OULU 2024
D 1785

ACTA UNIVERSITATIS OULUENSIS

Suleiman Kamau

ORGANISATIONAL INTEGRATION OF CULTURALLY AND LINGUISTICALLY DIVERSE NURSES

A HYPOTHETICAL MODEL

UNIVERSITY OF OULU GRADUATE SCHOOL;
UNIVERSITY OF OULU,
FACULTY OF MEDICINE

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D Medica 1785

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A hypothetical model

Academic dissertation to be presented with the assent of the Doctoral Programme Committee of Health and Biosciences of the University of Oulu for public defence in the Leena Palotie auditorium (101A) of the Faculty of Medicine (Aapistie 5 A), on 10 May 2024, at 12 noon

UNIVERSITY OF OULU, OULU 2024

Acta Univ. Oul. D 1785, 2024

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ISBN 978-952-62-4080-0 (Paperback)
ISBN 978-952-62-4081-7 (PDF)

ISSN 0355-3221 (Printed)
ISSN 1796-2234 (Online)

Cover Design
Raimo Ahonen

PUNAMUSTA
TAMPERE 2024

Kamau, Suleiman, Organisational integration of culturally and linguistically diverse nurses. A hypothetical model

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Acta Univ. Oul. D 1785, 2024
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Abstract

This study was aimed at developing a hypothetical model for identifying concepts to explain the integration of culturally and linguistically diverse (CALD) nurses into healthcare organisations. The study consisted of three phases.

In Phase I, an umbrella review was conducted to establish evidence from a wide range of existing systematic reviews related to integration strategies and models that support transition and adaptation of culturally and linguistically diverse nurses into healthcare organisations. The JBI guidelines were used to conduct the review. A total of 27 scientific articles were selected. Based on inductive content analysis three main categories were developed namely, intra-organisational strategies and models, sociocultural integration strategies and models, professional development strategies and models.

In Phase II, three qualitative descriptive studies were conducted. In all the studies, data were collected using individual semi-structured interviews and analysed using inductive content analysis. Culturally and linguistically diverse nurses (n=24) were recruited from primary and tertiary healthcare organisations. Nurse educators (n=20) were recruited from three universities of applied sciences. Nurse leaders (n=13) were recruited from four primary and specialised healthcare organisations.

In Phase III, a hypothetical model describing culturally and linguistically diverse nurse integration into healthcare environments was built based on study Phase I and II. Eleven concepts were proposed described as: Effective transition to nursing practice, Institutional support, Leadership involvement, Competence recognition and support, Understanding of nurses' roles through integration practices, Safe working environment, Growth within the organisation, Relationships, Collegiality, and Cultural diversity in healthcare and Linguistic diversity.

This study provides a hypothetical model which can be utilised when supporting the organisational integration process of culturally and linguistically diverse nurses. Moreover, future studies on culturally and linguistically diverse nurse organisational integration could put emphasis on improving institutional support, nurse leadership, co-worker support and the structuring of integrational practices within the formal structure of healthcare organisations.

Keywords: cultural diversity, hypothetical model, integration strategies, linguistic diversity, nurse, nurse educator, nurse leader, organisational integration

Kamau, Suleiman, Kulttuurisesti ja kielellisesti monimuotoisten sairaanhoitajien organisaation integraatio. Hypoteettinen malli

Oulun yliopiston tutkijakoulu; Oulun yliopisto, lääketieteellinen tiedekunta
Acta Univ. Oul. D 1785, 2024
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Tiivistelmä

Tämän tutkimuksen tarkoituksena oli kehittää hypoteettinen malli, jotta voitaisiin selittää kulttuurisesti ja kielellisesti moninaisten sairaanhoitajien integroitumista terveydenhuollon organisaatioihin. Tutkimus koostui kolmesta vaiheesta.

Vaiheessa I toteutettiin sateenvarjokatsaus, jonka tarkoituksena oli saada näyttöä useista olemassa olevista systemaattisista kirjallisuuskatsauksista, jotka liittyivät integraatiostrategioihin ja -malleihin, joilla tuetaan kulttuurisesti ja kielellisesti moninaisten sairaanhoitajien siirtymistä ja sopeutumista terveydenhuollon organisaatioihin. Katsaus toteutettiin JBI:n ohjeiden mukaisesti. Yhteensä 27 tieteellistä artikkelia valittiin mukaan katsaukseen. Induktiivisen sisällönanalyysin perusteella muodostettiin kolme pääluokkaa, jotka kuvasivat integraatiostrategioita ja -malleja, joilla tuetaan kulttuurisesti ja kielellisesti monimuotoisen hoitohenkilöstön siirtymistä ja sopeutumista terveydenhuollon ympäristöön: 1) organisaation sisäiset strategiat ja mallit, 2) sosiokulttuuriset integraatiostrategiat ja -mallit, 3) ammatillisen kehittymisen strategiat ja mallit.

Vaiheessa II suoritettiin kolme kvalitatiivista kuvaavaa tutkimusta. Kaikissa tutkimuksissa aineisto kerättiin yksittäisillä puolistrukturoiduilla haastatteluilla ja analysoitiin induktiivisella sisältöanalyysillä. Kulttuurisesti ja kielellisesti moninaisten sairaanhoitajia (n=24) rekrytoitiin sekä perus- että erikois- terveydenhuollon organisaatioista. Sairaanhoitajaopettajia (n=20) rekrytoitiin kolmesta ammattikorkeakoulusta. Hoitotyön johtajat (n=13) rekrytoitiin neljästä, perus- ja erikois- terveydenhuollon organisaatioista.

Vaiheessa III luotiin vaiheiden I ja II pohjalta hypoteettinen malli, joka kuvaa kulttuurisesti ja kielellisesti moninaisten sairaanhoitajien integroitumista terveydenhuollon ympäristöihin. Hypoteettisessa mallissa esitettiin 11 käsitettä: tehokas siirtyminen hoitotyöhön, institutionaalinen tuki, johtajien osallistuminen, osaamisen tunnustaminen ja tukeminen, sairaanhoitajien roolien ymmärtäminen integraatiokäytäntöjen kautta, turvallinen työympäristö, kasvu organisaation sisällä, ihmissuhteet, kollegiaalisuus sekä kulttuurinen monimuotoisuus terveydenhuollossa ja kielellinen monimuotoisuus.

Tämä tutkimus tarjoaa hypoteettisen mallin, jota voidaan hyödyntää kulttuurisesti ja kielellisesti moninaisten sairaanhoitajien integraatioprosessin tukemisessa. Lisäksi tulevaisuudessa kulttuurisesti ja kielellisesti moninaisten sairaanhoitajien organisaatioon integroitumista tutkivissa tutkimuksissa voitaisiin painottaa institutionaalisen tuen, sairaanhoitajajohtajuuden ja työtovereiden tuen parantamista sekä integraatiokäytäntöjen jäsentämistä terveydenhuollon organisaation virallisessa rakenteessa.

Asiasanat: hoitotyön johtaja, hoitotyön opettaja, hypoteettinen malli, integraatiostrategiat, kielellinen monimuotoisuus, kulttuurinen monimuotoisuus, organisaation integraatio, sairaanhoitaja

To my family, the pillar of joy and strength.

Acknowledgements

Working through the years towards actualising this doctoral dissertation has been a product of patience, resilience, and hard work. This work is a representation of my own image as a CALD nurse and that of many others like me, who have chosen a career in nursing and further moved across borders to actualise their professional dreams. Organisational integration for culturally and linguistically diverse nurses in an important topic especially in an era where globalisation of nursing education and practice has gained much attention.

I would like to extend my utmost appreciation to all individuals who in one way or another contributed to the realisation of this dissertation. First, goes to you Professor Kristina Mikkonen an accomplished researcher and a mentor to many like me. The guidance sessions we have had over all these years surpass what may be referred as supervision in the traditional form, but rather moments of mentorship. To professor Marco Tomietto, you are reliable, inspirational and the work you have done over the years shaped my research. I remember how prompt you were in giving feedback and even suggesting very concrete and interesting perspectives that made my doctoral journey a success. To both of you I will forever be grateful!

Members of the research Unit of Health Sciences and Technology at the university of Oulu especially Dr. Ashlee Oikarainen whose work inspired the basis of my research and the input you had during initial preparatory stages of this research. Dr. Miro Koskenranta, I remember the summer and Autumn of 2022, due to the days we spent working on the umbrella review publication and the subsequent meetings as part of research endeavours.

Special thanks to the members of my follow-up group. Professor Tarja Pölkki and Dr. William Garbrah. Professor Tarja Pölkki, you provided special guidance when needed and assured me to always be in contact on issues related to my doctoral process, if there was ever a need to. Your friendly and supportive approach made me feel like I was doing all the right things.

I would like to give thanks to Professor Elina Haavisto and Associate professor Jesicca Hemberg for agreeing to pre-examine my dissertation, the feedback you provided, and the suggested points of improvement made the final work clearer and more focused. My gratitude also goes to Professor Mari Kangasniemi for dedicating your time to familiarize with my dissertation and agreeing to be my opponent.

I am thankful to all researchers who contributed to the publications that form the basis of this dissertation. Special thanks to you Heli Kuivila, Paula Ropponen,

Dr. Terhi-Maija Isakov, Nina Kiviniitty and Milka - Maaria Juntunen for assisting during various stages of my research and being valued co-authors.

To my friends who have endured the years of free weekends without my presence and being great supporters in many ways especially Dr. Michael Oduor a friend so patient and humble. To you George Mungai and family you always opened your doors for me whenever I visited the university of Oulu. David Saeluzika a man I have know for over a decade, I count you as my brother. Kriss, Moses and Johnson you have always listened and encouraged me.

My family has been the greatest supporter in this journey. My partner Tuuli Toivanen you have been resilient and supportive, and your love has been strong even when I had to cancel few family activities to beat a deadline or two. A mother to our adorable children Lionel and Neema who inspire me to even work harder. Darling you are the best!

Lastly, I dedicate this doctoral thesis to my family. To my parents who saw me move to Finland almost fourteen years ago and are always a phone call away. My brothers James and Sammy and sister Joyce you know the thirst I always had for an education and who knew I could go this high, considering our background. All I would say is to God be the glory!

7.4.2024 Suleiman Kamau

List of abbreviations and symbols

CALD	Culturally and linguistically diverse
COVID19	Coronavirus disease-19
ICN	International council of nurses
IWG	Inform-Welcome-Guide
JBI	Joanna Briggs Institute
MeSH	Medical Subject Headings
NHS	National Healthcare System
OECD	Organisation for Economic Cooperation and Development
PCC	Participants, concept and context
PRISMA	Preferred reporting items for systematic reviews and meta-analyses
SRQR	Standards for reporting qualitative research
US	United States

List of original publications

This thesis is based on the following publications, which are referred throughout the text by their Roman numerals:

I Kamau, S., Koskenranta, M., Kuivila, H., Oikarainen, A., Tomietto, M., Juntunen, J., Tuomikoski, A.-M., & Mikkonen, K. (2022). Integration strategies and models to support transition and adaptation of culturally and linguistically diverse nursing staff into healthcare environments: An umbrella review. *International Journal of Nursing Studies, 136, 104377. https://doi.org/10.1016/j.ijnurstu.2022.104377*

II Kamau, S., Koskenranta, M., Isakov, T.-M., Kuivila, H., Oikarainen, A., Tomietto, M., & Mikkonen, K. (2023). Culturally and linguistically diverse registered nurses' experiences of integration into nursing workforce – A qualitative descriptive study. *Nurse Education Today, 121, 105700. https://doi.org/10.1016/j.nedt.2022.105700*

III Kamau, S., Oikarainen, A., Juntunen, M.-M., Koskenranta, M., Kuivila, H., Tomietto, M., & Mikkonen, K. (2023). Nurse educators' views of integrating culturally and linguistically diverse future registered nurses into healthcare settings: A qualitative descriptive study. *Journal of Advanced Nursing, 79, 3412–3425. https://doi.org/10.1111/jan.15683*

IV Kamau, S., Oikarainen, A., Kiviniitty, N., Koskenranta, M., Kuivila, H., Tomietto, M., Kanste, O., & Mikkonen, K. (2023). Nurse leaders' experiences of how culturally and linguistically diverse registered nurses integrate into healthcare settings: An interview study. *International Journal of Nursing Studies, 146, 104559. https://doi.org/10.1016/j.ijnurstu.2023.104559*

Contents

1 Introduction

Nurses constitute much of the global healthcare workforce (Debesay et al., 2022; WHO, 2020), however, statistics show that globally there is a significant nursing workforce shortage (Boniol et al., 2022). The global nurse shortage is a product of various factors and projections showing that the future deficit in human resources for nursing will be exacerbated by high retirement rates among nurses and increased demand for care (ICN, 2023; WHO, 2020). This global shortage in the nursing workforce has been described as critical and more severe than expected in other professions (WHO, 2020). Moreover, other factors such as an ageing population, ageing nursing staff, and a high number of qualified nurses who are not working in healthcare are deemed to exacerbate further the nursing workforce dilemma (Calenda et al., 2019).

Following the Corona Virus Disease-19 (COVID-19) pandemic, a drop in the number of local applicants to nursing degree programs has been noted. This worrying trend might further affect the availability of sufficient future nurses joining the workforce. For instance, in England, Wales, Scotland and Northern Ireland a drop of between 16 and 27 percent was recorded in the year 2023 (Royal College on Nursing, 2023). This trend has also been noted in Finland where applicants per place has dropped from 2.5 applicants to one applicant (YLE, 2022).

The International council of nurses (ICN) has referred to the nursing shortage as a global emergency, further noting that the recent COVID-19 pandemic had a negative effect on an already strained nursing profession and workforce (ICN, 2023). In the United States (US) for instance there has been a projected annual registered nurse demand of over 200,000 (U.S. Bureau of Labor Statistics, 2022). In Finland, it has been projected that, by the year 2030, the nursing shortage will amount to thirty thousand (Finnish Institute of Health and Welfare, 2022). The risks posed by the current shortage in the nursing workforce affect various aspects that are key to the health of populations, such as access to care, provision of quality and safe care, poor care outcomes and increased share of healthcare costs (ICN, 2023; Jarrar et al., 2018; Peters, 2023; Scott & May, 2020; You & Donnelly, 2023).

To meet the shortage in the nursing workforce and mitigate negative outcomes, healthcare systems are looking beyond locally educated nurses and are allocating efforts to recruiting beyond their borders (ICN, 2023). The United Kingdom National Healthcare System (NHS), for instance, has already embark on recruiting at least 50,000 nurses from abroad to specifically address the nurses shortage in the country (Department of Health and Social Care, 2022). In the Organisation for

Economic Cooperation and Development (OECD) region there was a noted increase of international nurses between the years 2011-2019 90,000 from 460,000 -550,000 nurses in a period of eight years (OECD, 2019). These statistics not only show that nurse migration is a phenomena worth attention, but also indicates that in global healthcare systems the workforce is becoming even more diverse (OECD, 2019).

The migration of nurses across borders has increased cultural and linguistic diversity within healthcare systems (Egede-Nissen et al., 2019). It should be noted that culturally and linguistically diverse nurses (CALD) make up a considerable percentage within various national nursing workforces. For instance, within the OECD region, CALD nurses constitute a considerable percentage of the nursing workforce in Israel, Australia, Switzerland, Luxembourg, Canada, Ireland, and the United Kingdom. These countries host between 20% and 48% of CALD nurses in their nursing workforce (Dumont & Socha-Dietrich, 2021).

Cultural and linguistic diversity is a multifaceted concept that may include gender, age, ethnic background, culture, and language (Debesay et al., 2022; Pham et al., 2021). Cultural and linguistic demographic shifts in the diversity of healthcare human resources have impacted the global healthcare systems outlook and necessitated a response to integrating and retaining CALD nurses within organisations (Egede-Nissen et al., 2019). This is because, although CALD nurses have been recognised as providing an immense contribution towards meeting societal demands and healthcare, extensive evidence has shown that these nurses undergo challenges that impact their confidence, social life, and work satisfaction (Buttigieg et al., 2018; Brunton et al., 2019). Existence of individual, team, ward, and organisational level challenges may further impede the smooth integration of CALD nurse into organisations and workforces (Buttigieg et al., 2018; Brunton et al., 2019; Zanjani et al., 2021).

