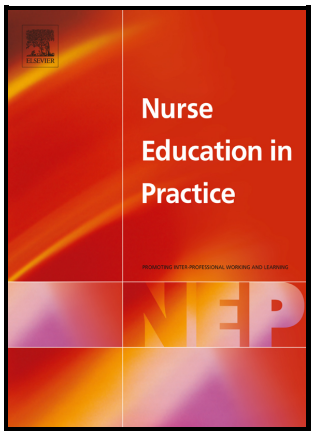

Mentors' cultural competence at mentoring culturally and linguistically diverse nursing students in clinical practice: An international cross-sectional study

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Luukkonen Anna-Leena (corresponding author), Research Unit of Health Sciences and Technology, University of Oulu, Oulu**;** email: ankku83@gmail.com
Kuivila Heli, Research Unit of Health Sciences and Technology, University of Oulu, Oulu; email: Heli-Maria.Kuivila@oulu.fi; ORCID: https://orcid.org/0000-0001-8639-7640
Kaarlela Veera, Research Unit of Health Sciences and Technology, University of Oulu, Oulu; email: Veera.Kaarlela@oulu.fi ORCID: https://orcid.org/0000-0002-8250-7491
Koskenranta Miro, Research Unit of Health Sciences and Technology, University of Oulu, Oulu, Email: Miro.Koskenranta@oulu.fi ORCID: https://orcid.org/0000-0001-7842-2703
Kaučič Boris Miha, Faculty of Health Sciences in Celje, Institute of Nursing Research, Celje, Slovenia; Email: miha.kaucic@fzvce.si ORCID: https://orcid.org/0000-0002-9708-3214
Riklikiene Olga, Faculty of Nursing, Lithuanian University of Health Sciences, Kaunas, Lithuania; Email: olga.riklikiene@lsmuni.lt ORCID: https://orcid.org/0000-0001-5143-4288
Vizcaya-Moreno Flores, Nursing Department, Faculty of Health Sciences, University of Alicante; Email: flores.vizcaya@ua.es ORCID: https://orcid.org/0000-0002-8826-9877
Pérez-Cañaveras Rosa M., Nursing Department, Faculty of Health Sciences, University of Alicante; Email: rm.perez@ua.es; ORCID: https://orcid.org/0000-0002-8541-2412
Filej Bojana, Faculty of Health Sciences in Celje, Institute of Nursing Research, Celje, Slovenia; Email: bojana.filej@gmail.com ORCID: https://orcid.org/0000-0001-7194-7259
Oikarainen Ashlee, Research Unit of Health Sciences and Technology, University of Oulu, Oulu; email: ashlee.oikarainen@oulu.fi
Kääriäinen Maria, Research Unit of Health Sciences and Technology, University of Oulu, Oulu, Medical Research Center Oulu, Oulu University Hospital and University of Oulu, Oulu, Finland; Email: maria.kaariainen@oulu.fi
Mikkonen Kristina (corresponding author), Research Unit of Health Sciences and Technology, University of Oulu, Oulu, Medical Research Center Oulu, Oulu University Hospital and University of Oulu, Oulu, Finland; Email: kristina.mikkonen@oulu.fi: Twitter: @Kristinamikkon; ORCID: https://orcid.org/0000-0002-4355-3428

Abstract

Aims: This study aimed to identify mentors' cultural competence profiles at mentoring culturally and linguistically diverse nursing students in clinical practice and explore associating factors.

Background: Globalization has had a significant impact on healthcare, increasing the diversity of healthcare workforces and the number of culturally and linguistically diverse nursing students in clinical practice. The cultural competence of mentors is important to secure students' safe and successful learning. The mentor role in clinical practice contributes toward enabling and ensuring students' high-quality and goal-oriented development of competence.

Design: This study implemented a cross-sectional design with a final sample of 270 clinical practice mentors from Finland, Lithuania, Spain and Slovenia.

Methods: The data were collected using an online survey including the Mentors' Cultural Competence Instrument, Mentors' Competence Instrument and background questions during 2020-2021. The data were analyzed using a K-mean cluster algorithm to identify mentors' competency profiles.

Results: Three significantly differing mentor competency profiles (Profile A 42%, Profile B 41%, Profile C 17%) were identified in this study. The cultural competence of the mentors in clinical practice varied between intermediate and high levels. Mentors rated their cultural competence as best in the area of cultural sensitivity and awareness, whereas the lowest scored area was cultural interaction and safety.

Conclusions: This study showed that the cultural competence of mentors in clinical practice varied and was influenced by mentors' work experience, age, job title and frequency of mentoring. This study provides new knowledge that could help to develop cultural competence operating models and education to enhance the cultural competence of healthcare professionals.

