

Improving outcomes for support workers in aged care

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List of abbreviations

AUT – Auckland University of Technology

GSES – General Self-Efficacy Scale

HRC – Health Research Council of New Zealand

JSS – Job Satisfaction Scale

MRC – Medical Research Council of the United Kingdom

NZ – New Zealand

PSS – Perceived Stress Scale

SW – Support worker

SWLS – Satisfaction with Life Scale

WHO – World Health Organisation

Attestation of authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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Abstract

The population of people requiring long-term care is growing, the workforce is ageing, and the demand, shortages and challenges are widespread and likely to increase. Support workers are central to providing care to our ageing populations. They provide the majority of direct care to residential aged care recipients and are dealing with increasingly challenging work conditions. It is therefore imperative to find effective strategies to support this key workforce group.

This Mixed Research project, informed by the Medical Research Council framework for developing complex interventions, aimed to develop a peer-mentoring intervention to improve outcomes for aged care support workers in NZ. It consisted of three phases:

Phase 1: To establish the conceptual and theoretical basis to define the peer-mentoring intervention protocol (Study 1A and 1B)

Phase 2: To define the intervention and develop the protocol (Study 2)

Phase 3: To investigate the feasibility and acceptability of the proposed intervention, and provide data required to plan a future randomised controlled (Study 3)

The aim of Study 1A was to review the evidence on the effectiveness of strategies that could be incorporated into a peer-mentoring intervention improving psychosocial and turnover-related outcomes for support workers in aged care. The study found low certainty evidence for some of the previously proposed interventions. However, none of the proposed approaches stood out as particularly effective and none of them had been developed for the NZ context.

Study 1B aimed to explore NZ aged care stakeholder perspectives on interventions improving outcomes for support workers. The study found there were increasing demands to support this workforce in NZ, focus on their psychosocial outcomes (job and life satisfaction, stress, and other), and use flexible approaches that can be tailored to the individual needs

and preferences of support workers. However, the reported inability of the aged care organisations to invest further resources in support workers was identified as a major barrier to implementing any workplace-based intervention and necessitated a modification of the originally proposed mentoring approach. This resulted in proposing an online-based peer-mentoring (e-mentoring) intervention as a strategy to improve outcomes for support workers.

The aim of Study 2 was to provide insight into usability of the proposed e-mentoring intervention, its acceptability, and perceived barriers, facilitators and benefits. Participants identified a few areas for refinement. Their stories highlighted the importance of the quality of the mentor-mentee match and a preference for like-minded people to be matched. These insights were used to inform final refinements of the WeCare Mentoring Programme before testing it in Study 3.

The final study in this project, Study 3, aimed to investigate the feasibility and acceptability of the proposed intervention, and to provide data required to plan a future randomised controlled trial. The study found that the proposed intervention was feasible and acceptable. Participants proposed some areas which could improve the experience further but were overwhelmingly in support of the programme. They would recommend, or already had recommended, this programme to other support workers.

This thesis describes a rigorous and structured approach to development of an evidence-based e-mentoring intervention for NZ aged care support workers. The proposed programme is an acceptable and safe intervention to improve health and well-being outcomes for this workforce. Its users reported improvements in a range of areas of their professional and personal lives. A range of refinements are proposed to further enhance the programme's feasibility. The next step is to test the intervention's effectiveness in a definitive randomised controlled trial. If effective, this programme will offer a much-needed support to people who have been historically undervalued and are experiencing increasingly difficult

working conditions. Better support for these workers is likely to lead to better health outcomes for them and the people they care for.

1 Chapter 1: Introduction

The population of people requiring long-term care is growing, the care workforce is ageing, and the demand, shortages and challenges in aged care are widespread and likely to increase (1, 2). Support workers are central to providing care to our ageing populations (3, 4). They provide the majority of direct care to residential aged care recipients yet are dealing with increasingly challenging work conditions (5). It is therefore imperative to find effective strategies to support this key workforce group.

1.1 Researcher interest in the topic

My interest in caregiving, and aged care, has been informed by both my personal and professional experience. During my teens in Poland, I observed my late grandpa experiencing Parkinson's disease and the challenges it created for him and our family. A few years later, I worked temporarily as a support worker in a nursing home in Ireland, assisting older residents with their daily activities. While my impression was that the residents appeared to receive good quality care, I was concerned with my colleague's working conditions and morale. Years later, I moved to NZ permanently. For almost two years I worked as a support worker in a residential care facility, where I learnt a great deal first-hand about the daily challenges of caregiving and residential care delivery in a NZ context.