The organisational integration of CALD nurses has been defined as a process through which the nurses overcome intra-organisational challenges and socialise within an organisation (Ramji and Etowah, 2018). Previous research has shown that integration strategies and models built around intra-organisational, socio-cultural, and professional development aspects are used to support the integration of CALD nurses within various global healthcare contexts and organisations. These strategies help a smooth entry and the settling and development of CALD nurses within the organisation and can also help alleviate the intention to leave and attrition of these nurses (Tomietto et al., 2019).

Even though there is evidence to show, on a general level, the various strategies and models that are adopted to integrate CALD nurses, there is an essential need to give more attention to how culturally and linguistically diverse employees can be integrated into an organisation (Omanović & Langley, 2023). Therefore, there is a need to build a structured hypothetical model that shows how CALD nurses' integration can be supported within healthcare organisations.

Further this research fits within the four metaparadigms in nursing science i.e. person, environment, health, and nursing (Branch et al., 2016). In the context of this dissertation while focusing on person, this signifies patients receiving care from CALD nurses which may encompass aspects of cultural diversity in nursing and culturally competent nursing. The environment metaparadigm represents the relations CALD nurses have with colleagues, patients and their families which may largely shape the nursing outcomes. The environment also represents the working environment in which CALD nurses operate while practicing nursing and its essence to care delivered to the patient. Health metaparadigm signifies the nursing care delivered by CALD nurses which predominantly affects the quality of outcomes and patient wellbeing. The nursing metaparadigm defines the application of knowledge and competences by the CALD nurse towards care delivery and individual attributes of the CALD nurse.

Hypothetical modeling enables researchers present complex research phenomena in a simple manner to enable a better understanding (Basso et al., 2017). A hypothetical model presents related concepts of phenomena under inquiry (McEwen & Wills, 2023). Kyngäs et al. (2019), elaborate that a hypothetical model is a representation of concepts, their descriptions and relational statements and that a hypothetical model may also be referred to as conceptual model or conceptual map (Kyngäs et al., 2019). Hypothetical models have both scientific and societal significance, this is because models are a means of communicating and disseminating complex research phenomena for a general public (Mäki, 2011). In this dissertation's context, a hypothetical model merely elaborates CALD nurse organisational integration, making it easier to understand a complex phenomenon for both research community and society.

Hence, the aim of this study was to develop a hypothetical model, for identifying concepts that explain the integration of culturally and linguistically diverse (CALD) nurses into healthcare organisations.

2 Organisational integration research and theories in the context of culturally and linguistically diverse nurses

The organisational integration research and theories in the context of culturally and linguistically diverse nurses is explained by the most recent literature, which has been retrieved and screened systematically. A literature search to identify current research on organisational integration research and theories in the context of culturally and linguistically diverse nurses, was performed in five scientific databases: CINAHL, PubMed, Scopus, Web of Science and PsycArticles. Studies were limited from 2013 to 2023 and grey literature was eliminated due to the availability of extensive empirical studies on the topic. Medical Subject Headings (MeSH) and keywords were used and truncated where necessary (Table.1). Study types in the English or Finnish language were included. The database search produced 2069 publications, which were transferred to the Covidence systematic review software. Duplicates (n=1192) were automatically removed. One researcher screened studies for eligibility based on title and abstract (n=877) and full text (n=86). A total of 57 studies were included.

Table 1. Key Search terms.

Search term combinations
Organisational integration OR organisational socialization OR onboarding OR organisational adjustment OR induction
AND
Culturally and linguistically diverse nurse OR CALD nurse OR migrant nurse OR international nurse OR foreign nurse OR internationally educated nurse OR overseas nurses OR immigrant nurse
AND
Healthcare

2.1 Organisational integration

Organisational socialisation or integration is a process through which new employees acquire knowledge, skills, behaviours, and attitudes that necessitate adaptation to a new work environment, function, and culture (Taormina, 2009; Van Maanen & Schein, 1979; Wanberg, 2012). The process of socialisation is also undertaken during role socialisation whereby employees may be moving to new roles and responsibilities within the organisation (Wanberg, 2012). Emergent terms

such as organisational onboarding (Bauer & Erdogan, 2011; Frögéli et al., 2023) and organisational integration (Chiu, 2003; Godinho et al., 2023) have been used to describe organisational socialisation. However, Klein et al. (2015), have argued that onboarding is a practice that facilitates smooth organisational socialisation of employees rather than being a substitute for the process of organisational socialisation. Onboarding in this context is defined as both formal and informal strategies and models used to support newcomer adjustment (Klein et al., 2015). Onboarding practices for instance use an organisational onboarding manual that has been established to help organisational integration (Godinho et al., 2023).

Hence in this research we use the terms organisational integration and organisational socialisation interchangeably to mean the same concept that entails onboarding as a practice in the newcomer's integration process. Efficient organisational integration has been found to be beneficial to both the organisation and the newcomer (Ellis et al., 2014), this process helps new employees become insiders within the organisation (Bauer & Erdogan, 2011). For the organisation, it establishes that employee turnover (Allen, 2006), low productivity and commitment (Karimi et al., 2014; Maia et al., 2016) non-alignment to the organisational culture, norms, goals, attitudes, and behaviours are related to inefficient socialisation (Ellis et al., 2014). In contrast, the employees who are well socialised, develop essential skills, enjoy job satisfaction, wellbeing, and growth within the organisation (Aderiye, 2021; Bauer & Erdogan, 2011; Tomietto et al., 2015; Van Maanen & Schein, 1979).

Organisational socialisation theories elaborate a process by which a newcomer takes a new role, adapts, develops within the role, and integrates into the organisation (Aderiye, 2021). For socialisation to occur four sequences of events may take place according to the theories, such as, anticipatory socialisation model by Feldman (1976) and Buchanan's (1974) three-stage early career model. In the *anticipatory* pre transition phase, the employee may already have learnt about their job and have expectations of the organisation. In the *encounter* phase the employee joins the organisation and starts to experience aspects such as skill development and role demands. In the *adjustment* phase the employee is already forming a sense of belonging, adopts and adjusts to their role and the organisation. Finally, *stabilisation* is a phase where the employee has become a part of the organisation and is well integrated (Wanberg, 2012).

Among the organisational roles, one role is to provide resources for a convenient organisational environment for the newcomer's socialisation (Ashforth et al., 2007). However, organisational integration is not entirely the function of an

organisation since management, co-workers and newcomers affect how this process takes place (Aderiye, 2021; Ellis et al., 2017; Wanberg, 2012). For instance, managerial support through devoting resources and providing information for a newcomer's integration has been found to positively affect the socialisation process (Ellis et al., 2017). Co-worker support for newcomers' psychological safety is a crucial aspect since newcomers who feel judged, misinformed, and enjoy low co-worker support may experience a lower self-esteem at work and this impedes their integration (Monata & Cassar, 2018). However, to enjoy, the organisation, management, and co-workers' support. A newcomer must also show essential proactive behaviour (Ellis et al., 2017). For instance, newcomers' ability to self-initiative, seek information and feedback are important mediators of integration (Zhao et al., 2023).

Even though organisational socialisation may seem to be sequenced, structured, and supported by the organisation, the management, co-workers, and the newcomer (Aderiye, 2021; Allen, 2006; Wanberg, 2012). Ashforth et al. (2007), questioned the assumption portrayed that organisational socialisation is similar across national cultures. Hence, in this context the organisational integration may not consider the international and cultural composition within the workforce which may, for instance, lead to similar role learning expectations for everyone across the organisation. Omanović and Langley (2023), established that organisational socialisation practices are also affected by national, political, contextual, and cultural aspects within which the organisation operates; hence, culturally and linguistically diverse newcomers may be dis-advantaged and further face challenges related to both cultural and linguistic aspects as they integrate.

2.2 Culturally and linguistically diverse nurses

Culturally and linguistically diverse (CALD) nurses have been referred to in previous research using various titles which show collective aspects that include the movement of nurses across borders, possession of a nursing qualification from a different nation other than the practice context and a different nationality or ethnicity from the host country. The adopted terms that define CALD nurses internationally include: immigrant nurses (Al-Nusair & Alnjadat, 2022; Buttigieg et al., 2018; Covell & Rolle Sands, 2021; Stievano et al., 2017; Xiao et al., 2014), internationally recruited nurses (Alexis, 2015), overseas-qualified nurses (Bhandari et al., 2015; Ohr et al., 2014; Philip et al., 2015; Zanjani et al., 2018), foreign-born nurses (Calenda et al., 2019; Wesołowska et al., 2020), migrant nurses (Al-Hamdan

et al., 2015; Brunton et al., 2020; Brunton & Cook, 2018; Buttigieg et al., 2018; Can et al., 2022; Choi et al., 2019; Chok et al., 2018; McBrien et al., 2022; Smith et al., 2022; Villamin et al., 2023; Winkelmann-Gleed, 2022), expatriate nurses (González et al., 2021), agency nurses (Knutsen et al., 2020), internationally qualified nurses (Brunton & Cook, 2018; Chun Tie et al., 2019; Kurup et al., 2023; O'Callaghan et al., 2018; Roth et al., 2023) and mobile nursing workforce (Leone et al., 2020). However, the use of CALD nurse as a term encompassing all the nurses whether locally or internationally educated, whose culture, language, professional experience, and practice context are different from the host healthcare system and society has recently gained popularity (Kiviniitty et al., 2023).

Through the globalisation of nursing education and increased migration of qualified nurses, CALD nurses are either locally educated or educated in a different nation than their host country (Kiviniitty et al.,2023). Various similar characteristics have been established to encompass cultural and linguistic diversity of these nurses and may include: their culture (Balante et al., 2021; Efendi et al., 2020; Schmidt et al., 2022; Zanjani et al., 2021), norms (Chun Tie et al., 2019; Xiao et al., 2014), beliefs (Choi et al., 2019), values (Bhandari et al., 2015; Riden et al., 2014), language (Bobek & Devitt, 2017; González et al., 2021; Njie-Mokonya, 2016) and ethnicity (Bobek & Devitt, 2017; Can et al., 2022) that differ from the native society. Hence to ensure uniformity and inclusiveness of all nurses of a culturally and linguistically diverse background, we adopt the term CALD nurse to mean either nurses who have moved across borders or are hosted in a healthcare system other than their home country and have a different culture and language from that of the host society.

Internationally, many healthcare systems rely on CALD nurses towards meeting their healthcare needs, there is evidence to show that the demand for these nurses is on the rise globally. In England, for example, the National Health Service (NHS) has for many years relied on CALD nurses to meet its workforce gaps (Alexis, 2015). This trend is projected to intensify due to existing nursing vacancies in the country which are projected to rise over the coming decade (Leone et al., 2020). The phenomena of nursing workforce shortages are also reported within other international healthcare contexts. Healthcare environments in Canada, Australia and United States are among those that host a great proportion of CALD nurses and are increasing these numbers through recruitment of new CALD nurses to supplement the insufficient domestic supply (Covell & Rolle Sands, 2021; Dywili et al., 2021; Thomas & Lee, 2023).

In the European context Germany, Norway, Italy, Malta, and Finland are also encountering similar challenges faced by other developed nations regarding an ageing population, increased demand for care, mass nurse retirement and an inability to meet nurse workforce demands through locally educated nurses (Buttigieg et al.,2018; González et al., 2021; Stievano et al., 2017; Tingvold & Fagertun, 2020; Wesołowska et al., 2020). Further, there has been an increase in reliance on CALD nurses mostly recruited from low- and middle-income nations (Buttigieg et al., 2018; González et al., 2021; Stievano et al., 2017; Tingvold & Fagertun, 2020; Wesołowska et al., 2020). Hence, evidence shows that CALD nurses will continue to migrate and supplement the nursing workforce in countries other than their homeland. This means that CALD nurse acculturation, transition (Balante et al., 2021; Choi et al., 2019; Pressley et al., 2022) and integration to international healthcare settings (Covell & Rolle Sands, 2021; Neiterman & Bourgeault, 2015; Ramji & Etowa, 2021) are important aspects that warrant much attention.

Finland's proportion of CALD nurse is projected to grow due to current nurse shortages within the national nursing workforce (Calenda et al., 2019; Kiviniitty et al., 2023; Wesołowska et al., 2020) The country is facing a steep increment in the older population, increase in demand for care and a mass retirement of nurses that is projected to increase future demand for CALD nurses (Calenda et al., 2019; Wesołowska et al., 2020). Traditionally, Finland has hosted a small number of CALD nurses compared to other developed nations (Calenda et al., 2019). CALD nurses in the country either transit to the workforce as locally educated or internationally recruited (Calenda et al., 2019; Kiviniitty et al., 2023).

The experiences of CALD nurses within the Finnish healthcare context are similar other international contexts. Research has shown that CALD nurses in the country face racial, ethnic, cultural, linguistic, practice adaptation difficulties, limiting licensure procedures, and low career mobility (Calenda et al., 2019). Wesołowska et al. (2020) established that in Finland CALD nurses had a low level of work control and this challenge promoted workplace discrimination. Furthermore, in Finland, the need for organisational supported and a well led process towards efficient integration of CALD nurse within the healthcare system has been established (Calenda et al., 2019; Kiviniitty et al., 2023; Wesołowska et al., 2020).

2.3 Culturally and linguistically diverse nurse organisational integration

CALD nurses have been found to experience challenges during their migration, acculturation, transition and integration to a new society and healthcare environment (Calenda et al., 2019; Neiterman & Bourgeault, 2015; Ohr et al., 2014; Ramji & Etowah, 2018; Riden et al., 2014; Thomas & Lee, 2023). During migration CALD nurses are often poorly prepared for what to expect in the destination country (Safari et al., 2022). Poor pre-migration expectations and misinformation have been related to disappointments once CALD nurses are in a new country (Efendi et al., 2022; Safari et al., 2022). On arrival and through the process of acculturation CALD nurses may adopt aspects of the new culture which may signify a period of disruption of their own beliefs, values and status in a new society which may further affect adjustment (Efendi et al., 2022; Kurup et al., 2023; Safari et al., 2022). Beyond the cultural hurdles CALD nurses have also been found to experience transition challenges caused by difficulties in acquiring licensure and certification, linguistic competence, communication and limiting individual attributes that may deter their efficient contribution to the workforce (Kurup et al., 2023)

While in a healthcare organisation all CALD nurses undergo a process of integration. Organisational integration for CALD nurses has been referred to as a two-way process that involves both the CALD nurse and the healthcare organisation (McBrien et al., 2022; Ramji & Etowah, 2018). The process of integration is long-term and involves an interactional process where CALD nurses apply their existing cultural, linguistic, professional competence and expertise in order to acquire new expertise, knowledge, language, social skills, and culture that helps efficient participation in a new healthcare environment (McBrien et al., 2022). While integrating into a healthcare organisation, CALD nurses have been found to require organisational support to overcome integrational challenges such as: practice adaptation, language and communication difficulties, cultural differences and racial-ethnic induced challenges such as racism and discrimination (Chun Tie et al., 2019; McBrien et al., 2022; Ramji & Etowah, 2018).

Due to the global movement of nurses, the demand for CALD nurses by developed nations and the motivation of nurse to migrate in order to achieve a better life, better wages and working conditions all contribute to the cross-border movement of the nurses (Ohr et al., 2014; Philip et al., 2015; Smith et al., 2023; Tingvold & Fagertun, 2020). Research pertaining to CALD nurse has largely

examined migration and migration experiences. For instance, CALD nurse migration research has established pitfalls in the process due to hurdles concerning legislative matters, including certification and the right of practice, as well as financial factors, which may entail resettlement costs and certificate evaluation and validation charges. In addition, there are cultural aspects which relate to the experiences in a new culture and linguistic experiences with regards to proficiency in the host nations language (Covell et al., 2016).

Beyond migration, acculturation into healthcare systems and organisations have also received much attention in research concerning CALD nurses. While in the host nation and healthcare system, much research has been done to further an understanding of acculturation (Balante et al., 2021; Choi et al., 2019; Goh & Lopez, 2016; Ohr et al., 2014; Pressley et al., 2022) and transition (Al-Hamdan et al., 2015; Chok et al., 2017; Choi et al., 2019; Iheduru-Anderson & Wahi, 2018; Ohr et al., 2014; Safari et al., 2022).

Acculturation has been studied to determine the experiences of CALD nurses within the host culture and their cultural adjustment. Balante et al. (2021) investigated the cultural challenges experienced by CALD nurses, with their findings showing that cultural differences often led to personal and professional challenges that resulted in feeling of otherness, language and communication difficulties, problems regarding nursing culture, practice adaptation, ethnic and racial dilemmas. To some extent, there have been expectations that a CALD nurse's acculturation process is to assimilate to the dominant culture (Balante et al., 2021). However, Choi et al. (2019) found that the power distance that CALD nurses face in new healthcare contexts, affect their position in the new culture, beliefs and values and may further adversely affect acculturation. Goh and Lopez (2016) attributed a smooth acculturation in the integration process to lower acculturation stress and this improved the overall quality of life of CALD nurses.