Keywords:

Cultural competence

Mentoring

Cultural and linguistic diversity,

Nursing student

Clinical practice

Cross-sectional study

1. Introduction

Globalization has had an impact on healthcare by increasing the diversity of healthcare workforces (Bhopal, 2014). Growing multiculturalism poses new opportunities for diversity (Bhopal, 2014) but also challenges for education and integration into working life (Kamau et al., 2022). The number of culturally and linguistically diverse (CALD) nursing students entering clinical practice has increased considerably (Newton et al., 2016). Mentors play an important role in clinical practice as students need a role model and support to complete quality practice successfully (Mikkonen et al., 2021a). The versatile competence of mentors is crucial in the development of healthcare students' competence and professional skills, as well as application of theoretical knowledge in practice (Ratliff, 2021; Tuomikoski et al., 2020a). Mentoring CALD students is often viewed negatively as a challenge rather than a positive experience (Hari et al., 2021; Oikarainen et al., 2018). The mentoring role needs to be emphasized and supported by preparing mentors with education and making nursing leaders more aware of this necessity (Mikkonen et al., 2020a). CALD nursing student mentor competence has been explored in national level studies. but less attention has been given to international data comparisons (Pramila-Savukoski et al., 2020, Tuomikoski et al., 2020a).

2. Background

According to the European Union directive (2013/55/EU), clinical practice needs to be included in university degrees of nursing, with at least half of the duration of the studies conducted under the supervision of qualified nursing staff. For students, clinical practice offers the opportunity to apply theoretical knowledge to practical work, during which their experiences and reflection increase learning, improve their self-confidence (Ford et al., 2016) and allow them to develop professional clinical competence (Pitkänen et al., 2018). The mentor's task is to enable and ensure students' high-quality and safe practice and the purposeful development of competence. Mentoring in clinical practice focuses on supporting student development and learning, as well as strengthening professional skills and professional identity (Kaihlanen et al., 2020). Students' clinical competence depends on the learning experiences gained in clinical practice and role models (Bandini et al., 2017). Mentors are exactly these role models. In a previous EU study, an evidence-based model of mentor competence at mentoring nursing students in clinical practice was developed, which defined mentor competence according to three main areas; 1) mentors' individual competence and interaction in the workplace and resources, 2) mentors' cultural competence and 3) mentors' competence in supporting the learning process through evaluation and constructive feedback (Mikkonen et al., 2020b; Oikarainen et al., 2021). A competent mentor manages their own task and understands their role as a student mentor (Karjalainen et al., 2015) and can create an interactive relationship with the student while developing they own characteristics (Tuomikoski et al., 2020a). Depending on the country, different terms are used for clinical practice mentoring, for example, preceptor or clinical instructor. In this study, term "mentor" refers to a healthcare professional who deepens and strengthens the student's previous learning and supports the nursing student during clinical practice.

Cultural competence has been described using several theoretical models and frameworks, of which Campinha-Bacote's (2010) model of cultural competence is one of the most widely used (Shen,

2015). According to this model, cultural competence in healthcare consists of cultural awareness, cultural knowledge, cultural skill, cultural encounter and cultural desire (Campinha-Bacote, 2010). Cultural competence in healthcare is a complex know-how that develops through the nursing professional's own critical reflection and action (Garneau & Pepin, 2015). A healthcare worker's openness toward becoming culturally competent is commonly affected by having experience in providing care to culturally diverse patients, the ability to communicate (Lin et al., 2021), having completed cultural competence education (Oikarainen et al., 2019) and the influence of leadership at work (Dauvrin & Lorant, 2015). Nurses' cultural competence is seen to increase patient satisfaction and confidence in care (Tang et al., 2019) and have a long-term impact on healthcare quality and job satisfaction (Henderson et al., 2018).

Experiences of different cultures affect the cultural competence and cultural knowledge of mentors (Hagqvist et al., 2020). Mentors who have experience in supervising CALD students rate their mentoring skills better than those who have no previous experience of mentoring such students (Oikarainen et al., 2018). The learning and guidance of CALD students in clinical practice are influenced by the relationship between mentor and student (Newton et al., 2016) as well as communication and cultural knowledge (Hari et al., 2021). In addition, empathy for CALD students is seen as a motivating factor for mentors to develop communication with a multicultural student (Hagqvist et al., 2020).

There are several special needs associated with mentoring CALD students in clinical practice. According to previous studies, mentors experience the most shortcomings in their linguistic competence, hampering communication and interaction between the mentor and CALD student (Hari et al., 2021; Oikarainen et al., 2018). In addition, differences between cultures and learning styles (Hari et al., 2021; Newton et al., 2016), feedback and reflection, short clinical practice duration (Hari et al., 2021) and additional time required for CALD students' mentoring (Newton et al., 2016) are perceived as challenges for mentors. Also, when looking at CALD students'

experiences, students often find integration into the learning environment stressful at first (Mikkonen et al., 2016). Students face the most challenges in language skills (Korhonen et al., 2019; Mikkonen et al., 2016). During clinical practice, students have also encountered social isolation and prejudice due to cultural differences (Korhonen et al., 2019), as well as discrimination (Korhonen et al., 2019) and the burden of their diversity (Mikkonen et al., 2016). In the learning environment of clinical practice, they may experience a lack of encouragement and communication challenges with staff (Pitkäjärvi et al., 2012). All of the above can increase tensions between cultures and thus cause additional challenges between the student, the patient and the mentor.