Following this, I got involved in doing research related to caregiving and aged care. First, in my Master's, I focused my research on the experiences of work stress for support workers employed in long-term residential facilities (6). Later, as part of a larger team, I investigated support workers' perspectives on ways of supporting them in their work in NZ aged care (7). Listening to the participants stories I was reminded how important their role was in the delivery of care, and how little support and recognition they received.

These experiences prompted me to explore how we could better support this workforce, both for their own well-being and to ensure they were well positioned to provide quality care to the

ageing population of NZ. I wanted to help improve the current situation and alleviate the impact of the steadily increasing demand for their services. When brainstorming ideas for how this could be achieved, I came across a study (8) using a peer mentoring approach to improve support workers retention and job satisfaction. Further reading and discussion with my colleagues made me realise that using peer mentoring as a platform for improving outcomes for support workers could work in NZ aged care context. This prompted me to apply for a career development award to the Health Research Council of New Zealand to fund myself to undertake a doctoral degree in this area. My project proposal, titled “Improving outcomes for support workers in aged care”, built around the concept of peer mentoring was successful in receiving this funding.

1.2 Aims and objectives of this research

This project, informed by the Medical Research Council framework for developing complex interventions (9), aimed to develop a peer-mentoring intervention to improve outcomes for aged care support workers in NZ. It consisted of three phases. The aims and objectives of each phase were:

- 1) Phase 1: To establish the conceptual and theoretical basis to define the peer mentoring intervention protocol:
 - i) Study 1A: To evaluate the scientific evidence on effectiveness of strategies improving psychosocial and turnover-related outcomes for support workers in aged care that could be incorporated into a peer-mentoring intervention.
 - ii) Study 1B: To explore NZ aged care stakeholder perspectives on interventions improving outcomes for support workers.
- 2) Phase 2: To define the intervention and develop the protocol:
 - i) Study 2: To provide insight into usability issues with the proposed e-mentoring intervention, its acceptability, and perceived barriers, facilitators, and benefits.

3) Phase 3: To investigate the feasibility and acceptability of the proposed intervention, and to provide data required to plan a future randomised controlled trial:

i) Study 3:

- (1) To investigate the feasibility and acceptability of recruitment protocols.
- (2) To investigate the feasibility and acceptability of data collection procedures and outcome measures.
- (3) To investigate the feasibility and acceptability of the intervention.
- (4) To investigate participants' preliminary responses to the intervention.

1.3 Thesis structure

In Chapter 2, I introduce the role of the support workers within the context of residential aged care. I describe the local and global challenges this workforce experiences. I propose that a strategy that utilises the existing structures and resources and focuses on improving support workers' turnover and psychosocial outcomes is needed.

Chapter 3 presents the study design and methodology used in this project. I describe the overall methodological approach, including Mixed Research and Pragmatism, and present the study design with a brief overview of each of the four studies conducted as part of this three-phased project.

Chapter 4 reports the first study in this project (Study 1A). It considers the current research by systematically reviewing the scientific evidence on effectiveness of interventions improving psychosocial and turnover-related outcomes for support workers in aged care that could be incorporated into a peer-mentoring intervention. It includes a meta-analysis of effectiveness of the proposed interventions. I discuss the findings and highlight the key implications for the development of the proposed peer-mentoring intervention.

Chapter 5 presents the second study in this project (Study 1B). This study included focus groups with a range of NZ aged care stakeholders. It aimed to contextualise Study 1A

findings and the proposed peer-mentoring intervention within the NZ aged care context. In this chapter I report and discuss findings that were pivotal to the course of this project and propose a list of key recommendations for the development of an online mentoring intervention.

In Chapter 6, I synthesise findings from Study 1A and 1B and present a rationale for using an online-based peer mentoring approach to improve outcomes for support workers. A detailed description of the proposed intervention's process is provided, including a mentoring programme manual. I also present and discuss the results of the usability testing study (Study 2) and subsequent refinements to the proposed intervention.

In Chapter 7, I present the results of the final study in this project (Study 3). This study evaluated the proposed six-month intervention, named the WeCare Mentoring Programme, with support workers from around NZ. Quantitative and qualitative data are triangulated and to provide an in-depth understanding of the feasibility and acceptability of the proposed intervention. Data to inform design of a future definitive trial are presented. I discuss the findings and propose final refinements for the intervention.

Finally, Chapter 8 revisits the aims of this doctoral work and presents its key contributions to the field, including specific considerations for designing a definitive trial. I also discuss the overarching project limitations and recommendations for future research.