Further transition has been studied as a process through which CALD nurses join the host healthcare system (Ohr et al., 2014; Safari et al., 2022). While investigating how healthcare organisations could help the transition experiences of CALD nurses, Ohr et al. (2014) established that, implementing initial support which may include financial support, accommodation assistance, developing connections to other ethnic counterparts and pastoral care for CALD nurse helped them settle in the host community. Transition was also supported for instance by using pre-registration support in order to gain licensure and qualifications in the host healthcare system (Ohr et al., 2014). CALD nurses experience of their transition has also been explored; Safari et al. (2022) found CALD nurses

experienced that most transition activities, for instance, bridging programs were not given sufficient time, lacked aspects such as cultural learning and support strategies and were largely not tailored to individual needs. While transitioning CALD nurses also faced linguistic barriers, discrimination and role adaptation challenges that warranted support (Safari et al., 2022).

Beyond migration, acculturation and transition, there has been a body of research related to CALD nurse integration in healthcare organisations (Calenda et al., 2018; Neiterman & Bourgeault, 2015; Primeau et al., 2021; Ramji & Etowah, 2018; Riden et al., 2014; Thomas & Lee, 2023). For instance, Ramji and Etowah (2018) developed a conceptual framework for CALD nurse workplace integration where the role of the healthcare organisation and the CALD nurse were found to be integral in supporting a two-way integration process. In addition to the role of CALD nurses and the healthcare organisation in integration, research on how colleagues, leaders, and support strategies such as mentorship help integration have also been explored (Knutsen et al., 2020; Roth et al., 2023).

Research on integration has further examined CALD nurse integration strategies. Findings have revealed certain strategies that assist the professional, cultural, linguistic, and personal challenges that CALD nurses face during organisational integration. Institutional support strategies such as onboarding and orientation programmes help CALD nurses familiarise themselves and learn their roles (Thomas & Lee, 2023). Collegial support and assistance have been established as means to increase confidence (Riden et al., 2014; Thomas & Lee, 2023). Preceptorship and mentorship allow CALD nurses to enjoy support for their role adaptation in a new healthcare organisation and culture (Ramji & Etowa, 2016; Riden et al. 2014).

Cultural and language learning opportunities help the development of cultural, linguistic and communication competences in CALD nurses (Ramji & Etowah, 2016; Riden et al., 2014; Thomas & Lee, 2023). These integration strategies show that the integration process of CALD nurses is a multifaceted process that involves the organisation, colleagues and the CALD nurses themselves, and entails application of support strategies at both organisational and individual levels (McBrien et al., 2022; Ramji & Etowa, 2018; Thomas & Lee, 2023).

2.4 Summary of the literature

Globally, there is a shortage in the nursing workforce, however, nurse migration and globalisation of nursing education has helped increase culturally and

linguistically diverse nurses within many healthcare contexts. Nonetheless, these nurses may not integrate smoothly into an organisation. Hence, they may not contribute fully to the delivery of essential nursing care. Integration is a two-way process that involves a CALD nurse and the healthcare organisation. During integration CALD nurses may join a healthcare organisation and already have the anticipatory qualities that may assist their integration. These nurses have professional qualifications and expertise from diverse healthcare environments that help their learning within the new context. When CALD nurses join an organisation, they may already through previous processes of acculturation and transition have interacted and learnt some aspect of the host culture and language; additionally, they also bring with them rich cultural and linguistic backgrounds. Even with anticipatory preparedness CALD nurses still face challenges while integrating; these challenges may relate to aspects such as adapting to the new practice context, workplace linguistic and cultural diversity, racial ethnic challenges including racism and discrimination which may hinder their professional upward mobility.

The healthcare organisation's role in CALD nurse integration is integral. Within the organisation, the enablers of integration are the organisation, the nurse leaders, colleagues, and the CALD nurses themselves. The use of integrational strategies is important as this helps alleviate challenges that CALD nurses face during integration. Strategies that may include onboarding and orientation programmes, collegial support and assistance, preceptorship and mentorship, cultural and language learning opportunities also allow the involvement of leaders and colleagues and help the CALD nurse to apply their anticipatory qualities. Integration strategies can also help CALD nurses to gaining new qualities, knowledge and competences that help their integration and development within the healthcare context.

3 Study aims and research questions

The aim of this study was to develop a hypothetical model, that would identify concepts to explain the integration of culturally and linguistically diverse (CALD) nurses into healthcare organisations. The study was structured in three phases. The first phase aimed to establish an umbrella review of recent evidence on integration strategies and models to support the transition and adaptation of CALD nursing staff into healthcare environments (Publication I). The second phase aimed to conduct qualitative studies describing the experiences of integration of CALD nurses as described by the CALD nurses (Publications II), their educators (Publication III) and nurse leaders in the healthcare organisations (Publications IV). The third phase aimed at defining concepts related to the integration of CALD nurses into healthcare organisations and providing a hypothetical model of these concepts by connecting the results from the first and second phase (Dissertation summary).

This dissertation answered the following research questions in both Phase I, II and III.

Phase I. Umbrella review

1. What kind of integrational strategies and models have been developed to support the transition and adaptation of CALD nursing staff into healthcare environments? (Publication I)

Phase II. Qualitative studies

1. What kind of experiences do CALD registered nurses have of their integration into the nursing workforce? (Publication II)
2. What kind of experiences do nurse educators have of the integration processes of CALD nurses into healthcare settings? (Publication III)
3. How do nurse leaders experience the integration of CALD nurses into healthcare settings? (Publication IV)

Phase III. Hypothetical model

1. What kind of concepts defined integration of CALD nurses into healthcare organisations? (Dissertation summary)

4 Materials and methods

The development of a hypothetical model in three phases was supported by the methodological guidelines of Kyngäs et al. (2019) on integrating content analysis into theory development. The phases included (I) an umbrella review (Publication I), (II) three qualitative descriptive studies conducted using individual semi-structured interviews (Publications II-IV), and (III) the development of a hypothetical model (Dissertation summary) (see Table I). In this approach containing three phases, the first phase was to establish a structured starting point through synthesising previous evidence defining the strategies and models of CALD nurse integration into healthcare environments (Publication I). In the second phase, data were collected through individual semi-structured interviews of CALD nurses, nurse educators and nurse leaders (Publications II, III & IV). The third phase defined and developed the concepts through analysis of the collected data; the concepts were connected by presenting a hypothetical model of integrating culturally and linguistically diverse nurses into healthcare organisations (Dissertation summary).

Table 1. Summary of the study phases.

Phase	Study design	Aim	Sample, setting, timeframe	Data collection	Data analysis
I	Umbrella review Publication I	To establish recent evidence on integration strategies and models to support transition and adaptation of culturally and linguistically diverse nursing staff into healthcare environments	Systematic and integrative reviews (n=27) March 2021	Systematic search conducted according to JBI guidelines for umbrella reviews, in electronic databases CINAHL, PubMed, Medic, ProQuest, and Scopus	Inductive content analysis
II					

Phase	Study design	Aim	Sample, setting, timeframe	Data collection	Data analysis
	Qualitative study Publication II	To describe CALD registered nurses' experiences of their integration into the Finnish nursing workforce	CALD registered nurses(n=24) working in primary and tertiary healthcare settings January -May 2021	Individual semi-structured interviews	Inductive content analysis
	Qualitative study Publication III	To describe nurse educators' views of how CALD future registered nurses are integrated into healthcare settings	Nurse educators (n= 20) from three universities of applied sciences May- June 2021	Individual semi-structured interviews	Inductive content analysis
	Qualitative study Publication IV	To describe nurse leaders' experiences of how CALD registered nurses integrate into healthcare settings	Nurse leaders (n=13) from four primary and specialized healthcare organisations November 2021 - March 2022.	individual semi-structured interviews	Inductive content analysis
III	Synthesis of Phase I and II Dissertation summary	To develop a hypothetical model, al of identifying concepts and relation between those concepts to integration of CALD nurses into healthcare organisations.	Data of phase I and II, August-October 2023	Data from Phase I-II	Inductive approach

4.1 Phase 1. Umbrella review (Publication I)

In the first phase, an umbrella review was conducted to establish evidence from a wide range of existing systematic reviews (Aromataris et al., 2015) related to

integration strategies and models that support transition and adaptation of culturally and linguistically diverse nurses into healthcare organisations. The guidelines published by the Joanna Briggs Institute (JBI) directed this review; umbrella reviews are ideal means of consolidating expansive research on a topic and establish evidence, consistency, contradiction, or discrepancy in their findings (Aromataris & Munn, 2020). Reporting of the umbrella review was performed using the preferred reporting items for systematic reviews and meta-analyses which enhanced the transparency and accuracy in the reporting (Page et al., 2020).

Participants, concepts, and context (PCC) protocols were used in formulating the research questions (Aromataris et al., 2015). Inclusion and exclusion criteria were formulated to limit the scope of the research question within the participants, concepts, and contexts. Studies that met the following criteria were included: 1) P = participants as nurses, nurse managers and nurse teachers; C = concept as integrational strategies and models of CALD nurses into healthcare organisations; C = context as healthcare organisations, including primary, secondary and community care (Table.2)

Table 2. Study inclusion criteria according to PCC.

PCC	Inclusion criteria
Participants	Nurses, nurse managers and nurse teachers
Concept	Integrational strategies and models of culturally and linguistically diverse nurses into healthcare organisations
Context	Healthcare organisations, including primary, secondary and community care

The study search included published systematic or integrative reviews and peer-reviewed articles published in English or Finnish from the year 2000 onwards, this is due to their being few existent systematic reviews prior to this period (Aromataris & Munn, 2020). Electronic databases CINAHL, PubMed, Medic, ProQuest, and Scopus were searched in March 2021, these scientific databases were appropriate for answering the research objective and questions (Aromataris & Munn, 2020). A library information specialist was consulted to enhance the search strategy for each database. The search was aligned according to the inclusion criteria and combined with the Boolean operators AND, OR and NOT. Medical Subject Headings (MeSH) were used in CINAHL and PubMed databases as this allowed a detailed search on the topic.

Study search outcomes from the scientific databases N=13,752 publications were retrieved and added to the Covidence systematic review management software. Article screening and selection started with initial elimination of duplicate studies, n=5,301, leaving a total of 8,451 studies to undergo a double screening process with a third reviewer resolving possible conflicts. The next phase entailed screening based on titles and abstracts, during which 7,694 studies were eliminated. Next, full-text screening of n=757 studies was conducted, where 507 papers that did not meet the initial inclusion criteria were eliminated. From the screened n=250 studies, n=233 studies that were neither systematic nor integrative reviews were eliminated. During the entire screening process, research articles were eliminated if they were not peer-reviewed or full-text, or had wrong outcomes, time limit, language, population, and setting. The process of article screening and selection was presented in a PRISMA flow diagram (Page et al., 2021) (Publication 1. Figure1)). A total of (n=27) articles met the inclusion criteria and were subjected to quality appraisal.

To ensure that chosen articles were of good scientific quality, all publications (n=27) underwent a quality appraisal which was performed by two researchers separately and later agreed together using the JBI critical appraisal tool for systematic reviews and research syntheses (Aromataris et al., 2015). All the research articles were examined for quality and findings using eleven distinct aspects. The eleven criteria were analysed using "yes", "no", "unclear" and "not applicable" criteria. One point was awarded to each criterion that was rated "yes". Initially, two reviewers separately analysed and scored all the 27 studies after which any disagreements were discussed and agreed together. Studies were included in the review if they met at least six out of the eleven requirements, the highest scored the maximum of eleven points and the lowest seven points, hence all the articles chosen for the review were found to be of good quality.

Data were extracted manually on an excel sheet, all relevant data to the review question were captured and this helped minimise the risk of bias (Aromataris & Munn, 2020). Extracted data included author details, year of publication, country, study title, study type, description of participants, concept, context, methodology and key findings related to integration strategies and models of CALD nurse transition and integration into healthcare.

Data analysis was done using inductive content analysis (Mikkonen & Kääriäinen, 2019). According to Kyngäs et al. (2019), content analysis allows for a systematic and objective approach that presents a research inquiry at a theoretical level, further enabling the creation of concepts that lead to the development of

hypothetical models. A three-step process composed firstly of data reduction, where meaning units in sentence form were selected as units of analysis. Then the second step was grouping the open codes for further formation on the categories and sub-categories. The third step was formation of the main categories that represented concepts related to the research question (Kyngäs et al., 2019). As a result of the analysis, 165 codes in 3 main categories, 10 categories, 111 subcategories were defined that answered the research question.

4.2 Phase II. Qualitative studies (Publications II – IV)

A qualitative descriptive approach that employed content analysis was adopted in all three qualitative studies (Sandelowski, 2010; Kyngäs et al., 2019). CALD nurses (Publication II), nurse educators (Publication III) and nurse leaders (Publication IV) were asked about their perspectives and lived experiences. A naturalistic paradigm (Lincoln & Guba, 1985) guided the research and hence participants experiences were studied within their natural settings. Descriptive (Lincoln & Guba, 1985) and in-depth data were gathered through individual semi-structured interviews (Kallio et al., 2016). To ensure accuracy, reporting of this study was done using standards for reporting qualitative research, this enhanced the transparency, quality and ensured complete data reporting (O'Brien et al., 2014).

There were three participants groups individually in three different qualitative data studies. Firstly, CALD nurses (Publication II) were recruited from North Ostrobothnia, Central, and Metropolitan regions of Finland and represented both primary and tertiary healthcare systems. To be included in the study, one had to be a registered nurse with a CALD background and working within the Finnish primary or tertiary healthcare system. A total of 24 CALD registered nurses participated in the study. These registered nurses were diverse and represented 11 different nationalities, with 17 being female and 7 male. The nurses had working experience within the Finnish healthcare system with the majority having worked for more than five years and most of them evaluated their Finnish language proficiency to be at an intermediate level. The participants age ranged from 24 to 50.

Secondly, nurse educators (Publication III) were recruited from three universities of applied science located in central and northern parts of Finland. Nurse educators who met the inclusion criteria as qualified nurse educators who had experience of teaching CALD nurses and who worked in Finnish universities of applied sciences were interviewed. A total of 20 nurse educators were recruited.

All participants had experience educating culturally and linguistically diverse nurses. They were all Finnish, female, qualified nurse educators with ages ranging between 35 and 65 years; 19 had a master's degree, one had a Doctoral degree, and more than half had work experience exceeding 10 years.

Thirdly, nurse leaders (Publication IV) were recruited from four primary and specialised healthcare organisations in central and northern parts of Finland. Nurse leaders who occupied a first-line leadership position (for more than one year) and had experience working with and leading CALD nurses were included in the study. The recruited participants were all front-line nurse leaders, all were Finnish, 11 were female and two male, and their ages ranged from 38 to 63 years-old with a mean age of 46. Participants' experience of working in a culturally diverse group ranged from one to twenty years, with an average of seven years. Three nurse leaders had experience living and working abroad, five were educated up to a master's degree level, and all occupied either positions of ward manager (n=6) or service manager (n=7) within long term elderly care (n=5), home care (n =1), medical wards (n=5) and specialised care units (n=2).

Snowball sampling (Bhardwaj, 2019) was applied in all three studies to recruit the participants. Hence, eligible participants were initially contacted through email and once a participant was successfully recruited, they were asked to suggest further potential participants. This approach helped recruit participants who were best suited to answer this phenomenon. Participant recruitment and data collection were performed by two researchers who used the same questions and interview approach in the spring period of 2021 with CALD nurses and educators and November 2021 - March 2022 with nurse leaders.

A semi-structured interview guide was developed for each publication (II, III and IV) based on themes representing strategies and models of organisational integration of CALD nurses into healthcare settings (Publication I). In the umbrella review CALD nurse integration was structured in three general themes, intra-organisational, sociocultural and professional development themes relating to the integration of CALD nurses into healthcare settings (Publication I). The educators were asked to give additional experiences of educators' support, cooperation, and a description of well-structured model. Additionally, the interviews included open questions by allowing participants to share their experiences related to the three general themes.

