16 focus groups with 2-5 participants per group. The acquired data were subjected to inductive content analysis, which yielded 506 open-codes, 48 sub-categories, nine categories, and one main category.

Results: The educators' competence was defined as a multidimensional construct, including categories of educators' competences in practicing as an educator, subject, ethics, pedagogy, management and organization, innovation and development, handling cultural and linguistic diversity, collaboration, and continuous professional development. Educators recognized the need for developing competence in innovation to meet rapid changes in a competitive and increasingly global socio-political environment. Enhancement of adaptability to rapid changes was recognized as a necessity.

Conclusions and Implications for Practice: The findings have social value in identifying requirements to improve social and healthcare educators' competence by helping stakeholders to improve educational standards, construct a continuous education framework and create national and/or international curricula for teacher education degree programs to enhance the quality of education. We also suggest that stakeholders need to establish, maintain and strengthen collaborative strategies to provide effective, adaptable support systems, involving educators and students, in their working practices.

Keywords: competence, healthcare, higher education, educator, social care, vocational

Introduction

Previous reviews have emphasized that health science educators' competence has received little systematic research attention (Mikkonen et al., 2018; Piirainen et al., 2018). For example, in a systematic review, Mikkonen et al. (2018) identified just six relevant quantitative studies, addressing educators' competences in Finland, the USA and Wales. Dimensions of educator competence identified in the reviewed studies included elements of knowledge in taught subject, evidence-based knowledge, knowledge of ethical codes and entrepreneurship, together with pedagogical skills, problem-solving, leadership, research, technological and clinical skills. A need for appropriate personal characteristics to motivate and care for students was also noted. Similarly, just 10 relevant qualitative studies were identified by Piirainen et al. (2018) mainly from the USA and UK, with contributions from Pakistan. Key thematic elements of health sciences educators' competence highlighted in these studies included self-development, interaction, research and multiculturalism. These two reviews provide some indications of generally understood aspects of health science educators' competences. Core competencies of nurse educators have also been defined by the World Health Organization (WHO, 2016), including knowledge of: theories and principles of adult learning; curriculum and implementation; nursing practice; research and evidence; communication, collaboration and partnership; ethical/legal principles and professionalism; monitoring and evaluation; and management, leadership and advocacy.

The European Qualification Framework (EQF) (European Commission, 2018) has distributed competence in education among eight levels of learning outcomes, divided into areas of knowledge, skills, responsibility and autonomy. The EQF provides descriptions for the European Higher Education Area of three cycles, generalized for all subjects of education in agreement with the Bologna process (2005). However, it does not further discuss or define the required competence of educators. In addition, the European Federation of Nurse Educators (FINE, 2011) and European Network of Physiotherapy in Higher Education (ENPHE, 2018) provides a platform for nurse and physiotherapy educators throughout the European Union (EU) to exchange knowledge, expertise and evidence-based teaching practice. Nevertheless, there is still a lack of clarity regarding the common practices and requirements of people engaged in nursing education, and more detailed knowledge of shared understandings of social and healthcare educators' competence requirements is needed.

Such knowledge is important because competent educators are required to ensure that social and healthcare professionals are effective and highly competent. Excellent care for clients requires up-to-date innovative care with integration of client self-care and digital health solution finding (Konttila et al., 2018). Moreover, high attrition rates of healthcare staff (WHO, 2013), reductions in

psychological wellbeing and increasing incidence of stress in healthcare students' last year (He et al., 2018) are all raising pressures for social and healthcare educators to provide effective support and guidance for students in their professional growth. To counter these problems and maximize quality of care, educators' practices and competences (current and required) must be more clearly defined to enable stakeholders, educational systems and educators themselves to make appropriate adjustments. This study was designed to facilitate such efforts.