2 Chapter 2: Support workers in residential aged care

Aged care support workers assist frail older people with activities of daily living (3). They are known by many titles, for example formal caregivers, healthcare aides, nursing assistants, personal care attendants, and combinations thereof. The use of this title varies between and within countries. However, in this thesis, I will use the term support worker which is commonly used and understood in the NZ aged care context.

The New Zealand Nurses Organisation defined a support worker as “an employee who is an auxiliary to the nursing team and is able to perform tasks in their position description relating to patient care and who works under the direction of a registered nurse” (5). As a result, the scope of the role is often determined by individual employment agreements (10) and can include applying measures to assist with personal cares, feeding, cleaning and laundry, rehabilitation, and independence. However, support workers’ role extends beyond the practical tasks and includes also spiritual aspects of caring pertaining to establishing and maintaining psychosocial relationships with the residents (11, 12).

Support workers are vital members of the aged care health workforce. They make up a large part of the workforce (for example, over 60% in Australia and UK (4, 13) and over 70% in USA (14)) and provide most of direct care in residential aged care (10, 15). Their role has evolved from being primarily about provision of essential personal care only, into one with complexity and blurred boundaries (5, 6).

“Support workers are lifelines to our elderly people, those with disabilities or long term conditions.” (16, p. 1)

Residential aged care is a term used to describe care for people who require assistance with activities of daily living and can no longer be supported living in the community (17). It includes assisted living care, rest home care, hospital level care and secure dementia care (18). In NZ, nearly all residential aged care facilities are privately owned (18) and publicly funded (5).

In the following sections I present background to this doctoral project. I start by describing the role of support workers in NZ. I then explain how the increasing demand for aged care created a need for more support for this workforce. I conclude with identifying an intervention that appeared to have potential to help improving outcomes for support workers and describe its key underpinning mechanism – peer mentoring.

2.1 Aged care support workers in NZ

In 2017, when this doctoral work commenced, support workers' role in NZ was unregulated (5), meaning there was no clearly defined scope of practice, no regulatory requirement under health legislation, no professional standards and no disciplinary procedures (2). The lack of official role regulation likely contributed to this workforce feeling invisible in the eyes of the research community and the general public (19).

A study published by Salvation Army NZ (18) reported there were 672 aged care facilities in NZ, employing an estimated 18,000-24,000 support workers. Reportedly, the workforce consists of workers who identify as European (56%), Māori (15%), Asian (13%), Pasifika (8%) and other (8%), with over 60% of the workers aged 40 years old or more (10). Nine out of ten workers are women (3, 10).

With approximately every third support worker born overseas, migrants comprise a large group of this workforce (2). This has been linked to challenges relating to cultural confusion, and communication and other workplace-related difficulties (2). Migrant workers rely on their employment to meet visa requirements, making these workers particularly vulnerable and potentially subject to exploitation (2). The reported under-employment (i.e. employment in roles that do not use all skills of the worker) and feelings of being undervalued add to the challenges these migrant workers' experience (2, 6).

Working conditions for support workers have been reported to be difficult, especially in light of increasing workloads (5, 20). Remuneration for support workers has been relatively low,

with 57% of workers earning just over half of the average NZ annual wage (21). Low wages have been frequently cited as one of the key drivers of staff turnover (22), which has been estimated at 30-60% per year (2). The rotational shift policy, commonly used within the sector, has also been identified to contribute to burnout and staff turnover (23, 24).

As noted above, residential aged care workforce is highly feminised (in NZ, approx. 90 % are female). Some researchers argued (e.g., Ravenswood et al. (25)) that this imbalance stems from the historic gender norms, low wages and the perception that care work is low skilled and belongs to the domestic sphere. In NZ, this situation is slowly changing, with the gendered undervaluation of aged care work being gradually redressed (26).

Due to a common belief in the inherent caring skills that this female-dominated workforce have (27), there was very limited training available to this workforce in NZ before 2009. In 2009, thanks to a combined effort of the New Zealand Qualifications Authority and an industry training organisation called Career Force, three qualifications were introduced. These qualifications, to which the NZ aged care sector commonly refers as NZQA 2, NZQA 3 and NZQA 4, offered the workers an opportunity to develop their problem solving and supervision skills, as well as suggested a career pathway (5).

Support workers work in an inherently complex environment and are required to utilise a range of skills, attributes and values; balance workloads; prioritise needs and respond to the constantly evolving demands (6, 28). Their working conditions are challenging and the expectations towards these workers, held by others and by themselves, are extensive.