In the future, healthcare is expected to become increasingly culturally diverse (Newton et al., 2016). Thus, mentors' cultural competence is important not only for mentoring students but also taking care of culturally diverse patients. Mentors' behavior can directly affect the professional growth of students. High-quality mentoring can ensure that they remain in the healthcare sector in the future (Jeffers & Mariani, 2017; Kaihlanen et al., 2020). The role of the mentor for CALD students is challenging and studies have highlighted the need to develop mentors' cultural competence (Hagqvist et al., 2020; Mikkonen et al., 2016; Newton et al., 2016; Oikarainen et al., 2018). Previous studies have examined mentoring of CALD students' clinical practice from different perspectives (e.g., Hari et al., 2021; Hagqvist et al., 2020; Newton et al., 2016), but less research has been done on the cultural competence of mentors and associated factors (Lin et al., 2021; Oikarainen et al., 2018). The aims of this study were to evaluate mentors' cultural competence in mentoring CALD nursing students in clinical practice and explore associating factors. Such research provides new valuable knowledge for developing cultural competence operating models and education to enhance the multicultural competence of healthcare professionals.

3. Methodology

3.1. Research design

This study adopted a cross-sectional survey design and was used to answer the following research questions: 1) How do mentors' self-assessed cultural competence levels to mentor CALD nursing students in clinical practice cluster into profiles? 2) What factors associate with the cultural competence profiles of mentors mentoring CALD nursing students in clinical practice? The study conducted during 2020-2021 involved mentors from Finland, Lithuania, Spain and Slovenia.

3.2. Participants

Participants from two central hospitals in Finland, two central hospitals in Lithuania, one central hospital in Spain and two central hospitals in Slovenia were invited to undertake mentoring education preceded by a survey during 2020-2021. The power analysis has been conducted prior to the study, counting Cohen's d effect medium size (two-tailed test, 1-beta error probability, 5% significance level), estimating 250 participants to reach the medium effect. In total, 276 mentors responded to the survey. The inclusion criteria for participating in the study were working as a registered nurse or healthcare worker and voluntary response to the survey. The previous mentoring experience was optional.

3.3 Instrument

Data were collected using the Mentors' Cultural Competence Instrument (MCCI) (Oikarainen et al., 2022) and Mentors' Competence Instrument (MCI) (Mikkonen et al., 2020b; Tuomikoski et al., 2018a) with background information. Both instruments have been previously content and construct validated representing the following factor models. MCCI contains three sum-variables and 21 items: 1) interaction and safety (8 items), 2) cultural sensitivity and awareness (9 items) and 3) cultural skills (4 items). MCI contains seven sum-variables and 43 items: 1) workplace mentoring practice (6 items), 2) mentor characteristics (7 items), 3) mentor motivation (5 items), 4) goal

orientation in mentoring (6 items), 5) reflection during mentoring (6 items), 6) student-centered evaluation (9 items) and 7) constructive feedback (4 items). Both instruments measure competence levels with 1-4 Likert scale, ranging from 1 to 4 (1 = fully disagree, 4 = fully agree). Cronbach's alpha varied for MCCI from 0.76 to 0.91 and for MCI from 0.72 to 0.90.

3.4 Data collection

Participants were recruited through a contact person by email provided by each healthcare organization. The invitation was sent to participants only once. Data were collected via a Webropol online survey and a paper version in 2020–2021. The study was carried out in connection with EU funded projects Quality Mentorship for Developing Competent Nursing Students (QualMent) and Cultural Competence in Social and Healthcare Work Environments (CultureExpert).

3.5 Data analysis

The data were analyzed using IBM SPSS 27.0 Statistics. The background factors were analyzed by computing means and percentages. Correlations between the three MCCI and seven MCI sum-variables formed from the data were examined using Spearman's rank correlation coefficients. Three mentors' competence profiles (cluster groups), named Profile A, Profile B and Profile C, were clustered from the average sum-variables by using the algorithm method (K-mean cluster). Several versions of clustering were tested to identify the optimal cluster configuration. The criterion for the cluster solutions was reasonable sample presentation, meaning that each competence profile had to contain at least 5% of the total sample (Rauf et al., 2012). The background factors of the competence profiles were described by means and percentages and their relationships to the mentors' competence were analyzed by using cross-tabulation, Pearsons's chi-square test, Fisher's exact test for classified variables and one-way ANOVA for continuous variables. Differences between competence profiles were analyzed using Kruskal-Wallis and Mann-Whitney U tests. Statistically significant *p*-values of the competence profiles were checked by Bonferroni correction.