Online interviews lasting between 30 to 60 minutes were conducted and audio and video recorded using the Microsoft team's platform. Pilot testing of the interview guide and questions was performed using the first and second rounds of

interviews. These were later included in the study data set because no significant weaknesses in the interview themes were found. Participants were allowed to choose between languages i.e. English or Finnish during the interview sessions. With the CALD nurses, three interviews were conducted in the Finnish language, with the remaining 21 conducted in English. With the educators, three interviews were held in English and 17 in Finnish. With the leaders, three interviews were held in English and ten in Finnish. Pilot testing was done using the first two interviews in all three studies and these were later included in the analysed data. Redundant data saturation was reached in each of the studies (Saunders et al., 2018); hence no further participant recruitment was carried out.

Collected data were transcribed verbatim into 369 pages of raw data with the CALD nurses (Publication II), 440 with nurse educators (Publication III) and 194 with nurse leaders (Publication IV). Transcribed verbatim data were analysed using inductive content analysis (Kyngas et al., 2019). With the belief that every participant in the study had unique experiences, the process of data analysis was guided by the philosophical background of critical realism (Fletcher, 2017). This allowed an understanding of the participants' experiences of integration as CALD nurses into healthcare (Lauzier-Jobin & Houle, 2021). The analysis process started with the researcher reading through the transcribed text and becoming familiar with the data. Meaning units in sentence form were then mapped and copied manually onto an Excel sheet.

With the CALD nurses' data, a total 596 meaning units connected to the research question were established. The meaning units were then arranged through data coding, identifying 359 codes. Following data abstraction, the codes were analysed and categorised based on similarities; a total of 21 subcategories were established during categorisation; eight categories that described CALD nurse experiences of integration into healthcare. With educators, a total 534 meaning units were found, which were then categorised into 345 open codes 29 subcategories, nine categories and three main categories. With the leaders, a total 474 meaning units were found, which were then categorised into 363 open codes, 279 subcategories, 24 categories and seven main categories.

4.3 Phase III. Hypothetical model (Doctoral summary)

The concepts of the hypothetical model have been developed from the study findings in the umbrella review (Publication I), and the qualitative studies (Publications II, III, IV). In all four studies, inductive content analysis was used to

analyse the data with the starting point being the unstructured reality of the studied phenomenon in nursing science and the development of a hypothetical model (Kyngäs, 2019). The interviews were partly guided by defined themes from the first study: the umbrella review. However, the content analysis of qualitative studies was inductive in nature. In the final Phase III, the inductive content analysis of four studies (phase I and II) was synthesised by analysing each article's content analysis categories (Publication I, n=10; Publication II, n=8; Publication III, n=9; Publication IV, n=24; Total n=51), resulting into 11 key concepts of the hypothetical model.

The concepts describing the organisational integration of CALD nurses were presented by the hypothetical model of the studied phenomena and the systematic approach used in all phases of the studies (Kyngäs, 2019). The next steps will be to operationalise the concepts into numerically testable items by developing new instrument/s, collecting qualitative or quantitative data, and statistically testing the concepts' definitions and relationships (Kyngäs, 2019).

5 Results

5.1 Development of the conceptual framework of the hypothetical model of integration of culturally and linguistically diverse nurses into healthcare settings in three research phases

This chapter presents the findings of phase I and phase II which are combined in the development of a hypothetical model of CALD nurse organisational integration in Phase III of this dissertation.

5.1.1 Umbrella review: Integration strategies and models to support transition and adaptation of culturally and linguistically diverse nursing staff into healthcare environments (Publication 1)

The search from five electronic databases returned a total of 13,752 publications including grey literature. After article screening and selection, a total of 27 publications were included, these were then subjected to quality appraisal and were determined to be of good quality hence all were included. Table 3. below presents a summary of the study characteristics.

Table 3. Included study characteristics (n=27).

Type of study	Number of papers	Country of publication (in general)
Integrative reviews	10	Australia (n=7), Japan (n=1), USA (n=5), Canada (n=4), China (n=1), Finland (n=1), Germany (n=2), Hong Kong (n=1), Singapore (n=1), Norway (n=1), United Kingdom (n=2) and New Zealand (n=1)
Systematic reviews	17	

Three main categories were attained that described Integration strategies, models to support transition and adaptation of culturally and linguistically diverse nursing staff into healthcare environments. 1) Intra-organisational strategies and models 2) Sociocultural integration strategies and models and 3) Professional development strategies and models. Overall, the three main categories were composed of 10 categories (Publication I, Figure 2).

(1) Intra-organisational strategies and models; these were tailored specifically to a particular organisation's characteristics and needs. These included organisation and management support and policies, workplace environment, diversity, employee treatment, and collegial and peer support. Organisation and management support

and policies included the following: fair recruitment policies that alleviated downward professional mobility (Montayre et al., 2018), antiracism and antidiscrimination policies that protected CALD nurses against racism and discrimination, as well as policies that promoted diversity in the workforce through for instance, recruitment of more culturally and linguistically diverse nurses to the workforce (Moyce et al., 2016)

Positive integration experience and development of essential competences such as linguistic competence of CALD nurses (Covell et al., 2014) was supported through efficient and supportive management. Managers supported competence development and helped advance equality which then increased the job satisfaction of the CALD nurses (Hyvärinen et al., 2017; Nichols & Campbell, 2010). Healthcare organisations were, however, tasked to support CALD nurse integration through the provision of sufficient resources, a conducive working environment, and developing diversity within the workforce. (Chun Tie et al., 2018; Javanmard et al., 2017; Schilgen et al., 2017). Organisational support for integration helped reduce instances of deskilling and improved integration and retention in the workforce and organisation (Davda et al., 2018).

Workplace environment, diversity and employee treatment were supported through acceptance of workplace cultural diversity and intergroup support (Chun Tie et al., 2018; Javanmard et al., 2017). The provision of conducive working terms, conditions, modalities, arrangements and a conducive workplace atmosphere and environment all improved workplace equality and fair treatment (Hyvärinen et al., 2017; Javanmard et al., 2017; Lin et al., 2018; Ng Chok et al., 2018b ; Pung & Goh, 2017; Viken et al., 2018; Wellard & Stockhausen, 2010; Zhong et al., 2017). A sufficient and supportive workforce helped CALD nurses' competence development, delivery of safe and quality care and their overall work wellbeing (Ng Chok et al., 2018a; Viken et al., 2018).

Collegial and peer support was presented as organised formal and informal relationships (Konno, 2006; Pung & Goh, 2017). Relationships included collegial social interactions and workplace interactions (Ho & Chiang, 2015; Javanmard et al., 2017; Ng Chok et al., 2018a). These social and professional interactions helped nurture acquaintance among nurses and shared cultural experiences. Support from nurses with a similar background (Ghazal et al., 2020; Kawi & Xu, 2009), promoted positive work experience and helped alleviate negative cultural experiences (Abuliezi et al., 2021).

(2) Sociocultural strategies and models; Cultural competency, appreciation of diversity, equality, collegiality, and development of a conducive work environment

were supported through cultural, multicultural and diversity training and support through cultural enhancement programmes, education, and sociocultural training (Abuliezi et al., 2021; Ghazal et al., 2020; Hyvärinen et al., 2017; Ng Chok et al., 2018b; Nichols & Campbell, 2010; Schilgen et al., 2017). The provision of a prolonged cultural orientation, induction and enhanced cultural sensitivity enabled social engagements, intercultural communication, cultural awareness, positive racial experiences, and further promoted integration in the work community (Lin et al., 2018; Moyce et al., 2016; Pung & Goh, 2017; Viken et al., 2018;). Provision of support for cultural awareness, intercultural support and cultural learning for the local workforce helped alleviate stereotyping and misperceptions, and promoted a multicultural workplace and workforce, which further enhanced positive social and professional relationships (Chun Tie et al., 2018; Javanmard et al., 2017).

Social support and friendship promoted through the provision of social amenities enhanced the acculturation to the host community, improved CALD nurse perception of the healthcare organisation, reduced isolation and had an overall positive effect on nurses' quality of life (Chun Tie et al., 2018; Covell et al., 2016; Lin et al., 2018; Moyce et al., 2016; Zizzo & Xu, 2009). Organised friendly relationships and friendships supported effective professional nursing practice and promoted wellbeing (Konno, 2006; Pung & Goh, 2017; Schilgen et al., 2017). Collegial social activities, peer interactions and engagements also increased CALD nurses' cultural adaptation, linguistic, communication and intercultural competencies (Javanmard et al., 2017; Lin et al., 2018). Language and communication developed through organisational supported language learning and helped CALD nurse acquire professional language competence (Kawi & Xu, 2009; Khan-Gökkaya et al., 2019), learning of the local language and use of CALD nurse rich linguistic capabilities in the delivery of care within the healthcare organisation (Cruz et al., 2017; Hyvärinen et al., 2017; Konno, 2006). Communication learning helped nurses to learn cultural communication and cushioned communication induced challenges (Ho & Chiang, 2015; Zizzo & Xu, 2009).

Personal skills were developed within a healthcare workforce through self-skills training geared for instance towards establishing openness and a welcoming attitude from local nurses toward CALD nurses (Hyvärinen et al., 2017). Development of personal qualities such as resilience, confidence, determination, and hope helped CALD nurses overcome adaptation and transition challenges, and enhanced their confidence, independence, and work satisfaction (Ghazal et al., 2020; Moyce et al., 2016; Zhong et al., 2017). Support for personal qualities of culturally and linguistically diverse nurses also boosted their morale, self-worth

and supported their development within a healthcare organisation (Ng Chok et al., 2018b).

(3) Professional development strategies and models; involved CALD nurse licensure and orientation to work with a focus on gaining rights of practice. Licensure was supported through organisational support for licensure, certification, and competence recognition (Covell et al., 2016; Kawi & Xu, 2009). Provision of important certification and licensure information (Abuliezi et al., 2021; Covell et al., 2014; Ho & Chiang, 2015) and allowing extra time for certification and licensure exams was important (Abuliezi et al., 2021). At the workplace, efficient orientation to work occurred through personalised transition and orientation (Chun Tie et al., 2018), continuous individualised orientation (Pung & Goh, 2017), tailored orientation (Javanmard et al., 2017), practice transition and adaptation (Davda et al., 2018; Konno, 2006; Primeau et al., 2014), and support for professional integration (Covell et al., 2016).

Organised orientation to work and the scope of practice, and organisational supported and prolonged orientation helped culturally, and linguistically diverse nurses attain cultural, professional, and linguistic competences. These strategies and models also allowed the nurses to become self-reliant, accepted as part of the workforce, promoted and achieve work satisfaction (Chun Tie et al., 2018; Covell et al., 2014; Cruz et al., 2017; Javanmard et al., 2017; Kawi & Xu, 2009; Khan-Gökkaya et al., 2019; Lin et al., 2018; Moyce et al., 2016; Primeau et al., 2014; Pung & Goh, 2017; Viken et al., 2018; Xu, 2007; Zhong et al., 2017). Career and competence development of CALD nurses were supported through recognition of their prior competence (Covell et al., 2016; Covell et al., 2014; Cruz et al., 2017; Davda et al., 2018; Nichols & Campbell, 2010; Ng Chok et al., 2018a; Ng Chok et al., 2018b; Primeau et al., 2014; Wellard & Stockhausen, 2010) acquisition of new competences and development of existing competence (Ng Chok et al., 2018b). Healthcare organisations supported competence acquisition through training (Ho & Chiang, 2015), learning support (Zhong et al., 2017) and by offering opportunities for career development (Cruz et al., 2017).

Workplace mentorship and preceptorship, in the form of mentorship in work, helped CALD nurses adapt to the host organisation, utilise their skills, gain professional and linguistic competences, and derive satisfaction from their work (Chun Tie et al., 2018; Covell et al., 2014; Javanmard et al., 2017; Lin et al., 2018; Primeau et al., 2014; Pung & Goh, 2017; Xu, 2007; Zizzo & Xu, 2009).Peer mentorship was found to improve nurses' feeling of acceptance (Ghazal et al., 2020). Effective mentorship and interaction with colleagues had a positive impact on

adaptation and facilitated rapid integration into the organisation (Kawi & Xu, 2009). Integrated mentorship and preceptorship not only helped adaptation to the host healthcare system but also allowed CALD nurses to utilise existing competences and skills (Ho & Chiang, 2015; Khan-Gökkaya et al., 2019; Montayre et al., 2018; Primeau et al., 2014; Viken et al., 2018; Zhong et al., 2017).

5.1.2 Qualitative studies: the integration of culturally and linguistically diverse nurses into the nursing workforce and healthcare settings (Publication II -IV)

Culturally and linguistically diverse registered nurses' experiences of integration into nursing workforce (publication II)

Eight categories describing the integration experiences of CALD nurses into the nursing workforce were defined as: (1) Othering and belonging; (2) Language challenges and skill development; (3) Work orientation; (4) Relationships; (5) Racial/ethnic experiences; (6) Intra-organisational support; (7) Professional competence development; (8) Safe work environment. These categories were generated from 22 sub-categories (Publication II, Table 1).

While expressing their experiences of othering and belonging CALD nurses expressed that before feeling that they were part of the nursing team and workforce, the nurses experienced disregard, mistrust, and misperceptions. In these instances, their competence was judged, and they had to prove themselves. Disregard was highly noted in instances of language challenges, and this led to mistrust of clinical skills that had a negative effect on teamwork and relationships. Mistrust was experienced by CALD nurses to have caused nursing role limitations and unnoticed appreciation of their contribution within the team and organisation. Initial misperceptions of CALD when they entered the workforce were experienced to be largely due to stereotypes that caused a negative reception and treatment in the workplace which made the nurses feel as if they were second to native nurses.

Language competence necessitated smooth communication and efficient completion of nursing tasks. In instances of language challenges CALD nurses expressed a feeling of diminished wellbeing, isolation, negative social experiences, and feelings of incompetence. This was further attributed to limited access to opportunities, discrimination and retaliation from native colleagues, limited career development and career satisfaction. Language learning according to CALD nurses

could have occurred better in the workplace and through interaction with colleagues, patients, and their families. Organisational support through arranging language courses that were well structured and scheduled could have further helped in CALD nurse language learning.

Orientation to work was expressed as induction and mentorship in roles, duties, the work community, and clinical contexts. A good induction offered confidence and helped alleviate a feeling that CALD nurses were abandoned and had to rely on themselves at the organisation and work unit. Colleagues played a crucial role in inducting them into the work unit as CALD nurses experienced that this helped avert work-related errors. Further, mentorship was essential for a smooth and efficient integration into work and the organisation, the development of competences, and work learning.

CALD nurses formed relationships with colleagues, patients, and families. Positive collegial relationships were essential for integration, this is due to workplace friendships providing an alleviation of isolation, respect, trust, acceptance and recognition in the work unit and team. Moreover, collegial relationships at the workplace promoted efficient communication, the perception of fair treatment, strong teamwork, efficient problem-solving, integration, as well as the feeling of being welcome, appreciated, and understood. CALD nurses experienced that family members at times preferred native nurses largely due to their mistrust of the CALD nurses' professional and language competences coupled with racial and cultural background differences. On the other hand, the patient's open-mindedness allowed CALD nurses to efficiently carry out their duties and enabled more interactive communication and positive patient feedback encouraged CALD nurses and increased their confidence.

Racial and ethnic experiences were experienced by CALD nurses as discrimination, racism, and cultural insensitivity. Discrimination from colleague's patients and managers meant that CALD nurses experienced low social interactions, were ignored, offered unequal duties and work terms. Managerial inaction in tackling discrimination was also perceived as a form of discrimination that affected multiple aspects of work life and interactions within the work environment. Racism was experienced from colleagues, patients, family, and other staff. Aspects such as food preferences, skin color and linguistic competence led to racism that further negatively affected the work environment and lead to discrimination in the workplace. Collegial cultural interactions helped build collegial cultural support, as well as respect for cultural values, cultural interest, cultural openness, and cultural acceptance. Cultural accommodation, multicultural educational training,

and cultural orientation were reported to potentially help both interpersonal and professional cultural learning, respect, and tolerance for other cultures, the alleviation of prejudiced cultural perceptions, and cultural accessibility.

Within the healthcare organisation, CALD nurses experienced that nurse managers played an important role in their integration. Nurse managers helped build connections between CALD and native nurses, resolved conflicts and fostered competence development and continuous education. Support, guidance, patience, and understanding from a nurse manager was perceived as critical to enhancing professional development. Organisational support in the form of social support activities, acceptance of CALD nurses, provision of special support, and the retention of employees was experienced to support integration.