Background

Educational structures of social and healthcare professionals vary internationally. The EQF requirements for social and healthcare professionals are on level five. This is defined as "Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge" with "a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems" (European Commission, 2018). In the EU, the education of social and healthcare professionals is conducted at diploma level in vocational colleges or bachelor's level at quaternary vocational institutions (with diverse names in different countries) or universities. In Finland, the requirements to practice as a social and healthcare educator include a professional degree, 3-5 years of working experience in the field, a higher educational (master's and/or doctoral) degree (University of Applied Science Act 2014/932), and generally at least 60 ECTS credits of pedagogical education. According to the WHO (2013), diverse social and healthcare professionals contribute to client care in social and healthcare sectors. Thus, to understand the meaning and complexity of competence in these contexts it is essential to explore the concept of competence holistically (Korthagen, 2016; Le Deist, 2005). Commonly understood elements include relevant knowledge, skills and attitudes. In addition, both external and internal dimensions are recognized. The former concern the contexts in which competences are, or are not, required and manifested (Korthagen, 2016; Scott, 2015). The internal dimensions are more connected to educators as people and the ethical core of their performance, a generic competence that guides educators in their work (Korthagen, 2016; Kulju, 2016; Salminen, 2015). The aim of the study was to address and answer the following question: What are social and healthcare educators' perceptions of their competence (current and required) in education?

Methods

Study design

The study had a qualitative design, to explore experiences of participants in natural settings (O'Brien et al., 2014), rooted in critical realism, i.e. seeking knowledge of reality embedded in participants' beliefs and perspectives (Braun et al., 2006; Tong et al., 2012).

Participants

The sole inclusion criterion for participation was part-time or full-time employment by a Finnish educational institution as a social or healthcare educator. Thus, all 730 of the social and healthcare educators working in nine educational institutions scattered across Finland, seven universities of applied sciences and two vocational colleges, were invited to participate, through contact persons nominated by the institutions. In total, 48 chose to participate: 41 working in universities of applied sciences and seven working in vocational colleges. Of these 48 educators, 14 had five years or less work experience (novice level) and 34 educators at least 10 years work experience (senior level). Most participants (33) were female, and average ages of the novice and senior participants were 46 and 54 years, respectively. They had professional backgrounds as nurses, social workers, midwives, bio-annalists, radiographers, and physiotherapists. All of the educators had at least Master's-level education, and seven also had a doctoral degree.

Data collection

The data collection process was planned with a panel of experts from seven higher education organizations participating in the TerOpe-project funded by the Finnish Ministry of Education and Culture. The panel included professors, associate professors, health science teacher degree program educators, and researchers. Data were collected in the period February-April 2018, by interviewing participants in 16 focus groups, with 2-5 participants per group, in Finnish or Swedish. The participants were interviewed in the premises of their own educational institution in quiet closed-door meeting rooms. The average duration of the 16 interviews was 50 minutes. In total, nine interviewers were trained to collect data from participants in the nine organizations, according to the plan formulated by the expert panel. Each interview was conducted by one or two interviewers per group. The interviewers had no relationship and were not acquainted with any participants. The interviews were designed to address the research question guiding the study, using open questions in a semi-structured format, based on findings obtained in the two previously mentioned systematic reviews on health sciences educators' competence (Mikkonen et al., 2018; Piirainen et al., 2018). The format covered abstract themes regarding educators' competence, to guide interviewers towards open conversations with participants. Each participant also provided background information, by filling in a document, on their organization, age, gender, work experience, title of employment and educational degree. The interviews were audio-recorded with digital voice recorders.

Data analysis

The data were subjected to inductive content analysis (Elo and Kyngäs, 2008), as follows. The interviews were transcribed in Microsoft Word format and transferred into NVivo 11 qualitative research software. The data were read through several times before the main analysis phase. The content analysis process then involved stages of selecting the unit of analysis for the whole data, open coding, grouping of codes into sub-categories, categories and a main category, the reporting the analytical process and results. The content analysis process guided researchers (KM, MK, CK, MK) to build a conceptual understanding and categories of social and healthcare educators' competence. The process yielded 506 open codes, 42 sub-categories, nine categories, and one main category reaching data saturation (Elo et al., 2014).