Results were reported as means and *p*-values with a limit of statistical significance of $p<0.05$. (Munro, 2005). The competence levels of mentors were interpreted based on the average of their Likert scale scores: low competence (<2.49), intermediate competence (2.5–3.49) and high competence (≥3.50).

3.6 Ethical considerations

All healthcare organizations in each participating country granted permission to conduct the study in accordance with their own research authorization protocol. The study was carried out in accordance with good scientific practices of the Research Ethics Advisory Board (TENK, 2012). Permission of the Ethics Committee was not required as no sensitive information was collected from participants. However, in some countries (e.g., Lithuania), consent of the institutional ethics board was issued to conduct the study. The information letter of the survey described the purpose and objectives of the study and provided information on its voluntary nature and anonymity. During the research, the data and material were processed and stored securely in accordance with EU data protection regulations (GDPR 95/46EC) and data protection act (1050/2018), according to which the data were also stored and managed after the investigation.

4. Results

4.1 Sample description

In total, 270 mentors of clinical practice participated in this study. Six of the responses were rejected because less than half of the questions were answered. Participants were distributed in this study as follows: 48% (*n*=130) from Finland, 21% (*n*=57) from Slovenia, 16% (*n*=43) from Spain and 15% (*n*=40) from Lithuania. Most respondents were women (93%) and the average age of respondents was 39 years (SD 9.27). More than half of the respondents had a bachelor's degree from a university of applied science (53%) or master's degree from a university (28%). 73% of the respondents worked as nurses, public health nurses, paramedics or midwives, 12% were nursing

managers and 5% were other health professionals (e.g., radiologists, therapists). Respondents' work experience in healthcare varied from less than a year to 49 years. 40% of the respondents had mentored students during the last week and 37% during the last month and a half. Only a small proportion of respondents had experience mentoring exchange students (22%), students in English degree programs (5%) and immigrant students (16%). 56% of respondents had never mentored CALD students or mentored less than annually (28%). More than half (65%) of respondents had never participated in mentor education.

4.2 Cultural competence of mentors

The competence of mentors ranged on average between intermediate and high levels. Comparing the three competence profiles, statistically significant differences in competence levels were identified in each of the areas of cultural competence and mentoring competence (Table 1). The most competent mentors were in Profile A, containing 42% of participants. Profile B contained 41% of the respondents and the group with the lowest level of competence, Profile C, contained 17%. Mentors in Profile A rated their cultural competence at a high level (mean > 3.50) in all areas of cultural competence (Table 2). The strongest competence was in the area *cultural sensitivity and awareness* (mean 3.87), where the highest competence was assessed as acceptance of cultural diversity while mentoring students (mean 3.96) and the weakest was not to stereotype students from different cultures (mean 3.73). In Profile A, *cultural skills* were assessed at a high level of competence (mean = 3.76). In this area, student support for learning in the mentor's native language (mean = 3.88) was rated as the strongest, whereas finding information about different cultures (mean 3.61) was the weakest. The weakest area of cultural competence was *cultural interaction and safety* (mean 3.67), where the highest competence was the ability to ensure a nursing environment culturally safe for students and patients (mean 3.85) and the lowest was the ability to overcome communication barriers where the student lacks language skills (mean 3.53).

In Profile B, the strongest competencies of the mentors were in *cultural sensitivity and awareness* (mean = 3.62). The highest competence was assessed by the mentors as awareness of one's own cultural background (mean = 3.83) and the lowest was the ability to identify cultural practices that differ from one's own culture (mean = 3.37). C*ultural skills* were assessed as intermediate competence (mean 2.98), of which student support for learning in the mentor's native language (mean 3.24) was assessed as the highest and lowest was effort to continuously develop multicultural competence (mean 2.82). Like Profile A, the weakest competence area in Profile B was *cultural interaction and safety* (mean 2.82), where the highest competence was the ability to interact with students from different cultures (mean 3.21) and the lowest was the ability to guide multicultural students according to their learning needs (mean 2.60).

The strongest competencies in Profile C were assessed as the area of *cultural sensitivity and awareness* (mean 3.22), where the highest competence was assessed as the ability to understand that adapting to a new culture takes time (mean 3.46) and the lowest was identifying cultural practices that differ from one's own (mean 3.00). *Cultural skills* were assessed to be at a low level of competence (mean 2.38), where the highest competence was positive attitude toward interaction situations where students lack language skills (mean 2.62) and the lowest was attempt to continuously develop their own multicultural competence (mean 2.11). Again, in this profile, the weakest competence area was related to *cultural interaction and safety* (mean 2.27), where the highest competence was assessed as the ability to interact with students from different cultures (mean 2.71) and the lowest was the ability to solve possible cultural misunderstandings (mean 1.93).