2.2 Increasing demand for aged care support workers

As the population of people requiring aged care grows, the demand for support workers is likely to increase (2). Our global population is ageing and the challenges associated with living in an ageing society are becoming widespread and acute (1). In 2015 there were almost one billion people aged over 60 years globally and this number was predicted to

increase by 50% by 2030 (29). In Australia and New Zealand, approximately 15% of the population in 2016 was defined as aged, with a further increase to about 25% by 2050 (30, 31). Current estimates show there are over 120,000 New Zealanders over 65 years old living with severe functional impairment, and over 50,000 people living with dementia (32). These numbers have been increasing rapidly and are predicted to double by 2050 (33). As the population of people requiring long-term care grows, the current support workers workforce is also ageing, limiting the number of people available to assist older people (18).

As these trends progress, more people are likely to experience age-related conditions, including cognitive and sensory decline, multi-morbidities, frailty and complex health issues (1). This is predicted to result in higher care dependency and admission rates to residential aged care facilities (34, 35).

Provision and quality of care to these people will depend largely on the availability and performance of support workers (34, 36). In recognition of this situation, the World Health Organisation (WHO) recommended increasing and strengthening the aged care workforce (37). In Australia and NZ, the demand for support workers is expected to double by 2030 (10, 38), with predicted increases by over 300 percent by 2050 in Australia (39). Support workers deficit in NZ is projected to be over 27,000 workers by 2036 (2).

The aged care demand and workforce shortages are likely to increase even further (5). However, some reports in NZ are questioning the reported demand (40) referring to a decline in aged care occupancy per population bases. The decline is argued to result from a range of initiatives, including the “ageing in place” (41) and the compulsory needs assessment (40). A range of global trends suggest initiatives like “ageing in place” (which depend on families providing care to their older relatives) may not be viable options. These trends include: declining birth rates in developed countries (42), increased workforce mobility and urbanisation (43), more women in higher education (44), high divorce rates and increasing prevalence of single-parent families (45). Furthermore, while the abovementioned

initiatives are needed and beneficial, they result in people entering residential aged care with more comorbidities and requiring higher levels of care (15, 46). Thus, it appears that not only will the sector need more support workers to meet the increasing care demands, but they will also need to be more skilled and knowledgeable (46).

Against this background, the globally reported high staff turnover and low retention are concerning (22, 47, 48). First, high turnover of staff reduces continuity of care and how well staff know residents. These factors are central to providing high quality care (23). Second, low retention and high staff turnover result in increased expenditure due to lost productivity and to recruiting and training new workers. The cost of recruiting and training one new worker may exceed that employee's annual salary (49). Third, the reasons reported by support workers who leave their employment include: job stress, inadequate training, lack of support, lack of career pathway, low pay and poor job status (3, 22, 50). When considering the above factors together, it appears that low retention rates and high staff turnover are associated with a range of adverse outcomes for the aged care residents, organisations, and support workers.

These adverse outcomes are likely to become more pronounced as the global demand for aged care and workforce shortages develop; they require immediate action. Steps need to be taken to improve the retention and turnover of support workers as the aged care sector: 1) is expected to provide high quality care to an increasing number of people, and 2) cannot afford losing staff who provide the most essential daily care to older people. As such, improving retention and turnover not only makes great economic sense but also helps to fulfil the aged care providers' duty of care, i.e. providing high quality care to residents. Moreover, factors contributing to poor staff retention and turnover need to be addressed as they negatively affect not only the quality of aged care and care costs but also support workers' health and well-being (51, 52).

Considering these challenges, the aged care support workers' availability and performance are central to ensuring a sustainable health system in NZ. These frontline workers are expected to provide high-quality care to some of the most vulnerable people in our society while dealing with limited resources, high stress levels, poor working conditions, increasing workloads and poor remuneration. It is therefore imperative to develop a cost-effective strategy to better support this key healthcare workforce group in New Zealand. This strategy would need to utilise the existing structures and resources and focus on improving support workers' turnover and the associated outcomes: job satisfaction, work stress and other.

2.3 Improving outcomes for aged care support workers

When developing and selecting candidate interventions, the Medical Research Council (9) recommends drawing on one's own experience and the published research and recognising that any previously proposed approach may need to be refined and applied flexibly. Often, multiple approaches may be combined to take advantage of their strengths and tailor them to the specific needs of the proposed end-users (9).

A large scoping review published not long before commencement of this doctoral work conducted by Hewko et al. (19) explored the international literature relating to aged care support workers' role, training needs, supply and demand, and injury and illness. One of its key findings was that all over the world this workforce was undervalued and invisible in the eyes of governments and healthcare organisations and this resulted in limited reports of effective strategies to support this workforce (19).