Professional competence development for CALD nurses was experienced to be hampered by deskilling which assumed two forms i.e., nurses were either given practical nurse roles or in extreme cases were employed as nurse assistants. Deskilling led to a further undervaluing of CALD nurses' competence. The work environment as experienced by the CALD nurses was conducive and safe when it was composed of a positive work atmosphere and an environment in which nurses felt welcomed, respected, and appreciated. A conducive work environment was also expressed to be free of bullying and where action was taken in such instances. Such activities as organised social gatherings outside of work, teamwork at the workplace, and a high degree of receptiveness from the native nurses promoted a positive work atmosphere, and built confidence, improved the work environment, and facilitated integration into the workforce.

Nurse educators' views of integrating culturally and linguistically diverse future registered nurses into healthcare settings (Publication III)

Three main categories describing the views of nurse educators on integrating culturally and linguistically diverse future registered nurses into healthcare settings were identified; (I) Pre-graduation; (2) Strategies to support integration into healthcare; (3) post-graduation. The main categories included nine categories and 29 sub-categories (Publication III, Table 1).

Nurse educators discussed pre-graduation as a phase where CALD nurses enter a healthcare organisation before graduating. This form of organisation entry was partly due to clinical practicums that exposed future CALD nurses to early cultural adaptation, Finnish culture, care culture, nursing roles and the healthcare system. During this phase healthcare organisations had an opportunity to prepare the future

CALD nurses for transition to the workforce through for instance, prolonged orientation. Within the pre-graduation organisation entry phase CALD nurses also engaged in temporary and periodic employment within organisations and formed part of the nursing workforce, this provided them an opportunity for language learning and integration into a professional community.

Integration of the CALD nurses within the organisation was also required by the healthcare organisations cooperation with other stakeholders such as; cultural centres, religious organisations, municipalities, social welfare organisations, the third sector, along with recruitment and employment agencies. These stakeholders together with the organisation made CALD nurses feel welcomed, enabled the provision of social amenities, integration into society and organisation.

Within the organisation, certain strategies were adopted to aid the integration of CALD nurses. Nurse educators considered that workplace strategies were largely based on the workplace structure and environment, culture, support from management, induction, along with peer and mentor support. Positive reception at the workplace, openness and successful inter relationships enhanced the workplace environment and made CALD nurses feel welcomed into the profession and work community.

CALD nurses, experience of a conducive workplace atmosphere, when coupled with positive feedback, made them feel valued, accepted, and supported; this further enhanced workplace comfort. Educators experienced that workplace strategies such as extra support, equal treatment and fair remuneration helped leverage adaptability and organisations were to avert CALD nurse vulnerability by motivating, supporting, and recognizing these professionals by making them feel important and useful within the workforce.

While discussing cultural diversity nurse educators felt that there was a need for cultural openness, understanding, sensitivity, recognition of diversity and efficient management and leadership that foster acceptance of cultural diversity within the ward, work community and healthcare organisations. Building a conducive environment was essential as it enabled CALD nurses ease of practice. Workplace supported acculturation through social events and cultural activities allowed for integration into the local culture and society. A cultural conducive environment was enabled by organisational cultural adaptation assessment and support, cultural interactions, genuine interest in cultural diversity and cultural understanding and accommodation. In such an environment managers showed their support through a positive attitude and valuing culturally and linguistically diverse

nurses. Managers helped create a conducive work environment and helped competence development of CALD nurses.

Nurse educators viewed induction as essential for CALD nurse assumption of roles and practicing nursing. Effective induction needed to be largely tailored to individual needs as it promoted the feeling that nurses were well supported at the workplace and helped model a positive attitude. A prolonged, instructed, evaluated, well-arranged induction with a named inductor and audited induction process was viewed by educators as crucial to building self-confidence and resilience. Organisational support for induction was vital as this allowed adaptation to roles, improved nurses' competence and promoted career development. Welcoming CALD nurses into the workplace and providing them with mentoring enhanced feelings of belonging and allowed collegial assistance. Mentorship helped nurses integrate into the work unit, overcome language challenges, and develop competence. Where peer mentorship was utilised, it was related to strong peer friendships, shared experiences that helped develop social relationships and peer networking.

The participating nurse educators highlighted language competence as an integral skill in the smooth integration of CALD nurses. Low language competence was viewed to affect nurse –patient relationship, limit career choices, decrease career mobility and slow the integration process. Linguistic competence coupled with cultural and work competence were essential to integration. Organisations should be ready to receive and integrate CALD nurses. This organisational preparedness was viewed by educators to be lacking due to low resources and unstructured support and integration process. It was the view of educators that a well-structured integration process would improve positive experiences by meeting personal needs as well as improving feelings of equality, delivery of safe care due to strong language and nursing competence, work well-being, self-belief, use of special competences, career development and eventual intention to stay for CALD nurses.

Nurse leaders' experiences of integrating culturally and linguistically diverse registered nurses into healthcare settings (Publication IV)

Seven main categories form from the nurse leaders' experiences of how culturally and linguistically diverse registered nurses integrate into healthcare settings: (1) Leadership; (2) Organisational strategy and culture; (3) Support strategies; (4) Relationships and interactions; (5) Nurse competence requirements and

development; (6) Language competence; (7) Cultural diversity and competence development. The main categories included 24 sub-categories (Publication IV, Table 1).

Nurse leaders' experiences of leadership of the CALD nurse integration process related to the roles, experiences, competence, and leadership style of a nurse leader. Support from nurse leaders involved; a review of competence, aligning work roles to competence, and support for workplace learning and competence development through arranged workplace education, learning opportunities and support. Nurse leaders' experienced that through effective leadership they formulated workplace regulations, established a conducive work culture, resolved workplace conflicts, and helped alleviate negative practices such as racism. Leadership roles according to nurse leaders required the adoption of diverse approaches such as equality, justice, advocacy, and organizing of integration enabling activities. Nurse leaders experience with CALD nurses helped build leadership competence through orienting CALD nurses into their work and the organisation, meeting their leadership expectations through the utilisation of feedback, and development of cultural competence to manage diverse nurses.

Organisational culture was an important factor in the integration. Nurse leader's experiences demonstrated that an organisation that fostered equality, offered equal roles, job security, opportunities to learn and develop, positive relationships, and support from colleagues made CALD nurses more satisfied with their work. CALD nurses were important to the workforce as they enriched the workplace and care culture, brought diverse linguistic capabilities, and enhanced the care of culturally and linguistically diverse patients. An organisation that had structured integration for CALD nurses would be able to match culturally and linguistically diverse nurses' competence to work demands, and to develop specialised ways of supporting how culturally and linguistically diverse nurses integrated into their workplaces.

Strategies to support integration were reported by the nurse leaders to be structured workplace support, mentorship, and induction coupled with unstructured peer and collegial support. Induction, oriented culturally and linguistically diverse nurses to the organistion, work community, and roles, and enhancing their competence. Collegial support enabled CALD nurses to settle in by offering teamwork support and creating a supportive work environment. While peers acted as role models, shared experiences, and provided comfort for CALD nurses within the work unit. Nurse leaders experienced those interactions and relationships with colleagues, patients, and families affected how CALD nurses integrated. Thus,

positive collegial relations helped to establish friendships, supported cultural openness, and enhanced collegial support, while interactions with patients and families helped acceptance of CALD nurse.

Nurse educators experienced that CALD nurse competence requirements were at the organisational and ward levels. At the organisational level, like all nurses, they were required to have nursing competence, sufficient language skills, and be licensed to practice. While at the ward level there were expectations of competencies such as knowledge of care culture, care process, communication skills, positive and personal skills. In an organisation where CALD nurses were allowed to rotate onto different wards, helped obtain medication and safety licenses, and opportunity for courses focused on theoretical competence, nurse leaders experienced that this allowed the nurses to develop within such an organisation.

Nurse leaders experienced that at the ward level the language proficiency of CALD nurses needed them to possess language competences related to speaking, reading, writing, and understanding at almost native level. It was however viewed that a universal understanding of required language competence could have helped alleviate variance in assessment. Due to language limitations, leaders experienced that the scope of CALD nurse work was sometimes limited which in some instances, culminated in lower levels of development within the organisation. Language development was to be supported at organisational and collegial level through the CALD nurses' performance of daily work routines and duties, workplace interaction, and language guidance from colleagues and leaders.

While discussing cultural diversity and competence development, nurse leaders viewed that there were occasions where cultural diversity negatively influenced workflow, teamwork, and workplace interactions. In these instances, mutual cultural adaptation and cultural competence would have helped develop positive cultural attitudes, understanding of work culture, and foster cultural interaction. The abilities and personal qualities of CALD nurses were also observed by nurse leaders as important factors for their integration. Nurse leaders experienced those attributes such as resilience, flexibility at work, courage to communicate, aspirations for career development, and a positive attitude helped integration.

5.2 Hypothetical model of integration of culturally and linguistically diverse nurses into healthcare settings

A hypothetical model describing the integration of CALD nurse into healthcare environments was built based on Phase I and II studies, including an umbrella review (Publication I) and the empirical studies of CALD nurses, nurse educators and nurse leaders (Publications II – IV). To ensure that the concepts of the hypothetical model were a representative of the findings of previous phases I and II, an inductive content analysis of the data leading to the findings in previous phases was conducted. This process ensured the harmonisation of results from the studies and the generation of new findings representing a hypothetical model of CALD nurse organisational integration. The 11 main categories presented new concepts relating to CALD nurse organisational integration. Further the concepts were mapped through the main findings of publication(I-IV) to ensure that the concepts represented previous phases, and no data were lost during hypothetical model development (Table 4).

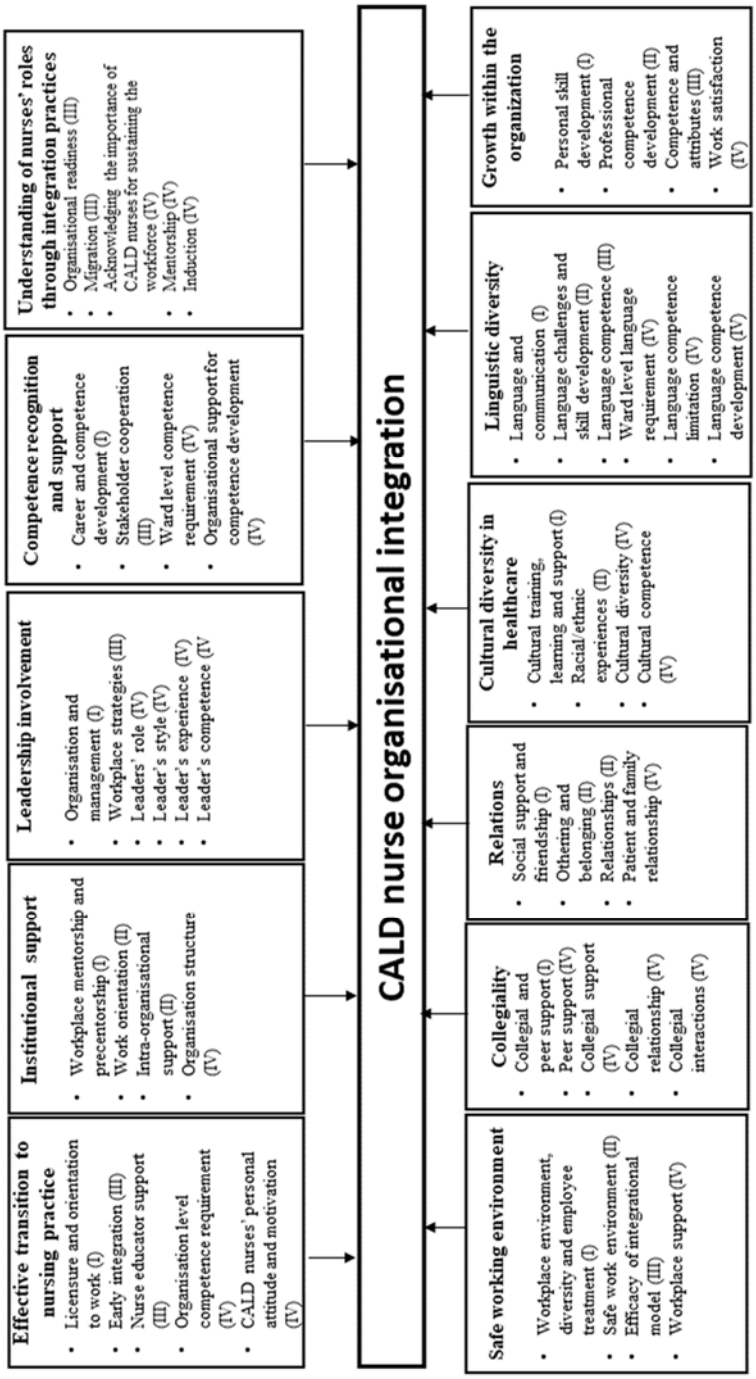
Table 4. Identified key concepts in the hypothetical model.

Categories of content analysis publications I-IV	Key concepts
Licensure and orientation to work (I)	Effective transition to nursing practice (I, III, IV)
Early integration (III)	
Nurse educator support (III)	
Organisation level competence requirement (IV)	
CALD nurses' personal attitude and motivation (IV)	
Workplace mentorship and precentorship (I)	Institutional support (I, II, IV)
Work orientation (II)	
Intra-organisational support (II)	
Organisation structure (IV)	
Organisation and management (I)	Leadership involvement (I, III, IV)
Workplace strategies (III)	
Leaders' role (IV)	
Leader's style (IV)	
Leader's experience (IV)	
Leader's competence (IV)	
Career and competence development (I)	Competence recognition and support (I, III, IV)
Stakeholder cooperation (III)	
Ward level competence requirement (IV)	
Organisational support for competence development (IV)	

Categories of content analysis publications I-IV	Key concepts
Organisational readiness (III)	Understanding of nurses' roles through integration practices (II, IV)
Migration (III)	
Acknowledging the importance of CALD nurses for sustaining the workforce (IV) Mentorship (IV)	
Induction (IV)	
Workplace environment, diversity and employee treatment (I)	Safe working environment (I, II, III, IV)
Safe work environment (II)	
Efficacy of integrational model (III)	
Workplace support (IV)	
Collegial and peer support (I)	Collegiality (I, IV)
Peer support (IV)	
Collegial support (IV)	
Collegial relationship (IV)	
Collegial interactions (IV)	
Social support and friendship (I)	Relations (I, II, IV)
Othering and belonging (II)	
Relationships (II)	
Patient and family relationship (IV)	
Cultural training, learning and support (I)	Cultural diversity in healthcare (I, II, IV)
Racial/ethnic experiences (II)	
Cultural diversity (IV)	
Cultural competence (IV)	
Language and communication (I)	Linguistic diversity (I, II, III, IV)
Language challenges and skill development (II)	
Language competence (III)	
Ward level language requirement (IV)	
Language competence limitation (IV)	
Language competence development (IV)	
Personal skill development (I)	Growth within the organization (I, II, III, IV)
Professional competence development (II)	
Competence and attributes (III)	
Work satisfaction (IV)	

The proposed hypothetical model (Figure 1) is based on the identified key concepts and shows that CALD nurse organisational integration is supported by 11 concepts described as: (1) *Effective transition to nursing practice* which is defined by CALD nurse transition to work, licensure to practice nursing, role of nurse educators in supporting the integration process and personal attributes of the CALD nurse. (2) *Institutional support,* which entails the support from nurse leaders and managers,

support from the organisation and organisational readiness towards CALD nurse integration support. (3) *Leadership involvement* describes integration through a leader's experience with a CALD nurse and leadership competence and awareness. (4) *Competence recognition and support* are presented as organisational and ward-level competence demands, recognition of existent competence and ward-level development of CALD nurse competence. (5) *Understanding of nurses' roles through integration practices,* this process includes the application of orientation and induction to nursing work and the use of mentorship and preceptorship approaches. (6) *A safe working environment entails workplace equality and justice, a supportive atmosphere which is free of racism and discrimination, coupled with the existence of organisational-wide* policies on racism and discrimination. (7) *Collegiality,* which means CALD nurse integration through collegial support, support from peers, social support, friendships and teamwork. (8) *Relations* are described as professional trust and relationships with patients and families, which may also affect the integration process. (9) *Cultural diversity in healthcare* signifies the existence of cultural competence, cultural support, and cultural management as key aspects. (10) *Linguistic diversity* means language challenges, ward and organisational level language demands and the need to develop CALD nurse language competence. (11) *Growth within the organisation* represents CALD nurse's positive impact on the workforce, work satisfaction and career development.



I* Publication (I,II,III,IV)

Figure 1. Hypothetical model of CALD nurse organisational integration.