4.3 Mentoring competence of mentors

In all competence profiles, mentoring competence was assessed at the level of intermediate (mean 2.5–3.49) or high (mean ≥3.50) competence. The highest competence in Profile A was assessed for

reflection during mentoring (mean 3.95). Profile A mentors rated their mentoring competence as generally high; only workplace mentoring practices (mean 3.49) were assessed at the intermediate level. Reflection during mentoring was also assessed as the strongest competence area in both Profile B (mean 3.81) and Profile C (mean 3.39). Workplace mentoring practices were assessed as the lowest competence in Profile B (mean 3.18) and Profile C (mean 2.52).

4.4 Cultural competence association with mentoring competence

A statistically significant correlation was observed in all sum-variables of mentors' cultural competences and mentoring competences (Table 3). Specifically, it was found that there was an association between mentors' cultural sensitivity and awareness with constructive feedback (r=0.50, p<0.001) and student-centered evaluation (r=0.50, p<0.001). In addition, mentors' cultural skills correlated strongly with the mentors' goal-orientation (r=0.56, p<0.001) and student-centered evaluation (r=0.64, p<0.001). A correlation was found between mentors' cultural interaction and safety competence and constructive feedback (r=0.51, p<0.001), mentors' goal-orientation (r=0.54, p<0.001) and student-centered evaluation (r=0.64, p<0.001).

4.5 Background factors related to mentors' cultural competence

The mentors' mean age was higher in Profile A (41 years, p=0.015) than in Profile B (38 years) and Profile C (37 years) (Table 1). Profile A mentors also had more work experience in healthcare (17 years, p<0.001) than Profile B (12 years) and Profile C (10 years) mentors; a statistically significant difference was observed between Profiles A and B with Bonferroni correction (p=0.001) and between Profiles A and C (p<0.001). The respondents in Profile A had the highest level of education (p=0.017): they had completed a college/university of applied sciences degree (43%), masters' degrees (36%) or vocational degree (4%). Most mentors in Profiles A (71%), B (77%) and C (70%) worked under the title of nurse, public health nurse, paramedic or midwife. Profile A comprised 19% nursing managers, while Profile C contained only 4% nursing managers (p=0.004).

Profile A respondents were 38% Slovenian, 29% Spanish, 25% Finnish and 8% Lithuanian. Most Profile B (61%) and C (72%) mentors were from Finland. Profile C contained no Spanish or Slovenian mentors. More than half of the mentors in Profiles A (56%), B (58%) and C (52%) had never supervised CALD students. Profile A mentors had most previous education in mentoring when comparing to Profile B and C mentors (<0.001).

6. Discussion

The purpose of this study was to evaluate mentors' cultural competence at mentoring CALD nursing students in clinical practice and explore factors associated to it. The study identified three different mentor competency profiles (A, B and C). The largest difference was in the level of competency between Profile A and Profile C. The cultural competence of the mentors in clinical practice was mainly intermediate and high. In previous studies, the level of cultural competence of nurses was found to be low (Chen & Huang, 2018), whereas that of mentors with previous experience in mentoring multicultural students was found to be high (Oikarainen et al., 2018). Comparison of the three profiles describing different levels of competence showed statistically significant differences in each area of cultural competence. Profile A student mentors, who represented the strongest cultural competence, rated their cultural competence as high in all areas of cultural competence, whereas Profile B and C mentors rated their competence levels as between low and strong competence.

The best cultural competence was in cultural sensitivity and awareness, where the highest competence was assessed by mentors as the ability to accept cultural diversity when mentoring students. In clinical practice, nurses' attitudes affect the learning outcomes and experiences of multicultural students and students often experience stress due to their differences (Mikkonen et al., 2016), as well as prejudice and discrimination (Korhonen et al., 2019). Mentors' ability to empathize is likely to help them understand cultural difference and, according to Hagqvist et al.

(2020), also motivates the development of intercultural communication in mentoring. The biggest difference between the competence profiles was between Profiles A and C regarding the identification of cultural practices that differ from the own culture of mentors. Challenges arising from the cultural differences between student tutors and teaching styles have been highlighted previously (Hari et al., 2021; Newton et al., 2016). In this study, the competence of mentors was high when assessing their motivation to learn about the cultural background and practices of CALD students and understanding that adapting to a new culture takes time.

The lowest cultural competence was in cultural interaction and safety, which also showed the largest difference between the competence profiles. This area of expertise emphasizes mentors' interaction skills as well as the individual learning needs of CALD students. The largest difference between the competence profiles was found in the consideration and assessment of the learning needs of students from different cultures and in the identification of possible additional support. The learning needs of students from different cultures may vary significantly from those of students in their own country, which is why it is important to be aware of the isolation features associated with mentoring CALD students in clinical practice. According to Mikkonen et al. (2016), both students and mentors need support in the learning process. Mentors consider their readiness to resolve cultural misunderstandings in mentoring to be particularly weak. In principle, cultural awareness may be deficient in mentors, in addition to which linguistic challenges are likely to be emphasized here, as has often been pointed out in previous studies of CALD student mentoring (Hari et al., 2021; Korhonen et al., 2019; Oikarainen et al., 2018). A positive learning environment created by staff can help to minimize language barriers of CALD students in clinical practice (Pitkäjärvi et al., 2012).