The authors identified two effective workplace-based interventions aiming to reduce staff turnover (8, 53). The study by Dill et al. (53) evaluated the effects of an education and compensation-based programme on support workers' turnover in 405 nursing homes in North Carolina. The programme included an introduction of a staff development coordinator, 27 hours of staff training and required commitments from support workers, but also the facilities management and the programme staff. It also included monetary incentives to

support workers (USD70 per session), pay rises for those who completed the programme, and coverage for release time for participants. It was funded and delivered in partnership with North Carolina's state government. The authors found that the programme led to statistically significant decreases in staff turnover. However, the level of administrative support and funding required to implement this programme may not be available in NZ due to the challenges our aged care sector experiences (5).

The second study (8) proposed appointing a designated support worker in a retention specialist role to decrease staff turnover. Thirty-two facilities from New York and Connecticut participated in this randomised controlled study (16 intervention and 16 control sites). Over 1000 support workers were interviewed at baseline, six and 12 months. The intervention was a 0.2 FTE appointment of the designated person in each of the 32 facilities, and the training and resources that this worker received. The training equipped them with a toolkit of strategies which included: peer mentoring, creating and maintaining a favourable climate for retention, diagnosis of staff problems, informal and formal recognition, career ladder programs, communication strategies, and conflict management. The actual strategies selected and implemented by the specialist worker were varied to allow sufficient flexibility to meet the specific facilities' organisational and management structures. The findings of the study showed a 10% decline in staff turnover at 12 months in the intervention group and this was statistically significant when compared to the control group (a 2% decline). In a facility employing 50 full-time workers this translates to annual recruitment-related savings of approximately two annual salaries (22, 54) compared to one fifth of the annual salary being the cost of appointing the specialist worker; saving approximately ten times the intervention cost. While the intervention had a positive impact on the participants' perception of quality of the facility and their perception of the organisation's efforts to train and retain workers, the authors did not report any statistically significant effects on support workers' job satisfaction or stress.

Appointing and training a worker dedicated to reducing aged care support workers' turnover appears to be an effective approach to supporting this workforce (8, 53). Moreover, the cost-effective intervention proposed by Pillemer et al. (8) allowed tailoring the available strategies to the confines of a specific facility and individual needs of support workers, which may be particularly important in the NZ aged care context. The majority of sites participating in the Pillemer et al. study (8) used peer mentoring as their key strategy and built their programmes around that approach.

Peer mentoring, and mentoring in general, is a concept that originated from business and management (55) and has since been applied in many other fields, including nursing (56). The definition of mentoring varies depending on the specific context; however, in broad terms it can be defined as a process in which a reciprocal sharing of experiences and knowledge occurs between the more experienced person (mentor) and a less experienced person (mentee), and offers mutual benefits (56). Mentoring is usually focused on negotiating personal and professional goals or objectives, and working towards achieving them (55, 56).

Peer mentoring is a specific type of mentoring, where both people work in the same area or are living through a similar experience (56) and where the mentor has no formal hierarchical authority over their mentee (57). It is an effective approach to improving and promoting health behaviours in a wide range of adult populations (58), and can serve as a flexible and cost-effective strategy to improve staff turnover and a range of psychosocial outcomes, including job satisfaction, work stress, self-efficacy and other outcomes in nursing staff (8, 59, 60).

Given the reported success of the programme proposed by Pillemer et al. (8), with peer mentoring being one of its key support strategies, the retention specialist programme appeared to be a promising candidate for a workplace-based intervention to improve outcomes for aged care support workers in NZ. It was cost-effective, required minimal

training while utilising the existing structures, and addressed some of the most burning issues affecting this workforce. However, the programme required further refinement to make it acceptable and feasible, and responsive to its potential users in NZ. First, while research evidence supported using peer mentoring to improve support workers' turnover (59), most of the strategies included in the retention specialist programme were not evidence-based. Therefore, a systematic literature review was warranted to identify other effective strategies that could be included in the proposed intervention. Second, given the reported lack of intervention effect on outcomes other than turnover, more focus was needed on support workers' job satisfaction, stress, and other psychosocial outcomes. Thus, the systematic literature review had to include interventions aiming to also improve these outcomes. Third, to ensure the proposed approach was relevant to its potential users, it would be appropriate to develop it further with NZ aged care stakeholders.

2.4 Summary

As the demand for aged care expands globally, so do the workload and challenges faced by support workers. These frontline workers, who provide the majority of direct care to our older population, are working in increasingly difficult conditions, while remaining poorly supported and undervalued.