6 Discussion

This section presents the results of the dissertation and the key concepts of the hypothetical model of CALD nurse integration into healthcare environments. A discussion of new findings and addition to previous literature in integration of CALD nurses into healthcare environments is then presented. In the final part of this section, ethics and trustworthiness of study Phases I, II and III are presented.

6.1 Discussion of results

The hypothetical model of CALD nurse integration presented in this study shows CALD nurse integration into healthcare environments as a process which is structured around eleven concepts. As a process, the hypothetical model presents concepts that show CALD nurse pre-organisation entry, up to CALD nurse growth within the organisation. This conforms to the four-phases: anticipatory, encounter, adjustment, and stabilisation of socialisation (Wanberg, 2012).

To explain these phases and their relations to the hypothetical model of CALD nurse integration, CALD nurses undergo a process of transition to the healthcare environment, which is *anticipatory* as they may already know nursing work, and may have prior interaction within healthcare environments either in their academic journey or through temporary work pre-graduation and hence have an idea of what might be expected within a healthcare environment (Gan,2021). In addition, they may have formed prior personal attributes essential to support integration (Kinghorn et al., 2017). Second is the encounter phase, within which these CALD nurses enter the organisation and start to experience institutional, and ward-level demands for competence together with recognition and support (Gan, 2021). At this level, the institution and leadership support are crucial (Tomietto et al., 2015).

Third, CALD nurse *adjustment* to their roles and the organisation are supported as regards the understanding of nurses' roles through integration practices for instance induction and mentorship (Eriksson & Engström, 2018; Paatela et al., 2023). Further, their adjustment to roles is supported by enjoying a safe working environment conducive for practicing nursing (Azar at al., 2016). Fourth, CALD nurse *stabilisation* is a phase where the CALD nurse enjoys a sense of belonging to the organisation and is well integrated hence may experience growth and may have an intention to remain as part of a healthcare organisation (Tomietto et al., 2015; Tucker et al., 2019).

However, when the process of CALD nurse integration is sequenced within the four phases, their cultural and linguistic diversity is not entirely accounted for, even when the proposed hypothetical model shows that cultural and linguistic diversity may affect the integration process and may affect the collegial atmosphere within a healthcare environment. Hence the proposed hypothetical model of CALD nurse integration attends to what Ashforth et al. (2007) referred to as a lack of attention to cultural and international workforce aspects within organisational socialisation theories. Hence, the hypothetical model of CALD nurse integration posits that the process of integration is affected by cultural and linguistic factors, which may further affect collegiality and relationships and influence integration.

Further, the hypothetical model of CALD nurse integration may fit into the framework of Taormina (1997) of organisational socialisation, which consists of four domains: training, understanding, co-worker support and future prospects. In the proposed hypothetical model, the effective transition of CALD nurses into nursing practice, competence recognition and support are like the *training domain* where CALD nurses are prepared through formal and informal processes i.e. formal training in education and healthcare institutions and informal learning, for instance, shadowing during clinical learning, to gain competences fit for a nursing career. Once in the organisation, CALD nurse competence is re-evaluated, and areas of development are identified and supported.

The *understanding domain* entails CALD nurses understanding the roles of nurses through integration practices. As Taormina (1997) states, understanding is essential for employees to perform their roles effectively. For CALD nurses, being inducted, mentored, precepted and oriented to work is essential not only for role learning but also for gaining information and competence with regard to efficiency when operating within a healthcare environment. Understanding is viewed as a continuous process (Taormina, 1997). Hence, initial understanding at the organisational entry for CALD nurse might be low, and as they are supported through integration practices, their understanding increases over time.

Co-worker support is achieved through what is referred to as collegiality, a safe working environment and relationships in the proposed hypothetical model of CALD nurse integration. It is implied that to support integration, collegial support through, for instance, social support, friendship, and teamwork, offer both moral encouragement and material social support; these are achieved through individual relationships within the organisation (Taormina, 1997).

Lastly, in the hypothetical model of CALD nurse integration, growth within the organisation is viewed as the ultimate level of a CALD nurse's successful

integration. Here, a CALD nurse enjoys a positive impact on the workforce and work satisfaction and can foster career development. Taormina (1997) refers to this stage as *future prospects*, where an employee anticipates a rewarding career within the organisation and entails aspects such as employee recognition and future roles.

Concepts representing a hypothetical model of CALD nurse organisational integration.

Effective transition to nursing practice

The hypothetical model presents an effective transition to nursing practice as the starting point of organisational integration for CALD nurses (Publication I, III, IV). Effective transition to nursing practice has been established to be important for nurse competence recognition and competence support (Phillips et al., 2014; 2015). In previous research, for instance, Philips et al. (2014) found that new nurse graduates needed recognition of their competence level during the transition, which was matched with work allocation and adjustments as nurse competence developed over time.

Nurse educators who participated in this study expressed that organisations set high nursing and linguistic competence demands for CALD nurses as they entered working life; this further affected effective transition to work (Publication III). Benners, from novice to expert model (Benner, 1982) may be used to explain an effective transition and integration where at transition, the CALD nurse is at novice level, and recognition of their competence at organisational entry and support helps mobility to expert level. In examining organisational socialisation and turnover intention for new nurses within the first two years, Tomietto et al. (2015) established that at transition, newcomer nurses had priorities, and the topmost priority was to strengthen competences that helped meet their nursing roles and duties and other needs for instance becoming an insider were experienced later during socialisation. Hence, an effective transition to nursing may help solve the challenge noted by nurse educators where CALD nurses migrated to bigger cities as they felt they could practice nursing even where language challenges were experienced, and healthcare organisations were more experienced and resourced towards helping CALD nurse integration.

Effective transition to nursing practice is also supported by nurse educators as established in the hypothetical model (Publication III). Previous research has linked

nurse educator support to help the effective anticipatory phase of organisational socialisation for new nurses as they transition (Teoh et al., 2013). Kramer (1974) found that anticipatory practices during nursing education helped alleviate reality shock. Well-prepared nurses integrated well into the organisation and showed higher job satisfaction (Kramer, 1974; Sitterding et al., 2018). This finding supports the experience of nurse educators who participated in this research (Publication III). The nurse educators experienced that they supported the anticipatory phase both through the provision of education at learning institutions and in clinical learning environments; this support was experienced by nurse educators to help transition, integration and curb migration to bigger cities (Publication III).

Transition and reality shock are major components of organisational socialisation if not properly managed (Duchscher & Windey, 2018), and this is even more true among CALD nurses, as their transition into an organisation is also combined with a transition into a new culture. This study established that nursing education has an important role in anticipating the organisational transition and socialisation as experienced by nurse educators (Publication I, III).

Organisational integration for CALD nurses starts during their education. Nurse educators viewed that this is because at this stage the CALD nurse as a student interacts with a healthcare organisation through clinical practice and periodic nursing jobs hence, the CALD nurse may already develop skills, attributes, and perceptions that support future integration into a healthcare environment (Houghton, 2014; Mikkonen et al., 2017; Tomietto, 2018). For CALD nurse students, this is a phase in their integrational journey as they begin to understand care culture, work culture, and professional language, and interact with patients and families, hence supporting their practice context competence development within the country, culture and language of practice (Isakov et al., 2023; Ropponen et al., 2023). For nurse educators, interviewed in this research, experienced that adopting pedagogical approaches for instance where local and CALD future nurses learnt together helped the learning of language, care culture, forming interpersonal skills and prepare for a culturally diverse profession and workplace (Publication III).

Due to development in the use of technology in nursing education (Hwang et al., 2022; Plotzky et al., 2021), educators use of digital technologies has also been established to assist in nurse transition support. While examining the effectiveness of extended immersive ward-based simulation, Davies et al. (2021), found that this increased nurse students' clinical confidence, increased role adaptation competence, communication and interpersonal competences which were essential for anticipatory integration. Sitterding et al. (2018) examined a new nurse-supported

transition using Artificial Intelligence (AI) and Gaming; this approach was found to anticipatorily prepare the nurses by enhancing their cognitive, psychomotor, and organisational learning competencies. Hence, if a CALD nurse is well prepared for the transition, this may avert negative experiences caused by transition and reality shock (Duchscher & Windey, 2018; Kramer, 1974; Sitterding et al., 2018) and support their integration.

The proposed hypothetical model also shows that, beyond educator support and an adequate transition preparation, licensure to practice nursing and CALD nurses' personal attributes may support effective transition to the organization (Publication I, IV). Licensure has been defined as verification of education, tests, and training before transitioning to employment (Shakya et al., 2022). Timely licensure has been found to support nurses' right to practice and efficient transition (Lai et al., 2023). In this study, licensure was found to be a strategy towards supporting CALD nurse integration and a part of professional development (Publication I). Strategies to support licensure and certification included provision of information and time to gain licensure offered by organisations. Previous research has found that occupational licensure affects the supply, quality and practice rights of workers who transit to organisations (Bryson & Kleiner, 2019). Hence, support for CALD nurse licensure is essential towards effective integration, as shown in the hypothetical model, and may allow CALD nurse anticipatory integration and help effective transition.

Newcomer personal attributes, for instance, proactive behaviour (Parker & Collins, 2010), the ability to seek information and feedback and build relationships (Bauer et al., 2019), have been found to help organisational socialisation. For instance, nurse educators in this research experienced that CALD nurse individual competencies, such as work competence, which was explained as ability and interest in work, positive attitude and motivation, appealed to healthcare organisations (Publication III). Bauer and Erdogan's (2011) model of organisational socialisation show that a new employee's positive characteristics and behaviours affect how they integrate, attributes such as active participation in the integration process, information seeking, openness and ability to relate with others are essential for a positive integration experience (Bauer & Erdogan, 2011; Bauer et al., 2019). Proactive behaviour is anticipatory and entails self-initiative (Bauer & Erdogan, 2011; Parker & Collins, 2010); this can be compared to the finding in this research that among strategies and models of CALD nurse organisational integration, development of personal skills such as resilience, confidence and determination help integration (Publication I, III, IV). Hence, a CALD nurse's

personal characteristics and behaviours may help efficient transition and integration as proposed by the CALD nurse hypothetical model.

Institutional support

The proposed hypothetical model of CALD nurse organisational integration proposes that support from nurse leaders and managers, support by the organisation and organisational readiness are important towards helping integration. Leaders in this research were established to play a crucial role in CALD nurse integration (Publication I, II). For instance, it was found that strategies and models that support CALD nurse integration included leadership and management support (Publication I). On the other hand, interviewed CALD nurses and leaders experienced leadership as an essential determinant of integration (Publication II, IV). Leaders experienced that a leader's roles, experience, competence, and leadership style were all related to how CALD nurses integrated (Publication IV). Jokisaari and Vuori (2018) have examined the intersection between resources at a leader's disposal and newcomer organisational integration. Their findings show that the relations between a leader and the organisation support the integration of a newcomer, and for instance, leaders in organisations where higher leadership autonomy is promoted leaders can support newcomers' integration better.

Druker (2012) defined the structure of a healthcare organisation as complex. This hierarchy is embedded in how roles are divided and the training culture of healthcare workers (Colenbrander et al., 2020). Within the organisational hierarchy, the organisational support for CALD nurses through nurse leaders and managers is essential, as suggested by the hypothetical model. Hence, the organisational provision of resources and training for managers as regards their competence development would filter down to the way they manage and support the integration process of newcomer CALD nurses (Milner et al.,2018; Warshawsky et al., 2020)

Organisational readiness, for instance, where an organisation utilises pre-planned and structured strategies, policies and regulations for socialisation, helps the adjustment of CALD nurses. Organisations can support integration through structuring formal tactics within the organisation's structure (Mornata & Cassar, 2018). However, interviews with CALD nurses and nurse leaders revealed that many organisations were not ready to integrate CALD nurses (Publication II, IV). Nurse educators, for instance, evaluated organisational readiness to be lacking since resources and strategies to integrate CALD nurses were not in place, and even some organisations were unwilling to employ CALD nurses in their workforce

(Publication III). Findings from the research study with CALD nurses revealed that they experienced organisational support as important towards integration and competence development, but this support was missing in many instances (Publication II). In a three-phase organisational socialisation model, Bauer and Erdogan (2011) proposed organisational input in the first phase of socialisation as important. Even though organisations' use of strict formal, structured tactics has been associated with possible limitations to a newcomer's creativity (Perrot et al., 2014; Saks et al., 2007). Evidence shows that organisation support through individualised and institutionalised socialisation approaches helps newcomers' efficient adjustment to their role and organisation (Bauer & Erdogan, 2011; Perrot et al., 2014 ; Taormina, 1997). In this way if CALD nurses were to be supported by a healthcare organisation during their initial phase of integration, this would help their adjustment to the organisation.

Leadership involvement

The hypothetical model proposes that leadership involvement is composed of a leader's experience with CALD and leadership competence and awareness (Publication I, II, IV). Previous research has associated a leader's transitional support with a newcomer's competencies and becoming an organisational insider (Hussein et al., 2017). Nifadkar and Wu (2022) have elaborated that leaders are integral to a newcomer's successful integration. However, where leaders feel a lack of work-related information or are unsatisfied with higher-ranking leadership, this may affect the support offered to newcomers towards their development and organisational citizenship and adversely affect organisational integration (Nifadkar & Wu, 2022). While examining the workplace integration of CALD nurses, Ramji and Etowah (2018), in their findings, showed that leadership equity allowed extra support for CALD nurses, while leaders' sensitivity to CALD nurse needs was essential towards meeting developmental needs. This finding connects to the experiences of CALD nurses in this research, which showed that a leader with a positive management culture, diversity in leadership teams, a supportive attitude, low leadership discrimination, and feedback from leaders positively helped integration (Publication II). Further, leaders are integral to supporting the learning and professional development of CALD nurses since they charter the way towards the development of CALD nurse careers post-transition (Ramji & Etowa, 2018).

The proposed hypothetical model shows that leaders' experience and their relationship with CALD nurses at the organisational level are essential components

of how leaders may support the integration process (Publication IV). In the hypothetical model of CALD nurse integration, it is proposed that the involvement of leaders and the development of their competence may help CALD nurse integration. This finding is similar to the experiences of leaders in this research, whereby interviewed nurse leaders experienced that a leader's lack of experience with CALD nurses affected their ability to help their integration (Publication IV). Leaders are influential in the organisational hierarchy and can affect integration (Druker, 2012; Kammeyer-Mueller & Wanberg, 2003). It has been established that building affect-based trust between a leader and the newcomer affects their psychological bond with an organisation (Lapointe et al., 2014). Moreover, the interaction between a leader and a newcomer supports integration (Ashforth et al., 2007; Korte et al., 2015). Interviewed CALD nurses reported the crucial role that leaders play in their integration as they unify the diverse workforce, solve conflicts, helped competence development and continuous learning (Publication II). Nurse educators viewed a nurse leader's role as necessary towards helping CALD nurses develop within an organization (Publication II).

Previous research has established that leadership involvement in CALD nurse integration benefits from the leader's competencies, for instance, knowledge management, diversity management and formal management competencies (Hayes et al., 2020; Lunden et al., 2017). Hence, the development of leadership personal and professional competencies through approaches such as formal leadership training, coaching, peer learning, residency (Anderson & Brinkert, 2011; Ficara et al., 2021; Garman, 2018; Nghe et al., 2020) and provision of resources to leaders (Gadolin et al., 2022) might help support the organisational integration of CALD nurses as they join healthcare organisations. This can be related to the findings of this research since among the strategies and models that were realised to support CALD nurse integration, the provision of resources to leaders and managers by the organisation was essential as this support was noted to influence how leaders and managers supported CALD nurses and resultant work satisfaction and possible turnover (Publication I, IV).

Competence recognition and support

The hypothetical model of CALD nurse organisational integration presents that competence recognition and support is affected by ward level competence demands organisational level competence demands and nurse competence recognition, development, and ward level competence support (Publication I, III, IV). CALD

nurses who participated in this research experienced that colleagues mistrusted their competences and they had to prove themselves (Publication II). This agrees with the finding from previous research, showing that the newcomers to hierarchical and functional organisations undergo a period of low trust, critique by insiders and a test of their abilities (Druker, 2012; Van Maanen and Scheins, 1977).

Previous research agrees with the findings of this research (Publication I, II) that where competence recognition and development was a challenge, CALD nurses experienced deskilling, mistrust, misperception, low job satisfaction and possible attrition (Goh & Lopez, 2016; Korzeniewska & Erdal, 2021; Villamin et al., 2023).