In the area of cultural skills, the efforts of Profile C mentors to continuously develop their cultural competencies were clearly weaker than those of Profile A mentors. The continuous development of cultural competencies of health professionals has been found to be very important (Lin et al., 2021).

The results of this study may have been influenced by the fact that most mentors who had completed a master's degree belonged to Profile A, which may have increased their motivation to develop their own cultural competence. A statistically significant correlation was found between the mentors' cultural competence and mentoring competence in general. The results indicate that the student mentors' competence in cultural sensitivity and awareness and the formation of cultural interaction and safety may depend on mentors' competence in providing constructive feedback and implementing student-oriented assessment. In this study, mentors evaluated reflection during mentoring as the best realized area of mentoring competence, which agrees with previous studies (Kukkohovi et al., 2020; Mikkonen et al., 2020b; Rouvinen et al., 2021; Tuomikoski et al., 2018b). The area of expertise in reflective mentoring emphasizes the creation of an interactive and safe atmosphere, an understanding of students' experiences and empathy. Such guidance skills are also closely reflected in student-centered assessment and feedback.

Work experience in healthcare and the average age of mentors were found to be significant factors contributing to the cultural competence of mentors. Mentors of Profile A, who represented the strongest competence, had on average ten years more work experience than mentors with the lowest competence profile. These results are in line with those of Lin et al. (2021), who found that cultural competence and awareness of experienced mentors was significantly higher than that of recent graduate nurses. Mentors in the most culturally competent profile were, on average, a few years older than the mentors in other profiles. It has also been shown that older age contributes to better mentoring skills (Mikkonen et al., 2021b). The support of an older and more experienced nurse helps younger nurses move from a student role to an employee role (Kaihlanen et al., 2020).

The cultural competence of mentors was also found to be affected by their job title. Although most mentors were nurses, there were differences in job titles between the competency profiles. The highest number of nursing managers was in Profile A and the lowest was in Profile C. In contrast, Profile C had the highest number of practical nurses. According to Lin et al. (2021), a higher job

title of mentors is associated with higher cultural competence; the development of cultural competence depends not only on extensive clinical experience but also on advancement in the workplace. In addition, in our study, the frequency of mentoring was found to have a significant effect on the cultural competence of mentors. The lowest competence Profile C included the highest number of nurses who had never mentored students or had more than a year since the last mentoring. In contrast, Profile A had the most mentors who had mentored students during the past week.

The study found that mentors in some countries rated their competence as clearly lower than in other countries. In the comparison between the countries, Finnish mentors ranked as third, i.e., the weakest competence profile. In contrast, Slovenian and Spanish mentors ranked highest in the strongest competence Profile A and were not present in Profile C. Similar results were found in other studies of mentors' competence between European countries (Kukkohovi et al., 2020; Mikkonen et al., 2021a), i.e., Lithuanians considered their skills to be the weakest. Cultural differences between countries may also be reflected in research results. The competence and training of Finnish healthcare professionals is at a high standard and valued at the international level. However, Finns may be modest in assessing their own competence. In Slovenia, mentors are usually supervisors, such as nurse managers (Dobrowolska et al., 2016), which might explain their self-assessed high level of competence. In Lithuania, traditionally a monocultural post-Soviet society, modern nursing only started to be developed 30 years ago when new world standard models of nursing education were introduced. Moreover, in the recent reality of globalization and expanding migration, the transcultural links and cultural competence of nurses and nursing mentors may undergo major transformations.

Based on the research results, there is a clear need to narrow the gaps between the competence profiles of mentors in the areas of cultural competence. The solution to this may be to improve education used to develop the mentors' competence (Tuomikoski et al., 2020b) and cultural

competencies (Oikarainen et al., 2019) and thus improve the competence of Profile B and C mentors closer to the competence level of Profile A mentors, particularly in the areas of cultural sensitivity and awareness, cultural skills and interaction and safety.

6.1. Study limitations and strengths

Data were collected from mentors from four different countries through project invitation aimed at attracting mentors interested in mentor education. For this reason, the response rate could not be calculated. The effect size of the outcomes mainly varied between moderate and very large according to Cohen's *d* value (Cohen, 1992). International sampling increased the generalizability of the results, which is especially important in cultural competence research. A limiting factor is the self-assessed competence of the participants. Statistically significant differences were found in the comparison of competence profiles, validating the choice of analytical methods. The relationships between background factors and competence profiles were also statistically significant, which increases the reliability and generalizability of the results. (DeVellis, 2011) The validity of the study was enhanced by the STROBE Statement checklist used in reporting (von Elm et al., 2007).