The aged care support workers' availability and performance are central to ensuring a sustainable health system in NZ. A strategy that utilises the existing structures and resources and focuses on improving support workers' turnover and psychosocial outcomes is needed.

The retention specialist programme provides a sound peer-mentoring intervention framework which could be adapted to the NZ context. The programme needs to be refined in engagement with NZ aged care stakeholders to ensure it is relevant to its future users and to increase the likelihood of future uptake. If successful, the proposed programme could improve turnover and psychosocial outcomes for support workers.

3 Chapter 3: Methodology and study design

The broad aim of this doctoral project was to develop a peer-mentoring intervention that could address the needs and preferences of aged care support workers in NZ and improve their outcomes. This meant using qualitative methods to allow better understanding of the local NZ context and to incorporate perspectives of aged care stakeholders'; and quantitative methods to quantify the relevant data and evaluate potential for effectiveness of the proposed mentoring intervention. I hoped that drawing on this mixed method approach would ensure feasibility of, relevance to and satisfaction with the proposed intervention for its users. I wanted to develop an intervention that would work for this group and which could be implemented in the real world.

In this chapter I start by describing the overall methodological approach for this doctoral project. I then present the study design and a brief overview of each of the four studies (Study 1A and 1B, Study 2, Study 3) conducted as part of this three-phased project. Specific methods used in each of the four studies are then presented in more detail in their respective chapters.

3.1 Mixed Research

Using qualitative and quantitative research methods together is known as Mixed Methods Research or Mixed Research (61). In this thesis, I used the term Mixed Research; it is simpler and also seems more accurate as the term does not refer only to 'methods' but also to a methodology and its philosophical underpinnings (62).

The qualitative and quantitative methods are commonly associated with diverging research paradigms. At the quantitative extreme of the paradigmatic spectrum the ontological assumption is that there is only one reality existing in a particular way, while at the qualitative end it is argued there are multiple realities that are socially and/or linguistically co-constructed from interactions of people with one another (63). This presents a challenge to

an academic researcher using Mixed Research who wants to identify and justify a philosophical stance that is congruent and integral with their research approach.

Quantitative research is associated with objectivism and positivism (62). A researcher using quantitative methods aims to be an objective bystander, ensuring they do not affect the phenomenon they investigate, nor themselves be affected by it (64). Quantitative research focuses on confirmation or deduction and uses quantitative data (numerical) to examine relationships between variables (65).

On the other hand, the label 'qualitative research' is often used as a term representing an array of methodological approaches (66). Although there are a range of qualitative methodologies which draw on diverse ontological and epistemological assumptions, qualitative research is commonly associated with subjectivism and interpretivism (62). Qualitative research which is informed by subjectivism and interpretivism is commonly seen as exploratory and inductive, and focuses on "understanding the meaning people have constructed, that is, how people make sense of the world and the experiences they have in the world" (67).

While qualitative and quantitative research paradigms may appear contradictory, many researchers managed to successfully integrate them to serve their research inquiries' purpose (62). The key reason for this is that when used together, these approaches can complement each other. The qualitative approach allows an in-depth investigation of different phenomena producing rich, contextualised findings (68). However, it may be time-consuming and its findings are transferable, rather than generalisable (69). On the other hand, while quantitative research may not provide the same nuanced understanding, it can be used to test hypotheses (including theories generated through qualitative research) to produce generalisable findings (62).

Mixed Research emerged from amalgamating the strengths of these two complementary research approaches. Mixed Research has been increasingly recognised as a stand-alone

methodology (70). In a Mixed Research study, quantitative and qualitative approaches can be used concurrently or sequentially (71), informed by the goals of the research. The central assumption of Mixed Research is that integrating qualitative and quantitative methods will produce a more complete understanding of the studied phenomenon, rather than using only one method type (71). This way both methods can be used to enhance or support one another.

3.1.1 Philosophical underpinnings

Many researchers proposed pragmatism to be the most appropriate philosophical justification for using Mixed Research (70), with some calling it its 'philosophical partner' (72). Three most known contributors to pragmatism were Charles Pierce, William James and John Dewey. Pierce is considered to be the father of pragmatism (73), with James being credited for developing and popularising this philosophy in the twentieth century (74). Dewey developed it further and turned the focus of pragmatist philosophy towards many areas of social development, including politics and education (74).