Trustworthiness

The study was planned and conducted according to the trustworthiness framework formulated by Elo et al. (2014), which includes preparation, organizational, and reporting phases. In the preparation phase, data collection methods were carefully planned with consideration of quality of data, interview format, training of interviewers, sampling strategy, definition of participant inclusion criteria, reaching of data saturation, and selection of the unit of analysis. The organization phase was conducted by creating of concepts and categories, evaluating analysis outcomes and interpretations between the four researchers (KM, MK, CK, MK), and finding mutual agreement**. The final reporting phase was performed by systematically and logically reporting the analysis, representing participants' perceptions correctly, using systematic quotations and emphasizing prominent results in discussion (Elo et al. 2014). The Standards for Reporting Qualitative Research (SRQR) checklist was used to improve the transparency of the qualitative research design and trustworthiness (O'Brien et al. 2014). The study fulfilled all requirements mentioned in the 21-item checklist.

Ethical considerations

The study was conducted according to the Helsinki Declaration on ethical standards for research involving human subjects (Stang 2015). Ethical permission for the study was granted on 12.12.2017 by the Ethical Committee of the University of Jyväskylä. Permission to conduct qualitative research was requested from, and granted by, all nine host organizations of the 48 participants. The study involved voluntary participation of educators, each of whom provided informed and signed consent. Information about the participants (who are referred to using arbitrary numbers here) was anonymized and stored in secured folders at the University of Jyväskylä. Data will be stored for 10 years in archive folders according to relevant legislation: the GDPR (2016) and Personal Data Act (523/1999).

Results

As already mentioned, the inductive content analysis yielded nine categories of educators' competence: capability to practice as an educator, and competences in subject, ethics, pedagogy, management and organization, innovation and development, cultural and linguistic diversity, collaboration, and continuous professional development (Table 1). Findings regarding each of these categories (according to the participants, unless otherwise stated) are summarized in the following sections.

Requirements regarding *educators' capability to practice* as an educator included a relevant degree from a vocational university, or institution of at least corresponding rank, in social and/or healthcare as well as proven competence in working life in an associated professional sector. All of the educators had a bachelor's degree from a university of applied sciences that met requirements for employment as an educator in social and healthcare. They also had a master's level degree from a university or university of applied sciences with 60 ECTS credits in pedagogical education, which provides educators with legal rights to practice in the Finnish educational system.

Subject competence was recognized to be at the multi-professional knowledge level, requiring integration of evidence-based knowledge and deep competence in one's area of expertise. Educators recognized the necessity for deep competence in integration of theory in professional practice. A senior female educator (no. 12) noted that: *If our students are very skilled and they have really long work experience, they may have more knowledge and skills than an educator.* Accepting responsibility for providing social and healthcare students with clear and reliable pathways for career development was seen as essential.

Ethical competence was described in terms of ethical and moral decision-making. Educators recognized that their daily work has major ethical dimensions, requiring self-reflection on their own ethical openness and discernment. They reflected on the necessity of evaluating one's own personality, prioritizing student-centered education, taking responsibility to uphold human values and handling internal conflicts with dignity. They also recognized a need to take responsibility for preparing young professionals to provide ethical care for clients. A senior female educator (no. 16) stated, *Everyone can provide care to clients, but not in the most ethical way. We need to direct students towards human-centred care. For example, in homecare, healthcare providers go into people's homes. They need to treat those people with great respect. The focus should be on treatment and the client feeling that s/he is a person. This is difficult to achieve in a hurry or with a wrong attitude.* However, the educators showed awareness of personal limitations caused by time pressure, which hindered provision of required support, especially when mentoring young social and healthcare

students in clinical practice. They particularly recognized a need for additional resources for the young students entering clinical practice in the beginning of their professional education.