Nurse competence is defined as the ability of a nurse to meet their role demands (Ortega-Lapiedra et al., 2023). If a new employee does not understand their roles and experiences incompetence in meeting role demands, there is likelihood of turnover (Bauer et al., 2007).

A newcomer's organisational entry has been established to be the most challenging organisational socialisation period (Kammeyer-Mueller & Wanberg, 2003) and organisations may impose functional boundaries by assuming that a newcomer is able to handle certain tasks or demonstrates task mastery in particular areas. It has been established that if functional screening is applied to newcomers this may help establish areas of competence development and ensure the functional ability of newcomers (Van Maanen & Schein, 1977). This agrees with interviewed nurse educators, CALD nurses and nurse leaders who viewed competence assessment, for instance, by nurse managers and provision of competence development support and aligning of roles according to CALD nurse competence level as crucial (Publication IV). Among strategies and models to support CALD nurse integration, it was established that recognition of existent competence and organisational support through learning and development opportunities supported professional development.

Recognising CALD nurse competence and support for competence development, as established in this study, may provide role clarity within the organisation, improve role functionality, and ease the organisational integration of CALD nurses (Bauer et al., 2007; Van Maanen & Schein, 1977). Previous research has established that an employee's role in the organisation may act as a bond to the organisation (Adil et al., 2023), and recognition of CALD nurse competence and its development may help their organisational adjustment and loyalty (Sun et al., 2023). Kammeyer-Mueller and Wanberg (2003) elaborate organisation adjustment as knowledge, confidence, and motivation in the role performance of CALD nurses.

Hence, advancing CALD nurse competence as the hypothetical model proposes may allow role understanding and boost nurses' morale and desire to serve in the organisation. Enhancing role functionality and the application of healthcare nurse competence scales (Meretoja et al., 2004) may help establish the strengths of CALD nurses, as well as areas of development and ability to tailor effective competence development tactics. Further, healthcare organisations may apply continuous and life–long learning approaches to CALD nurse competence development (Ortega-Lapiedra et al., 2023). This also aligns with organisational integration as a life-long process (Ashforth et al., 2007; Van Maanen & Schein, 1977).

Understanding of nurses' roles through integration practices

The hypothetical model of CALD nurse organisational integration suggests that the understanding of nursing roles may support the organisational integration of CALD nurses through orientation, induction to work, mentorship and preceptorship (Publication II, IV). Previous research finds that integration practices have been clustered as either formal or informal. For instance, organisational learning through mentorship and training programmes are formal institutional tactics (Ashforth et al., 2007). Bauer and Erdogan (2011) established that formal orientation introduced newcomers to the organisational culture, insiders and their work, hence making them feel welcomed and well-informed. Access to a mentor helps the newcomer through work learning and social support (Buer & Erdogan, 2011). The CALD nurses who participated in this research experienced that sometimes formal tactics, for instance, orientation or mentorship, were lacking or insufficient, and they had to rely on themselves (Publication II). Detlín et al. (2022) observed that rapid task completion in a safer way was experienced by newcomer nurses when they received confirmation from colleagues. Also, individual task completion was a challenge, and the help of clinical mentors or more experienced colleagues developed a feeling of safety within the clinical environment (Detlín et al., 2022).

A previous study on the effect of formal onboarding as a facilitator of organisational socialisation established that onboarding tactics that entailed a training component on operating within an organisational role helped integration (Frögéli et al., 2023). This finding supports the experience of nurse leaders in this study as they experienced that providing online courses during integration helped the clinical competence development of CALD nurses. Mikkonen et al. (2019) established that a good mentor-and-mentee relationship fosters clinical learning.

Hence, establishing formal mentorship that is built on strong relationships provides an ample clinical learning environment and fosters proactive competencies essential for CALD nurse organisational integration (Mikkonen et al., 2019). Dudley et al. (2020) conducted a pre-post survey on new graduate nurses' work readiness and relationship with the clinical environment; provision of a fellowship program, for instance, and a conducive clinical environment were found to be significant towards perceived competence and professional identity. For CALD nurses, as established in this research, their integration was supported in a clinical environment where mentorship strategies and models existed as mentors helped adapt to the clinical environment, utilisation of skills, acquire competencies, and work satisfaction.

Newcomers require on-the-job training as elaborated by the Inform-Welcome-Guide (IWG) model (Klein et al., 2015). The IWG socialisation model presents approaches that inform, welcome, and guide the newcomer. It is believed that a newcomer needs to acquire knowledge and skills essential to integration through, for instance, orientation (Klein et al., 2015). Orientation, induction, mentorship, and precentorship as part of institutional organisational tactics need to be systematic and sequenced and help the newcomer CALD nurse understand their roles and institutional operations (Bauer & Erdogan, 2011). However, CALD nurses who were interviewed observed that they mostly lacked tailored orientation, induction, and mentorship and could have benefitted better if peer mentorship had been applied (Publication II). Hence, to efficiently utilise CALD nurse expertise within a healthcare organisation, it is prudent to input resources for formal tactics. It has been established that organisations that invest in formal onboarding tactics enjoy higher productivity levels (Frögéli et al., 2023). For instance, it has been found that well-inducted nurses show a higher work performance and possess a positive attitude towards the healthcare organisation (Kamau, 2014).

Mentorship by experienced nurses helps newcomers become more familiar with their work, develop skills, and enjoy social relationships, hence enjoying better organisational socialisation (Gong et al., 2022). Further, preceptorship has increased nurses' confidence in role performance and operating within a work environment (Lalonde & McGillis-Hall, 2017). Hence, CALD nurses may integrate well and be effective within a healthcare organisation if they are well-oriented, inducted, mentored and precepted (Gong et al., 2022; Lalonde & McGillis Hall, 2017).

Safe working environment

The hypothetical model of CALD nurse organisational integration presents that a safe work environment is affected by workplace equality and justice, workplace supportive atmosphere, racism and discrimination and organisational policies on racism and discrimination (Publication I, II, III, IV). A safe work environment has been associated with employee wellbeing, intention to stay, and effective utilisation of organisational social capital, leading to organisational effectiveness (Johnson et al., 2018; Walker & Clendon, 2018). The World Health Organization (2016), in its health workforce report, observed that supporting healthcare teams' performance and alleviating attrition are key strategies towards a well-functioning workforce strategy. It is, however, to be observed that the definition of workplace safety and its application influences positive results for employees and the organisation (Balderson, 2016). Dekker (2014) defines a safe work environment as a combination of enabling capabilities, capacities and competencies that result in positive outcomes. The organisational atmosphere is a familiar feeling and attitude built upon norms, values and attitudes of organisational culture and has either a positive or negative effect on an individual's behaviour (Na & Chelliah, 2022). For instance, studies examining attrition have found unsatisfactory workplaces and a lack of a supportive atmosphere at the workplace as major contributors to nurses leaving an organisation (Walker & Clendon, 2018). Nurses who experience that the work environment and organisation are not convenient have been forced to leave a healthcare organisation in search of a more conducive organisation that may meet their job satisfaction and career aspirations (Lavoie-Tremblay et al., 2008).

Hence, a healthcare organisation's support for a convenient work environment and organisational policies, for instance, fostering justice, may reflect employees that an organisation has positive motives and may promote CALD nurse work well-being (Tsai et al., 2015). The conducted CALD nurse research showed that within healthcare organisations, CALD nurses may have experienced inequality, injustice, racism, and discrimination, and this affected their experience of a conducive organisational atmosphere and perception of the organisation and management support (Publication I, II). A conducive nurse work environment has been related to factors such as job satisfaction and delivery of nursing care (Dutra & Guirardello, 2021). Counterproductive work behaviour causes negative employee behaviours that may harm other employees (Low et al., 2021). CALD nurses' perception of discrimination may occur due to a perceived lack of procedural, distributive, and interactional justice within the organisation and workplace (Ceylan & Sulu, 2011).

Racism harms organisational effectiveness and may foster employee discrimination (Jones et al., 2017). This study's findings show that organisational policies on antiracism and anti-discrimination were essential among the strategies and models to support integration (Publication I, II). Previous research has established that the experience of discrimination may result in work alienation and low work satisfaction and a perception of inequality (Skinner et al., 2018). Further, organisations can foster a supportive and safe work environment by enacting policies against selection bias, performance evaluation bias and application of diversity-supportive policies (Jones et al., 2017). This might create an organisational culture where CALD nurses are appreciated, protected against counterproductive behaviours, and enjoy a supportive and safe work environment.

Collegiality

The hypothetical model shows that CALD nurses' integration can be supported through collegiality, which is described through collegial support, support from peers, social support and friendships, and teamwork (Publication I, IV). Collegiality is related to behaviours which may include respect, professional behaviour and co-worker support that enable a conducive work environment (Mallows, 2023). Collegiality is a fundamental value in nursing practice; beyond promoting the delivery of safe and quality care, collegiality promotes dignity and professional commitment among nurses (Kangasniemi et al., 2023).

Organisational socialisation theories have shown that co-worker support is integral to successful socialisation (Bauer & Erdogan, 2011; Kammeyer-Mueller & Wanberg, 2003; Taormina, 1997). Co-worker support has been defined as emotional, moral, or material support that accrues no financial reward (Taormina, 1997). Relationships between newcomers and organisational insiders are essential for building social capital (Bauer et al., 2007). Collegiality contributes to co-worker support and has been defined as core to professional ethics (Kangasniemi et al., 2017).

Collegiality among nurses is fostered by collegial mutual relationships, justice, equality, and trust within the workplace (Kangasniemi et al., 2017). This research has established that within sociocultural integration strategies and models collegial social activities, peer interactions and engagements increase cultural adaptation, linguistic, communication and intercultural competences for CALD nurses (Publication I, IV). Nurse leaders experienced situations where collegial expectations towards CALD colleagues were not realistic and poor collegial

interactions were due to perceived differences within the nursing team, which affected workplace social relationships (Publication I, IV). Findings from previous research have shown that negative collegial relationships may have detrimental outcomes for a healthcare organisation and workforce, resulting in poor work satisfaction, delivery of care and even intention to leave among nurses (Cowin & Eagar, 2013). Collegiality fosters teamwork among nurses (Cowin & Eagar, 2013; Kangasniemi et al., 2017; Logan & Michael Malone, 2018), and teamwork has been associated with positive patient outcomes, low incidences of workplace incivility and bullying (Logan & Michael Malone, 2018).

Relations

The hypothetical model of CALD nurse organisational integration suggests that relationships with patients and families and professional trust may help CALD nurse integration (Publication I, II, IV). Relationships with family and patients were established in the findings of this research, with CALD nurses observing that in some instances, patients refused to be cared for by a CALD nurse, and there was a perceived preference for a native nurse (Publication II). It was experienced that families sometimes mistrusted CALD nurse competence due to limited linguistic capabilities and cultural differences. Previous research has established that in nursing practice, trust is fundamental to relationship building between nurses, patients and families; trust signifies the belief and confidence in the nurse and is ethically bound (Dinç & Gastmans, 2013). Professional trust is also a moral obligation that helps achieve positive patient outcomes (Ozaras & Abaan, 2018). Instances of negative nurse /patient/ family relations have been related to low work well-being and work performance that threaten the delivery of safe, quality care (Alshehry, 2022). Hence, for CALD nurses' positive relationships with patients and families may promote their efficient delivery of care and their work wellbeing (Dinç & Gastmans, 2013; Ozaras & Abaan, 2018; Alshehry, 2022). This is justified by the experiences of interviewed nurse leaders as they experienced that CALD nurses had a positive approach to patients, and where the CALD nurse interacted with patients and their families, this helped establish relations (Publication IV).

Negative workplace relations among nurses have been found to affect job satisfaction, performance, increased absenteeism, and attrition (Baltimore, 2006). The way nurses relate helps promote collegiality and meet the core value of collegiality, which is to provide the best care possible; further collegiality is affirmed where nurses demonstrate advocacy and support for colleagues when in

need. Moreover, collegiality may be related to perceived institutional support (Kangasniemi et al., 2017). In this study, interviewed nurse leaders and CALD nurses experienced those positive relations among colleagues as an important aspect towards integration (Publication II, IV). Fang et al. (2011) established that enjoying social capital means that newcomers must build relationships through processes such as socialisation and networking.

Interpersonal relationships built on trust among nurses imply the belief that colleagues are reliable and capable of carrying out nursing-related tasks (Ozaras & Abaan, 2018); this way, professional trust in CALD nurses from colleagues might be an essential component in their performance within a healthcare environment. In this research, however, it was established that CALD nurses experienced mistrust of their competencies from colleagues (Publication II). Previous research findings have established a collegial trust to create a conducive working environment and teamwork (Jackson, 2008; Jones & Jones, 2011). Hence, positive relations built on professional trust are an essential aspect of how CALD nurses integrate into a healthcare organisation.

Cultural diversity in healthcare

The hypothetical model of CALD nurse integration proposes that cultural diversity in healthcare comprises cultural diversity and resultant cultural competence development (Publication I, II, IV). In the current globalised world, the success of organisations has been related to diversity within the workforce (McMillan-Capehart, 2006). However, organisations need to manage diversity to enjoy its efficiency. Cox (1994) explained diversity management as organisational efforts to input strategies and implement actions to maximise cultural diversity within its workforce. Cultural competence, support, and management may help the socialisation process. Nurse leaders and nurse educators observed that there has been a shift in the diversity of the workforce and overall healthcare scope (Publication I, II, IV). The increase of culturally and linguistically diverse nurses has increased cultural diversity within healthcare contexts (Debesay et al., 2022; Markey et al., 2021). Cultural diversity in healthcare has been established as a positive aspect in this research; for instance, nurse leaders experienced that CALD nurses provided culturally competent care and their cultural diversity brought positive aspects to patients (Publication IV). But for cultural diversity to thrive, it needs support and acceptance, as found in the sociocultural strategies that support the integration of CALD nurses (Publication I).

Research has established healthcare organisational support for cultural inclusiveness helps personnel overcome cultural bias, improve interpersonal encounters and patient outcomes (Markey et al., 2021). In organisations where cultural diversity is valued, CALD employees experience an inclusive atmosphere within the workforce (Luijters et al., 2008). In this case, the existence of cultural humility within a healthcare organisation may support the respect and upholding of everyone's dignity despite their cultural background (Hughes et al., 2020). Respect and upholding cultural diversity are ethical components in nursing (Hughes et al., 2020; Markey et al., 2021). Results from this research have established a need for cultural competence development across the workforce; nurse educators viewed that there needed to be genuine interest in multiculturalism, and organisations could input resources towards cultural learning (Publication I, IV). For CALD nurses, it was experienced that a multicultural and culturally sensitive workplace helped their integration (Publication II). Hence, healthcare organisations should invest in resources supporting cultural diversity and competence (Hughes et al., 2020; Luijters et al., 2008; Markey et al., 2021). This in turn would help mitigate negative experiences and outcomes for CALD nurses and further improve their integration.

Linguistic diversity

In the hypothetical model of CALD nurse organistional integration, linguistic diversity is presented by language challenges, ward and organisation level language demands and language competence development (Publication I, II, III, IV). Cultural diversity has been found to be composed of individuals' characteristics such as ethnicity as well as linguistic aspects (Hughes et al., 2020; Luijters et al., 2008; Markey et al., 2021). The hypothetical model of CALD nurse integration shows that there are language demands for CALD nurses, that they experience language challenges, and that they need language competence development. Research has found that linguistic diversity within organisations may cause challenges in communication and act as a foundation of isolation (Lauring & Selmer, 2013). Linguistic competence promotes knowledge sharing. Ahmad (2017) defined knowledge sharing as a collaborative activity through which employees share information and expertise and solve problems. Through day-to-day conversations and social interactions, employees develop knowledge networks (Ghaznavi et al., 2011), social networks and opportunities (Thuesen, 2017).

CALD nurses in this research experienced that language challenges affected their work and relations with colleagues, patients and families and further led to

professional mistrust (Publication II). There were also experiences of discrimination and even racism due to low proficiency. Schmidt et al. (2023) conducted a systematic review inquiring about cultural diversity in healthcare; among themes related to cultural diversity research in healthcare teams, language diversity was significantly investigated, showing that cultural diversity had a significant input to increased language diversity. Oikarainen et al. (2019) investigated nurses' cultural competence development through educational interventions, where it was observed that there is a need for a culturally competent nursing workforce not only due to cultural diversity but also due to increased linguistic diversity within healthcare systems.