In broad terms, pragmatism as a philosophy postulates that knowing the world is inseparable from transacting with it (74), i.e. the observer (e.g. a researcher) and the observed (e.g. support workers in aged care) form an indivisible unit and give continued meaning to each other. Pragmatism has been often explained as being about 'what works' (62). William James in one of his works explained:

“The true is the name of whatever proves itself to be good in the way of belief, and good, too, for definite assignable reasons.” (75)

Pragmatism has over the years evolved into new forms (for example, neopragmatism), and also informed development of other philosophical views, such as feminism (76) or ecology (77). Pragmatism, specifically James' account of it, was criticised by other philosophers for its ambiguity around the notions of truth and belief. For example, Bertrand Russell argued that James' was committed to the truth of “Santa Claus exists” (78). However, it has been

argued that claims like this are unfair and represent a misreading of James' account of pragmatism (79). In James' view, beliefs can be considered true as they contribute to our feelings, for example of happiness. Thus, benefits may result from beliefs that are truth-relevant, but they would only be fully true if they did not conflict with any other vital benefits (74). The belief in Santa Claus, while it could provide happiness, may also lead to a range of experiential surprises and disappointments.

At its core, James' pragmatism questions the status quo and seeks to understand the practical consequences of actions, i.e. how they influence our experience in specific situations, and the benefits they produce for us (74). This Mixed Research study was underpinned by pragmatism, as it sought to benefit aged care support workers in a way that they themselves consider appropriate and beneficial.

3.1.1.1 Mixed Research and pragmatism

Mixed Research has been criticised for lacking epistemological and axiological integrity (70, 80). Thus, it is important to further clarify how pragmatism provided the philosophical foundation for this doctoral project. In this section I present how pragmatism combines both quantitative and qualitative paradigmatic stances and provides an integrated methodology. I do this by explaining the ontological, epistemological, and axiological aspects of pragmatism. First, Mixed Research researchers must be able to switch between two opposite ontological positions: objectivism and subjectivism. To allow this movement, Maarouf (62) proposed an idea she coined the reality cycle. It assumes only one reality exists in a certain setting at a certain time, in which social actors' (or people's) perceptions of reality evolve through their transactions with it, changing their behaviours over time and producing new reality. While these changes occur continuously, they only become notable after a considerable period of time (62). This idea allows the pragmatic researcher to switch between one external reality (quantitative paradigm) and multiple realities co-constructed by people (qualitative).

The reality cycle assumes the existence of one reality in a specific setting and multiple perceptions of it that exist in people's minds (62). The pragmatic researcher seeks the truth that exists in this reality cycle. They use qualitative methods to investigate the people's perception of their realities, and quantitative methods to evaluate concepts as they relate to one external reality. The mixed methods are seen as having equal scientific value, rather than one type of method being used to validate the other one. They complement each other in helping the researcher understand these realities as they explore different aspects of the reality cycle. Thus, they can be used to study the same phenomenon from different perspectives in a Mixed Research study.

Second, one of the key epistemological assumptions of pragmatism states that knowledge is based on experience, i.e. what we know about our reality is influenced by our experiences (81). Each person's knowledge is unique. Yet, much of this knowledge is created through socially shared interactions. As the primary purpose of knowledge in pragmatism is to inform change and improvement (82), any source of knowledge helping to understand a part of reality and to improve that reality may be acceptable. Therefore, the decision whether to use quantitative or qualitative methods to obtain knowledge depends on the research question and is based on how useful these methods can be in producing the desired outcomes (82). Mixed Research is well-positioned for serving this purpose as it allows application of a range of research methods depending on the nature of the research objectives under investigation.

Third, the key axiological consideration in a pragmatic study is that the research methods should help answer the research question. The actual approach a pragmatic researcher chooses depends on their research question, but also on the researcher's experience, knowledge and their personal perceptions of the phenomenon under investigation (62). Maarouf (62) proposes that a pragmatic researcher needs to accept what they coined 'the necessary bias principle'. They argue that although some level of bias is an unavoidable feature of any research inquiry, the pragmatic researcher should be biased only to the

degree that helps reaching their research aims. A pragmatic inquiry reaches its aim when a solution to the investigated problem is provided (74). To this extent, using both quantitative and qualitative methods is a justified approach to answering research questions in Mixed Research studies.

As presented in this section, the ontological, epistemological, and axiological stances of pragmatism support the use of Mixed Research and justify combining quantitative and qualitative methods in this doctoral project. This approach can produce findings that are relevant and a solution that works for the study population. Using Mixed Research guided the development of what I hoped would be a relevant and effective intervention for NZ aged care support workers.