'Pedagogical competence was the broadest identified category of competence. Educators recognized student-centred pedagogy as an essential part of pedagogical competence, and a need to prioritise its maintenance, together with generic abilities to make correct and critical decisions in their daily work as an educator. Integrating diversity into teaching and being open to innovation were also seen as essential in a competitive educational environment. Educators also emphasized curricular work as an important competence, i.e. planning, implementing and evaluating curricula in degree programs, in order to understand the rapidly changing taught and experienced curricula of the students. Educators discussed changes in curriculum models towards student-centred modes and support for personal career development. Versatile teaching methods and digitalization were discussed as new and essential innovations in rapidly and globally changing educational trends. Educators expressed a great necessity to use their digital competence in education on a daily basis and maintain their motivation to resolve digitalization-related challenges. However, educators also expressed fears of digitalization replacing human contact and relationships with students. As a senior female educator (no. 13) said, *Educating students is so different nowadays, for example not knowing people by name and educating them without meeting once or being able to recognize them by face*. The desirability of balanced learning with a mixture of contact-based and virtual teaching methods was also expressed.

In addition educators discussed the need for evaluation of, and reflection on, students' learning processes. The importance of continuous, formative evaluation was emphasized for promoting students' learning, and connecting theory with clinical and/or working practice for promoting their professional development. They also saw great importance in establishing collaborations with professionals in working environments. Finally, they recognized a shift in educational style from contact teaching to mentoring/guidance of students. Educators described mentoring as coaching, guiding, offering support, fostering and adaptability to students' needs for professional development. A novice female educator (no. 1) commented that: *Traditional teaching is in decline. Our work strategy is becoming more aligned with coaching. The role of the educator is perhaps becoming more and more like a mentor*. Mentoring was also seen to be an important competence for the guidance and counselling of immature students.

Management and organizational competence refers to educators' competence in handling relevant organizational issues of educational institutions. Educators emphasized the need to understand their

employers' organizational structure, strategies and goals within the context of national and international educational systems. They also recognised a connection between political understanding of the strategies and their personal leadership and self-management competence. They noted a need for the ability to adopt an appropriate leadership style in self-management, marketing and management of other people and issues. They clearly expressed an understanding that competence as an educator is not limited solely to educating students but encompasses taking an active role in the ongoing development of their institutions and, more broadly, both national and international educational systems. Educators discussed rapidly changing modes of education and their competence to adapt to the changes in a motivated and responsible manner. However, they expressed concerns about effects of increasing workloads and cuts in resources on the quality of their work. As a senior female educator (no. 6) said, *Educators' expertise has not been noticed and exploited in recent years because of high workloads and lack of support in the educational system.* At the same time educators understood the necessity of building multi-professional competence in management and being open to collaboration and extending one's competence in sharing work among multi-disciplinary collaborators.

Innovation and development competence encompassed educators' competence in research, project management, innovation and adaptability to rapid changes. Key elements mentioned included abilities to retrieve, evaluate, integrate and create evidence-based knowledge, which were regarded as important for preparing future professionals to foster evidence-based practice in social and healthcare professional sectors. Another element, discussed mainly by senior educators, was project management, particularly needs for skills to collaborate in, or even lead, projects. Educators also shared the necessity to participate in project management by creating consortia and applying for funding. Innovation competence was described as a requirement in a competitive and rapidly changing global political environment, and for maintaining national competitiveness. As a senior female educator (no. 16) said, *Regarding higher structures of education, as an educator I need to gain deeper understanding of political aspects for example at European, Union level and rapid changes coming from there. The national level is not enough.* Strenuous efforts to adapt to rapid changes were seen as essential for educators' survival.

Collaboration competence was described as the ability and motivation to organize collaboration and remain active in the process. The responsibility was seen by educator him/herself in stepping out of comfort zone and recognizing one's own professional and personal benefits in the process. They also wanted to learn about common approaches to collaboration, discussing opportunities, requesting assistance, using social skills, helping and receiving help from national and international colleagues

in educational, as well as social and healthcare sectors, companies and political decision-making bodies. A novice female educator (no. 3) remarked that, *In multi-professional teams we could create dual educational degrees to collaborate in educating students. There are needs to collaborate and build networks, because no-one can function well on his/her own.* Other aspects of collaboration mentioned included formulation of common goals, using both face-to-face and virtual channels, facing challenges when conflicts arise, and always treating other humans kindly.