Although linguistic diversity in a healthcare organisation has been found to ease and improve care outcomes for culturally and linguistically diverse patients (Handtke et al., 2019), the low linguistic competence of CALD nurse in the host nation's language leads to negative experiences. To bridge the language challenges, measures such as native colleagues' adaptation of their language to enhance understanding for CALD colleagues as well as building interpersonal relationships through social engagements helps to improve competence (Thuesen, 2017). Nurse educators and nurse leaders observed that there was a need to help improve CALD nurse language competence at the workplace (Publication III, IV). However, CALD nurses experienced that they received minimal support from organisations towards provision for language learning opportunities. Healthcare organisations support for linguistic diversity and competence development may help CALD nurses overcome language barriers and improve their integration (Oikarainen et al., 2019). According to integration strategies and models established in this study, approaches such as organisation support for language learning by utilising, for instance, linguistic specialists and integrating language learning into transition programs (Publication I).

Growth within the organisation

Integration for CALD nurses as proposed by the hypothetical model is that positive impact to workforce, work satisfaction and career development may influence integration positively (Publication I, II, III, IV). Organisational socialisation theories have shown that a newcomer's integration into an organisation is also founded on expectations of growth within the organisation (Taormina, 1997; Van Maanen & Schein, 1977). Even though growth is a long-term goal, Taormina (1997) explained growth as employee expectation of enjoying a rewarding career within

an organisation. Nurses who envisage personal growth within a healthcare organisation have been found to enjoy job satisfaction and the intention to stay (Lu et al., 2012; Ni et al., 2022). Interviewed CALD nurses experienced that their career development was hampered by aspects such as a low language competence. In some instances, some nurses weighed migrating to a healthcare context where they possess a mastery of the local language (Publication II).

Due to the global nurse workforce shortage, international recruitment, integration, and retention have been given much attention in recent times (Jönsson et al., 2021). To improve retention, nurses must envisage prospects for career growth which in turn would instill in them organisational commitment (Ni et al., 2022). Although it was the experience of nurse leader's and nurse educators in this study that most CALD nurses contributed positively to the workforce and helped meet human resource demands, still the CALD nurses experienced de-skilling and low career mobility within organisations, this affected how they intended to remain in an organization (Publication II, III, IV). Career development has been related to work satisfaction and intention to remain in an organisation (Tomietto et al., 2015). Organisational commitment is defined as the employee's relationship with an organisation which influences their decision to stay or leave an institution (Meyer & Allen, 1991). Organisational commitment is perceived when an employee experiences that their contribution is valued (Kim et al., 2016). Meyer and Allen (1991) linked the experiences and expectations employees had within their organisation as drivers of organisational commitment. Hence, CALD nurses' perception that a healthcare organisation values their impact on the workforce may eventually increase their job satisfaction, organisational commitment, and intentions to stay.

6.2 Ethical considerations

For the umbrella review (Publication I) there was no direct contact with human subjects and hence ethical approval was not needed when carrying out the study. Joanna Briggs institute (JBI) guidelines for conducting reviews were adhered to, thus minimizing probable bias. Research permissions for the qualitative studies (Publications II, III, IV) were sought and granted as follows; Study II. University under which study was conducted; Study III. ten Universities of Applied Sciences across Finland; Study IV. ten healthcare organisations across Finland. All participating organisations gave research permission as per Finnish ethical conduct regulations (Declaration of Helsinki, 2013). Ethics involving human subjects were

respected during the data collection (Stang, 2015; TENK, 2019). A statement of ethical permission was not required since the studies did not involve underaged participants, did not compromise the physical integrity of the participants, cause harm or produce security threats (TENK, 2020).

To mitigate risk posed to participants in the form of stress, discomfort, and study burden a written consent was sought from all participants before conducting interviews by means of an electronic consent form. Voluntary participation and withdrawal were respected throughout the research process (Stang, 2015). To ensure dignity, and promote autonomy and respect for participants, the study and its aims, participants' selection criteria, possible discomfort and research benefits were made explicit to participants (Fouka & Mantzorou, 2011). Effort to maintain the protection of research data, participants privacy, confidentiality and anonymity was affected by use of special numerical reference codes (Personal Data Act 523/1999; Directive (EU) 2016/680). Instances where some of the informants were familiar to the researcher, any conflict of interest was minimised by the researcher making his role explicit to the participants (TENK, 2019). Further, the findings of this research will hopefully benefit the integration of the CALD nursing workforce and the promotion of their wellbeing and thus, renders this research as having considerable social value (Stang, 2015).

6.3 Trustworthiness

Trustworthiness of the umbrella review (Phase I)

The umbrella review (Publication I) established current evidence on integration strategies and models used for supporting transition and adaptation of culturally and linguistically diverse nurses into healthcare organisations. JBI guidelines for conducting umbrella reviews were adhered to and this helped enhance the scientific rigor and consistency of the review (Aromataris et al., 2020). A medical science library informatics specialist was consulted about the search strategy. A search strategy based on P - participants, C - concept, C - context was used in formulating the research question and identification of relevant literature (Aromataris et al., 2015).

Two reviewers performed study selection independently and a third reviewer resolved conflicts, eventually a consensus was reached on what studies to include. Quality appraisal for the chosen articles was performed by two researchers separately and later agreed together using the JBI critical appraisal tool for systematic reviews and research syntheses (Aromataris et al., 2015). This appraisal

tool examines a research article for quality and findings using eleven distinct aspects. The eleven aspects were analysed using "yes", "no", "unclear" and "not applicable" criteria. One point was awarded to each criterion that was rated "yes". Initially, both reviewers separately analysed and scored all the 27 studies. Disagreements were discussed and agreed together. The highest paper scored a maximum of eleven points and the lowest seven points. Data that were relevant to the review question were extracted, hence minimising the risk of bias (Aromataris & Munn, 2020). During reporting, transparency was enhanced by using the 27-item PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) checklist (Moher et al., 2015)

Trustworthiness of qualitative studies (Phase II)

Three qualitative descriptive studies (Publications II, III, IV) were conducted, and their trustworthiness was evaluated using the criteria for critiquing qualitative research (Lincoln & Guba, 1985; Beck, 2009). The trustworthiness of qualitative research is evaluated on its credibility, dependability, confirmability, transferability, and authenticity. *Credibility* of research is dependent on whether the readers can believe what has been reported and have confidence in whether the findings are true (Beck, 2009). Kyngäs et al. (2020) found that to enhance credibility, appropriate informants in relation to the research question should be recruited and that data saturation should be achieved. In the three qualitative studies research participants were carefully recruited to ensure that those who could answer the research question were selected by using a snowball sampling approach.

Data saturation in all three studies was achieved after establishing redundancy during the data collection process (Saunders et al., 2018) hence it was observed that no new information could be established by recruiting new research participants. Prior to data collection, a pilot test was done on the interview themes and questions (Kallio et al., 2016) using the first and second interviews in all three qualitative studies; this helped gauge whether the questions could return information appropriate to the study aim. The data analysis process is also a determinant of research credibility (Kyngäs et al., 2020) the key principles of inductive content analysis were abided by throughout the data analysis phase, in all three qualitative studies the analysis process was scrutinised by a research team and where meaning units were translated from Finnish to English a multilingual research team approach was used to ensure accurate translation and avoid loss of meaning.

The *Dependability* of the research is determined by whether the study is consistent and accurate (Beck, 2009). Dependability can be enhanced through peer examination, co-researcher dialogue and researcher reanalysis of their data (Kyngäs et al., 2020). Researcher triangulation (Noble & Heale, 2019) was adopted in the three qualitative studies, two researchers were involved in data collection and during data analysis discussion and confirmation was performed within a research team. To ensure a clear audit trail of the analysis process (Kyngäs et al., 2020) the identified concepts were presented in a table clearly indicating the analysis pathway. All three studies used a checklist for reporting qualitative studies, Standards for Reporting Qualitative Research (SRQR) (O'Brien et al., 2014).

In qualitative research, confirmability and authenticity are attained if the study findings are well supported by the collected data (Kyngäs et al., 2020). In all three qualitative studies an audit trail was developed by giving each research data a numerical identifier that could help trace quotations back to original data. Authenticity (Eldh et al., 2020) was achieved using diverse direct quotations that elicited the participants voices more vividly in the reported results.

The *transferability* of research is determined by the degree to which the findings can be adapted to other contexts and fields (Kyngäs et al., 2020). The three qualitative studies presented results pertaining to CALD nurses within the Finnish context, even though participants were recruited from northern, metropolitan, and central Finland regions, the findings may be transferable to other regions of Finland within healthcare and nursing education contexts where CALD nurses are either educated or employed. CALD nurse migration and integration is a global phenomenon and hence our findings may be adopted with caution to other contexts since some findings were comparable to other international contexts. However, it should be acknowledged that the Finnish cultural, linguistic, political, and socioeconomic context may differ from other international contexts and hence CALD nurse integration may be different in other contexts.

Trustworthiness of the hypothetical model (Phase III)

According to Fawcett and DeSanto-Madeyas framework (2012), a key focus in the analysis of a hypothetical model is to establish its origin, focus and content. During the development of the hypothetical model of CALD nurse organisationl integration an inductive content analysis with the analytical starting point as all categories of phase I and II of the study ensured that the formed concepts were representative of these phases and that the presented hypothetical model was

authentic (Fawcett & DeSanto-Madeya, 2012). This process was essential since sub-studies of the previous phases had varying richness of data, some analysis leading to a level of main categories, some reaching only category level. Data triangulation (Lincoln & Guba, 1985) of previous phases, where content analysis outcomes of research phase I and II were combined towards developing the hypothetical model helped develop a reliable scientific model and enabled validity of the developed model (Fawcett & DeSanto-Madeya, 2012). Also, researcher triangulation was utilised where, one researcher synthesized data and developed concepts of the hypothetical model and this was further confirmed by two researchers who were consulted throughout the process of this research (Lincoln & Guba, 1985). Further, the usefulness of the model to nursing can be established as it aims to tackle an already established research gap in CALD nurse organisational integration. The reader can follow how the hypothetical model was developed as all the research activities and phases related to the development of the model have been presented and hence may consider the transferability of this research (Lincoln & Guba, 1985; Fawcett & DeSanto-Madeya, 2012). The hypothetical model presents concepts related to the organisational integration of CALD nurses and not statistical relationships between these concepts as they have not been tested (Fawcett & DeSanto-Madeya, 2012). Hence, the hypothetical model presents the concepts and their relations to CALD nurse organisational integration.

7 Conclusions, implications, and future research

7.1 Conclusions

1. The hypothetical model presents concepts which influence each other and hence show that integration is affected by a myriad of aspects that have an effect on each other towards meeting the eventual goal of CALD nurse integration to an organisation and finding meaning and growth in the profession.
2. A healthcare organisation may need to make significant conscious efforts to ensure a conducive and receptive work community and environment. At the organisational policy level, anti-discrimination, anti-racism, and multicultural policies need to be clearly defined and disseminated across the workforce. A healthcare organisation may need to use integration strategies such as organisational equity to meet the specific needs of the CALD nursing workforce; this can include supporting their language and cultural learning, tailored induction, mentorship, and preceptorship.
3. The findings of this research show that CALD nurses require nurse leaders support while integrating to healthcare environments. Nurse leaders have an important role in fostering CALD nurses' competence development, ensuring fair work practices, and serving as a link to top leadership. We however established that nurse leaders may lack sufficient knowledge and expertise to manage the process of CALD nurse organisational integration. Further, enhancing formal nurse leadership competences, knowledge management and diversity management may help instil skills in leaders that are essential for/to leading the integration process.
4. Co-worker support has been established in this research as a core component of a smooth organisational integration of CALD nurses. Beyond workplace support that nurse colleagues may offer through, for instance, strong teamwork, co-workers can also provide outside-of-work relationships that are important for integration. Therefore, enabling and supporting social capital within healthcare organisations may improve CALD nurse integration experiences.
5. A good anticipatory preparation for the CALD nurse is important as this may alleviate disappointments and help support the integration process once in a healthcare organisation. Preparation through nurse education excellence,

cultural and linguistic competences allow CALD nurses to transit and integrate better. However, our findings show low support and resources especially during the transition to the organisation phase; this low support further impairs the integration of CALD nurses into healthcare environments.

7.2 Implications

1. To efficiently support CALD nurse integration healthcare organisations could allocate more material and human resource support. This support is essential for a smooth and successful integration of CALD nurses and for alleviating adverse impacts attributed to a negative integration, such as, low work satisfaction, career mobility and eventual attrition.
2. Organisations could ensure suitable policies are in place, support competence development such as cultural competence across its workforce and adopt appropriate integration strategies presented in this research. The presented hypothetical model could be integrated and tested within healthcare organisations as a basic formulation of the best practices and policies that support CALD nurse integration.
3. The findings of this study showed that nurse leaders may need competence development in how to manage CALD nurse integration. Hence, healthcare organisations could provide useful insights into enhancing nurse leaders' competence through education, and continuous learning. Further, there is a need to develop and implement a nurse leadership and management educational curriculum that addresses aspects of workforce diversity, equity and inclusion, as well as the management of a culturally and linguistically diverse workforce; this curriculum also needs to include strategies to support CALD nurse integration to healthcare. Integrating diversity leadership competence into formal nurse leadership and management education could provide a strong foundation in terms of future nurse leaders' awareness of workforce diversity, management of diversity, and adoption of approaches that support successful CALD nurse transition and integration into the workforce.
4. The findings have shown that anticipatory preparation of CALD nurse influences their integration. Within nurse education, early support, especially during the final clinical placement, acts as a secure step towards a smooth transition. At this stage, the nurse educators serve as an important support system. Hence, to ensure sufficient nurse educator anticipatory support educational institutions could channel more resources to nurse educators as this

may allow better anticipatory support. Further, increasing cultural and linguistic diversity among nurse educators would ensure a group of nurse educators who can competently educate culturally and linguistically diverse nurses and support their integration. Hence, universities could review employment practices, as well as policies that guide inclusivity, equity, and diversity within the teaching workforce.

5. Relationships and interactions within the work environment influence workplace relationships, co-worker teamwork, and the overall atmosphere. Hence, capitalising on social capital within a healthcare environment would help build strong workplace teamwork, information sharing, knowledge transfer and would further better outside-of-work collegial relationships, which are essential for adjustment to an organisation. Integration also benefits from the existence of cohesion, trust, cooperation, and collegiality in diverse healthcare teams.

7.3 Future research

1. Future research will aim to test this hypothetical model developing a middle-range theory of CALD nurse organisational integration. The presented hypothetical model creates the initial step for middle-range theory development and empirical testing. Developing an instrument in which the items are composed of concepts presented in the hypothetical model would enable statistical testing. These steps would lead to the development of a theoretical model of CALD nurse organisational integration.
2. The anticipatory phase in a CALD nurse integration process has been shown to be significant for successful organisational integration and thus further research is needed to fully understand how nurse educators who are aware of cultural differences and diversity influence the anticipatory preparation and integration process of culturally and linguistically diverse registered nurses. Moreover, longitudinal research is needed to test these assumptions and corroborate the hypothetical model.
3. The voices of patient and families are absent in this study, nevertheless the findings show that they do affect the organisational integration of CALD nurses. Future research could examine the perspectives of patients and families and their relationships with CALD nurses.
4. Co-worker support is integral in the CALD nurse integration process, however future research should explore a team-level perspective and empirically test

this component by collecting data from the team members and the CALD nurses.

5. Nurse leaders are a great resource and support system for the integration of CALD nurses into healthcare organisations yet there is a research gap regarding their competence in how to manage the process of CALD nurse organisational integration. Future research could establish the traits and competences of a leader that are essential for CALD nurse integrational support.

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Original publications

I Kamau, S., Koskenranta, M., Kuivila, H., Oikarainen, A., Tomietto, M., Juntunen, J., Tuomikoski, A.-M., & Mikkonen, K. (2022). Integration strategies and models to support transition and adaptation of culturally and linguistically diverse nursing staff into healthcare environments: An umbrella review. *International Journal of Nursing Studies, 136, 104377. https://doi.org/10.1016/j.ijnurstu.2022.104377*

II Kamau, S., Koskenranta, M., Isakov, T.-M., Kuivila, H., Oikarainen, A., Tomietto, M., & Mikkonen, K. (2023). Culturally and linguistically diverse registered nurses' experiences of integration into nursing workforce – A qualitative descriptive study. *Nurse Education Today, 121, 105700. https://doi.org/10.1016/j.nedt.2022.105700*

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ACTA UNIVERSITATIS OULUENSIS

ISBN 978-952-62-4080-0 (Paperback)
ISBN 978-952-62-4081-7 (PDF)
ISSN 0355-3221 (Print)
ISSN 1796-2234 (Online)