7. Conclusions

This study showed that the cultural competence of mentors in clinical practice varied and was influenced by mentors' work experience, age, job title and frequency of mentoring. Mentors rated their cultural competencies as the best in cultural sensitivity and awareness and the lowest in cultural interaction and safety. Mentors of CALD students also require understanding, empathy and an ability to support students in adapting to a foreign culture and healthcare practice. Older and more experienced mentors should support and encourage younger carers to strengthen their cultural competences in mentoring. Cultural competence is formed through continuous learning in interaction with different people – this learning is a process that spans the entire career of a healthcare professional. Owing to increasing globalization, the cultural competence of mentors must

be invested in from the start of a nurse's career. Education of cultural competence must be developed and made continuous. In addition to strengthening cultural competence, education can help narrow differences in the cultural competence of mentors, improving the quality of mentoring. Clinical practice is a significant part of the education and professional growth of a future caregiver. A student's culturally diverse background should not limit their opportunity for quality internships. Thus, mentors play a special role in the success of clinical practice for multicultural nursing students. This study provides knowledge and advice that can guide the organization of healthcare cultural competence education in the future.

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8. Conflict of interest

No conflict of interest has been declared by the authors.

- **Data availability statement**

All data generated during this study are included in this published article

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Table 1. Mentors' background factors and competence profiles *(n=270)*
Mentors' Cultural Competence Instrument (MCCI) and Mentors' Competence Instrument (MCI) means, percentages and p-values of the sum variables

Background factors and profiles	**Profile A** *n*=114 42%	**Profile B** *n*=110 41%	**Profile C** *n*=46 17%	***p*-value**
Country, %				
Finland	25	61	72	<0.001[d]
Lithuania	8	16	28	
Spain	29	10	0	
Slovenia	38	13	0	
Age, years				
Mean (SD)[a]	41 (9)	38 (9)	37 (9)	0.015 [e]
Minimum (Min.)	20	22	24	Profiles 1, 3 – *p* 0,039
Maximum (Max.)	62	61	58	with Bonferroni correction
Education, %				
Vocational degree	4	5	13	0.017[c]
Bachelor's degree from university of applied science	43	62	54	
Master's degree from university	36	21	26	
Other	17	12	7	
Job title, %				
Practical nurse	3	5	9	0.004[c]
Registered nurse/public health nurse/paramedic/midwife	71	77	70	
Other healthcare professional (therapist/radiographer)	1	7	8	
Healthcare manager	19	8	4	
Other	6	3	9	
Work experience in healthcare, years				
Mean (SD)	17 (10)	12 (9)	10 (8)	<0.001[e]
Min.	1	1	1	Profiles 1.2 – *p* 0.001
Max.	49	35	32	Profiles 1.3 – p <0.001 with Bonferroni correction
Mentored last time, %				
Last week	50	31	35	0.007[c]
Last month – 6 months	26	49	35	
Last year or over a year ago	23	18	26	
Never mentored	1	2	4	
Mentored international students, %				
More than yearly	4	0	2	0.585[c]
Yearly	14	13	15	
Less than yearly	26	29	31	
Never mentored	56	58	52	

Education in mentoring, %				<0.001[d]
Yes, 1 day education	35	15	11	
Yes, 2 days education	7	3	2	
Yes, more than 2 days education	10	6	2	
No education	47	76	85	
Mentors' Cultural Competence Instrument (MCCI): sum variables, mean (SD)				
Cultural sensitivity and awareness	3.87 (0.24)	3.62 (0.29)	3.22 (0.34)	<0.001[b]
Cultural skills	3.76 (0.26)	2.98 (0.46)	2.38 (0.50)	<0.001[b]
Cultural interaction and safety	3.67 (0.34)	2.85 (0.42)	2.27 (0.43)	<0.001[b]
Mentors' Competence Instrument (MCI): sum variables, mean (SD)				
Reflection during mentoring	3.95 (0.11)	3.81 (0.24)	3.39 (0.41)	<0.001[b]
Mentors' motivation	3.88 (0.26)	3.67 (0.35)	3.39 (0.60)	<0.001[b]
Mentors' characteristics	3.88 (0.17)	3.67 (0.30)	3.30 (0.40)	<0.001[b]
Constructive feedback	3.88 (0.26)	3.55 (0.46)	2.99 (0.54)	<0.001[b]
Goal-orientated mentoring	3.85 (0.24)	3.44 (0.37)	2.91 (0.51)	<0.001[b]
Student-centered evaluation	3.80 (0.27)	3.30 (0.41)	2.63 (0.44)	<0.001[b]
Mentoring practices in the workplace	3.49 (0.60)	3.18 (0.57)	2.52 (0.61)	<0.001[b]

Levels of competence: low (≤2.49), intermediate (2.50–3.49), high (≥3.50)
[a] Mean, SD=standard deviation
[b] Kruskal-Wallis test
[c] Fisher's exact test
[d] χ2-test
e One-way ANOVA