Cultural and linguistic competence included cultural competence, cultural pedagogy, cultural collaboration and linguistic competence. With global border crossing and international trends in education, educators expressed a necessity for cultural competence in terms of cultural knowledge and awareness, communication and ability to interact, with sensitivity to cultural and linguistic diversity. A need to integrate all cultural competence components into cultural pedagogy and collaboration was also recognised. Educators emphasized the importance of integrating culturally and linguistically diverse students and colleagues in collaborative efforts and learning with national students and colleagues. A senior female educator (no. 14) remarked that, *Trying to translate Finnish concepts for people with various cultural backgrounds is not enough. How do you explain the treatment of mental illness in this country and the kind of healthcare we use for that purpose? An essential element is to integrate students into Finnish culture. An essential element is to integrate students into Finnish culture.*

Finally, the *continuous professional development* category was described as continuous education, active engagement in one's personal career growth, management of people and organizational issues, as well as continuous innovation, development and initiation of new collaborative efforts in education. A senior female educator (no. 11) expressed this as follows, *We educators need to have competence in reading crystal balls, the ability to predict future educational trends and awareness of changes in society.* Educators recognized that continuous professional development requires them to be competent educators and willing to develop and grow. They also recognized a need to accept responsibility in continuous education, because development does not occur automatically but is a continuous process of growth requiring active effort.

Discussion

The participants' qualifications to practice were found to be at the high end of previously reported ranges for educators in social and healthcare, in terms of professional and pedagogical education, and duration of work experience, with most being at the senior level in this respect. The data provided rich insights, reaching saturation at each category level. A previous systematic review (Mikkonen et

al., 2018) found that educators with lower degrees generally did not attach great importance to developing their own research skills and preferred to use traditional teaching approaches, such as using their own experiences from clinical practice and textbooks as teaching materials (Koivula et al., 2011). In contrast, educators who participated in this study expressed awareness of the importance of research, and using evidence-based knowledge in their daily work practices. In addition, in the subject category of competence they emphasized the importance of connecting theory and practice. Recent evidence indicates that educational inputs in professional working practice, such as clinical practice, have been reduced, with negative effects on healthcare students' learning outcomes (Heinonen et al., 2018) and insecurity in their professional career choices (Mikkonen et al., 2016). Possibly for this reason, in the interviews reported here educators from vocational colleges discussed their role in clinical practice and collaboration with clinical mentors to a greater extent than educators from universities of applied sciences. In several previous studies (Mikkonen et al., 2017; Pitkänen et al., 2018; Oikarainen et al., 2018; Warne et al., 2010) problems caused by cuts in resources for clinical practice of healthcare students have been raised and discussed, with suggestions to strengthen educational collaboration. Similarly, we suggest that stakeholders need to establish, maintain and strengthen collaborative strategies to provide effective, adaptable support systems, involving educators and students, in their working practices.

The educators' ethical competence was discussed from educators' personal perspectives, the organizations' perspectives and, not least, students' perspectives. This is consistent with findings of the systematic review by Mikkonen et al. (2018), that ethical aspects are important elements of health sciences educators' competence. For student-centred pedagogy, educators must have holistic ethical awareness, and the participants highlighted the importance of self-reflection and personal development to foster the required ethical competence. The educators were concerned about a lack of resources limiting their possibilities to work according to their own educational value base or ethos. As educators' ethical competence significantly affects students' experience of teaching (Salminen et al., 2015; Scott, 2015), this inevitably impacts students' possibilities to learn. Thus, as always in times of rapid changes, it is important to formulate and preserve ethical values.