Table 2. Mentors' cultural competence (n=270)
Means, standard deviations (SD) and p-values of the sum variables by competence profiles

	Profile A (*n*=114) Mean/SD	**Profile B (*n*=110) Mean/SD**	**Profile C (*n*=46) Mean/SD**	***p*-value**
Cultural sensitivity and awareness (α=0,76)	**3.87 (0.24)**	**3.62 (0.29)**	**3.22 (0.34)**	**<0.001[a]**
I accept cultural diversity while mentoring students.	3.96 (0.19)	3.72 (0.54)	3.28 (0.62)	
I recognize that culturally diverse students have unique backgrounds.	3.85 (0.54)	3.64 (0.59)	3.20 (0.58)	
I do not stereotype culturally diverse students.	3.73 (0.76)	3.64 (0.63)	3.17 (0.70)	
I am aware of my own cultural background.	3.88 (0.54)	3.83 (0.47)	3.50 (0.62)	
I want to familiarize myself with the cultural background and practices of students.	3.89 (0.31)	3.59 (0.57)	3.17 (0.83)	
I understand that adaptation to a new culture can take time.	3.93 (0.29)	3.70 (0.55)	3.46 (0.55)	
I am able to identify cultural practices that differ from my own culture.	3.82 (0,45)	3.37 (0.69)	3.00 (0.60)	
I intervene when there is discrimination against culturally diverse students.	3.90 (0.38)	3.63 (0.56)	3.07 (0.80)	
I help culturally diverse students feel welcomed into the clinical placement.	3.85 (0.54)	3.51 (0.70)	3.13 (0.81)	
Cultural skills (α=0,76)	**3.76 (0.26)**	**2.98 (0.46)**	**2.38 (0.50)**	**<0.001[a]**
I seek knowledge on different cultures.	3.61 (0.57)	2.84 (0.78)	2.37 (0.83)	
I support students in learning the Finnish or Swedish language.	3.88 (0.43)	3.24 (0.69)	2.47 (0.87)	
I am comfortable communicating with students who have limited Finnish or Swedish proficiency.	3.81 (0.47)	3.02 (0.76)	2.62 (0.81)	
I continuously strive to develop my cultural competence.	3.73 (0.52)	2.82 (0.80)	2.11 (0.72)	
Cultural interaction and safety (α=0,91)	**3.67 (0.34)**	**2.85 (0.42)**	**2.27 (0.43)**	**<0.001[a]**
I am able to guide culturally diverse students according to their learning needs.	3.61 (0.57)	2.60 (0.71)	2.00 (0.62)	
I know how to recognize when culturally diverse students need additional support.	3.62 (0.59)	2.78 (0.63)	2.07 (0.70)	
I am able to assess the learning needs of culturally diverse students.	3.57 (0,62)	2.61 (0.74)	2.00 (0.68)	
I have the skills to solve possible cultural misunderstandings that occur during mentoring.	3.68 (0.62)	2.69 (0.79)	1.93 (0.70)	

I have the ability to ensure that nursing environments are culturally safe for both students and patients.	3.85 (0.36)	3.15 (0.73)	2.40 (0.72)
I have the skills to overcome communication barriers in situations where the student lacks sufficient language skills.	3.53 (0.81)	2.69 (0.78)	2.29 (0.79)
I am able to interact with students from different cultures.	3.78 (0.48)	3.21 (0.66)	2.71 (0.55)
I know how to build a good mentoring relationship with students from different cultures.	3.69 (0.65)	3.01 (0.67)	2.58 (0.62)

[a] Kruskal–Wallis test, statistical significance $p < .05$ (marked in bold)
Levels of competence: low (≤2.49), intermediate (2.50–3.49), high (≥3.50)

Table 3. Correlation of cultural competence with mentors' competence by Spearman's rank correlation coefficients (n=270)

	Mean[a]	**SD[a]**	**1. Cultural sensitivity and awareness 3.66 (0.36) [a]**	**2. Cultural skills 3.21 (0.65) [a]**	**3. Cultural interaction and safety 3.09 (0.66) [a]**
Reflection during mentoring	3.80	0.31	0.44[b]	0.43[b]	0.46[b]
Mentors' motivation	3.71	0.41	0.27[b]	0.34[b]	0.35[b]
Mentors' characteristics	3.70	0.34	0.37[b]	0.40[b]	0.46[b]
Constructive feedback	3.59	0.51	0.50[b]	0.45[b]	0.51[b]
Goal-orientated mentoring	3.52	0.48	0.48[b]	0.56[b]	0.54[b]
Student-centered evaluation	3.40	0.55	0.50[b]	0.64[b]	0.64[b]
Mentoring practices in the workplace	3.19	0.68	0.39[b]	0.38[b]	0.42[b]

[a] Mean, SD=standard deviation
[b] Statistically significant correlation, $p < 0.001$