In the pedagogical competence category, an emphasis on student-centred pedagogy was observed. Educators regarded it as essential in education of students, curriculum building and acting as a mentor rather than traditional teacher in their daily educational environment. They also expressed reluctance to completely replace human contact with digital communication. Similarly, in previous studies healthcare students have perceived needs for both mentoring and digital communication (Chiou et al., 2015; Heinonen et al., 2018). They found digital communication helpful for reaching educators

in challenging situations, but experienced challenges in presenting their worries to educators during, for example, video calls. In addition, face-to-face meetings with educators can reportedly help students to open up about their worries more deeply (Heinonen et al., 2018). Moreover, Zawacki et al. (2016) found that implementing student-centred pedagogy reduced professional hierarchy in education, and promoted both equality and respect among healthcare students. Use of 'flipped classrooms' could also be helpful for educators seeking to shift from teacher-centred and directed education towards student-centred, mentor-guided education (Chiou et al. 2015). Several participants mentioned the desirability of using this approach.

The educators in this study discussed the importance of self-management at work, but also expressed concerns about time pressure affecting the quality of their work on a daily basis and their recovery after work. This is consistent with findings by Nilsson et al. (2017) that work-life balance is related to time pressures at work, satisfaction with everyday life, self-rated health and recovery. Both Nilsson et al. (2017) and our participants emphasized the importance of employees' support in education for the educators and appropriate balances of priorities in their work.

The participants obtained support from their colleagues and building new multi-professional national and international collaborations. They took responsibility to step out of their personal comfort zones and recognize the professional and personal benefits the collaboration process provided for themselves. Multi-professional collaboration in education is also reportedly highly beneficial for the development of students' professional competence, social skills, positive learning behaviours and cognitive performance (Jun and Qin, 2018).

The educators also raised the need for international-level collaboration, due to the increasing crossing of global borders and international trends in education. They discussed a need to integrate culturally and linguistically diverse students with Finnish students. Similarly, previous studies on culturally and linguistically diverse students have strongly recommended their integration with students of native or majority backgrounds (Mikkonen et al., 2017; Pitkääjärvi et al., 2011). Participants in this study recognized the importance of cultural competence and excellent communication skills when working with culturally and linguistically diverse students. Finally, they frequently emphasized the importance of continuous professional development and maintaining active engagement in one's own professional development. The importance of continuous development of one's own competence has also been emphasized by occupational therapy educators (Heinistö et al., 2018). However, enhancement of continuous education structures and models to provide educators with more extensive guidance and support could be valuable.

Limitations

The results provide qualitative indications Finnish educators' perceptions of current and required competence in social and healthcare education. There is a need to create empirical items to quantify dimensions of the framework defining educators' competence developed in this study. This would provide possibilities to measure and compare diverse national and international groups of educators.

Conclusion and Implications for Practice

The findings have social value in identifying requirements to improve social and healthcare educators' competence by helping stakeholders to improve educational standards, construct a continuous education framework and create national and/or international curricula for teacher education degree programs to enhance the quality of education. The study has contributed new evidence-based knowledge, through rigorous qualitative methodology, that should facilitate the adjustment of educational structures to meet changing requirements and enhance educators' practices, environments and effectiveness. We also suggest that stakeholders need to establish, maintain and strengthen collaborative strategies to provide effective, adaptable support systems, involving educators and students, in their working practices.

Conflict of Interest Statement

There is no conflict of interest to declare.

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References

- Bologna Process, 2005. The European Higher Education Area - Achieving the Goals. Publication of Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qual Res Psychol* 3, 77–101.
- Chiou, S.F., Su, H.C., Liu, K.F., Hwang, H.F., 2015. Flipped classroom: A new teaching strategy for integrating Information Technology into nursing education. *Hu Li Za Zhi* 62(3), 5-10.
- Declaration of Helsinki, 2013. Ethical principles for medical research involving human subjects. *JAMA* 310(20), 2191–2194.

Elo, S., Kyngäs, H., 2008. The qualitative content analysis process. *J Adv Nurs* 62(1), 107–115.

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., Kyngäs, H., 2014. Qualitative content analysis: a focus on trustworthiness. *Sage Open* 2014, 1-10.

ENPHE (European Network of Physiotherapy in Higher Education), 2018. Mission and Vision. URL: <http://www.enphe.org/mission-and-vision/>

EQF (Descriptions defining level in the European Qualifications Framework), 2018. European Commission.

FINE (European Federation of Nurse Educators), 2011. Position Statement from FINE.

GDPR, 2016., Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

He, F.X., Turnbull, B., Kirshbaum, M.N., Phillips, B., Klainin-Yobas, P., 2018. Assessing stress, protective factors and psychological well-being among undergraduate nursing students. *Nurse Educ Today* 68, 4-12.

Heinistö, A.K., Kääriäinen, M., Ruotsalainen, H., 2018. Health care teachers' experiences of their competence and teaching occupational health care (in Finnish). *Nursing Science (in Finnish)* 30(2), 106-118.

Heinonen, A.T., Kääriäinen, M., Juntunen, J., Mikkonen, K., 2018. Benefit of technology in mentoring of nursing students by nursing teacher in clinical practice. *Nurse Education in Practice*. *Under review 8/2018*.

Koivula, M., Tarkka, M.T., Simonen, M., Katajisto, J., Salminen, L., 2011. Research utilization among nursing teachers in Finland: a national survey. *Nurse Educ. Today* 31, 24–30.

Konttila, J., Siira, H., Kyngäs, H., Lahtinen, M., Elo, S., Kääriäinen, M., Kaakinen, P., Oikarinen, A., Yamakawa, M., Fukui, S., Utsumi, M., Higami, Y., Higuchi, A., Mikkonen, K., 2018. Healthcare professionals' competence in digitalization: a systematic review. *J. Clinical Nurs.*, 1-17.

Korthagen, F. A., 2016. Relations between student teachers' basic needs fulfillment and their teaching behavior. *Teach. Teach. Educ.* 60(C), 234-244.

Kulju, K. 2016. Ethical competence. *Nursing Ethics* 23(4), 401-412.

Le Deist, F. D. 2005. What is competence? *Hum. Resour. Dev. Int.* 8(1), 27-46.

Mikkonen, K., Elo, S., Kuivila, H.M., Tuomikoski, A.M., Kääriäinen, M., 2016. Culturally and linguistically diverse healthcare students' experiences of learning in a clinical environment: a systematic review of qualitative studies. *Int. J. Nurs. Stud.* 54, 173-187.

Mikkonen, K., Elo, S., Miettunen, J., Saarikoski, M., Kääriäinen, M., 2017. Clinical learning environment and supervision of international nursing students: a cross-sectional study. *Nurs. Educ. Today* 52, 73-80.

Mikkonen, K., Ojala, T., Sjögren, T., Piirainen, A., Koskinen, C., Koskinen, M., Koivula, M., Sormunen, M., Saaranen, T., Salminen, L., Koskimäki, M., Ruotsalainen, H., Lähteenmäki, M.L., Wallin, O., Mäki-Hakola, H., Kääriäinen, M., 2018. Competence areas of health science teachers – a systematic review of quantitative studies. *Nurs. Educ. Today* 70, 77-86.

Nilsson, M., Blomqvist, K., Andersson, I., 2017. Salutogenic resources in relation to teachers' work-life balance. *Work* 56(4), 591-602.

Oikarainen, A., Mikkonen, K., Tuomikoski, A.M., Elo, S., Pitkänen, S., Ruotsalainen, H., Kääriäinen, M., 2018. Mentors' competence in mentoring culturally and linguistically diverse nursing students during clinical placement. *J. Adv. Nurs.* 74(1), 148–159.

O'Brien, B.C., Harris, I.B., Beckman, T.J., Reed, D.A., Cook, D.A., 2014. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med* 89(9), 1245-1251.

Pitkänen, S., Kääriäinen, M., Oikarainen, A., Tuomikoski, A., Elo, S., Ruotsalainen, H., Saarikoski, M., Kärämäoja, T., Mikkonen, K., 2018. Healthcare students' evaluation of the clinical learning environment and supervision – a cross-sectional study. *Nurs. Educ. Today* 62, 143-149.

Pitkäjärvi, M., Eriksson, E., Kekki, P. 2011. Teachers' experiences of English-language taught degree programs within health care sector of Finnish polytechnics. *Nurs. Educ. Today* 31(6), 553–557.

Personal Data Act 523/1999, (1999). Ministry of Justice. Finland.

Piirainen, A., Ojala, T., Mikkonen, K., Sjögren, T., Koskinen, C., Koskinen, M., Salminen, L., Koivula, M., Lähteenmäki, M.L., Saaranen, T., Sormunen, M., Koskimäki, M., Kääriäinen, M., 2018. Competence areas of health science teachers – a systematic review of qualitative studies. *Teach. High. Educ.* Under peer-review since 8/2018.

- Stang, J., 2015. Ethics in action: conducting ethical research involving human subjects: a primer. *J Acad Nutr Diet* 115(12), 2019–2022.
- Salminen, L., 2016. Ethical principles in the work of nurse educator—A cross-sectional study. *Nurs. Educ. Today* 36, 18-22.
- Scott, D. E. 2015. The nebulous, essential dimensions in effective university teaching: the ethic of care and relational acumen. *JUTLP* 12(2), 1-17.
- Tong, A., Flemming, K., McInnes, E., Oliver, S., Craig, J., 2012. Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Med Res Methodol* 12, 181.
- University of Applied Sciences Act 2014/932 (in Finnish), 2014. Ministry of Education and Culture, Finland.
- Warne, T., Johansson, J.B., Papastavrou, E., Tichelaar, E., Tomietto, M., Van den Bossche, K., Moreno, M.F.V., Saarikoski, M., 2010. An exploration of the clinical learning experience of nursing students in nine European countries. *Nurs. Educ. Today* 30, 809–815.
- World Health Organization (WHO), 2013. Guidelines 2013: Transforming and Scaling up Health Professionals' Education and Training. World Health Organization, Geneva, Switzerland.
- World Health Organization (WHO), 2016. Nurse Educator Core Competencies. WHO Document Production Services, Geneva, Switzerland.
- Zawacki, A., Knutson, M., Keohane, E., 2016. A student-centered active learning approach to teaching anemias in a medical laboratory science hospital-based program. *Clin. Lab. Sci.* 29(2), 104-105.
- Zhang, J., Cui, Q., 2018. Collaborative learning in higher nursing education: a systematic review. *J. Prof. Nurs.* 34(5), 378-388.

Table 1. Sub-categories, categories and main category of participating social and healthcare educators' perceptions of competence in education

Main category	Category	Sub-category
Multidimensional educators' competence	Educators' capability to practice as an educator	Professional degree
		Working life competence
		Higher education degree
		Pedagogical education
	Subject competence	Multi-professional knowledge
		Evidence-based knowledge
		Deep competence in one's area of expertise
		Integration of theory into professional practice
	Ethical competence	Ethics and human morals
		Ethics-based work
		Awareness of one's limitations
	Pedagogical competence	Student-centred pedagogy
		Generic skills
		Integrating diversity into teaching
		Curriculum work
		Versatile teaching methods
		Digitalization competence
		Evaluation and reflection
		Professional development of students
		Mentoring competence
	Management and organizational competence	Organizational competence
		Leadership competence
		Self-management competence
		Multi-professional competence

Innovation and development competence	Research competence
	Project management
	Innovation competence
	Adaptability to rapid changes
Collaboration competence	Organizing collaboration
	Professional benefits
	Motivation in collaboration
	Common kinds of collaboration
Cultural and linguistic competence	Cultural competence
	Cultural pedagogy
	Cultural collaboration
	Linguistic competence
Continuous professional development competence	Continuous education
	Active engagement in personal career growth
	Engagement in people management and organizational issues
	Continuous innovation and development
	Building of new collaborations in education