3.1.2 Researcher positioning

As a researcher, I strived to be as neutral as possible in conducting this doctoral work. However, as complete 'objectivity' in research is not attainable (83), I would like to acknowledge the stance I adopted in relation to my world view, and the social and political context of this research.

First, thanks to my previous experience of working as a support worker, I was able to better understand and relate to the stories recalled by this project's participants. I may have been regarded by the participants as 'one of us', and therefore more trusted than if I were not seen as an 'insider'. However, it also led me to prioritise the individual outcomes of support workers over organisational outcomes.

Second, I am a NZ immigrant. I have a strong sense of connection to other NZ migrants, and a well-formed understanding of what it means to live in a foreign country with no or very limited support networks. As a result, I felt strongly about the need to provide a more holistic means of support for these workers, than one that would focus only on the theoretical or practical aspects of their job.

Third, as a researcher, I lean slightly towards quantitative methodology. I am also more solution- rather than problem-focused. Thus, my ambition for this doctoral work was to find practical and actionable solutions to improve outcomes for support workers. To that end, I focused on building on the existing experimental research on interventions for support workers, rather than on deconstructing and exploring the specific aspects of such interventions.

Finally, my dual position as an outsider (e.g., male in a female-dominated setting; significantly younger than the average age of participants) and an insider (e.g., NZ immigrant; ex-support worker) likely influenced this research. The power dynamics between myself and the participants may have been affected by the historically and socially imposed gender roles. My relatively young age (approximately 20 years younger than the average participant) may have affected my interactions with participants. As an insider, I might have been more trusted by participants, and able to better understand their language, including colloquial language.

Ultimately, the advantages of being an insider can become the disadvantages of being an outsider, and vice versa (83). Thus, although acknowledging positionality is not a guarantee of higher quality of research (83), doing so will hopefully aid the reader in interpreting the findings of this doctoral work.

3.2 Study design

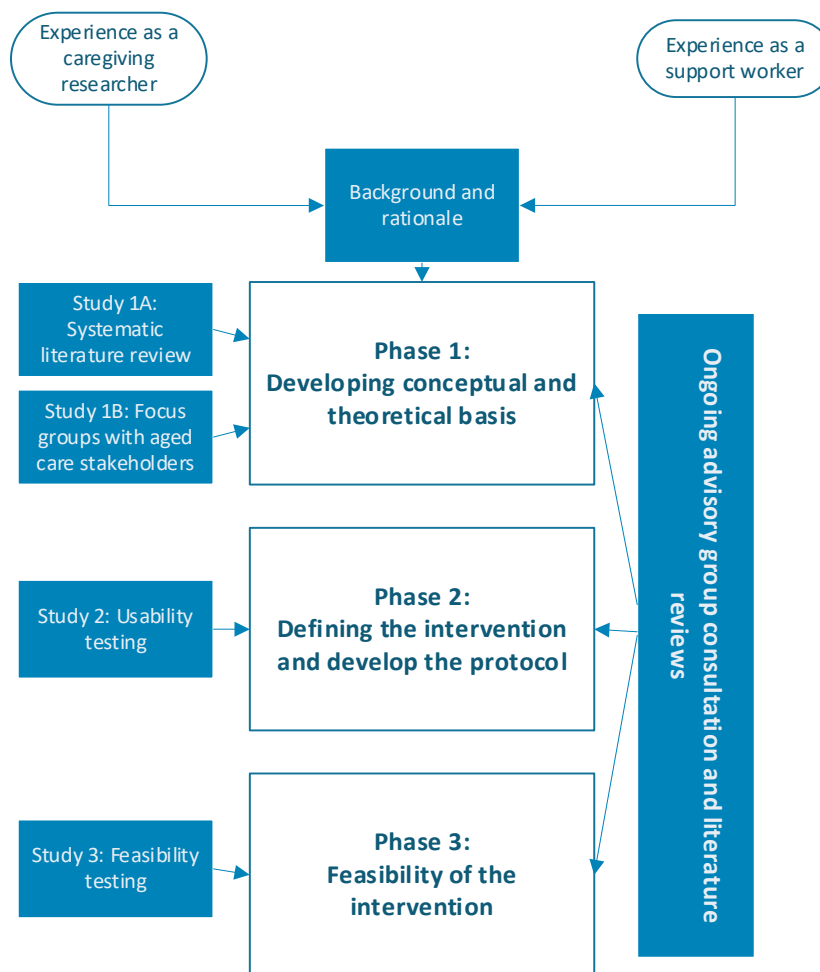
This doctoral thesis consisted of three phases (Figure 1) and was funded by the Health Research Council of NZ. The phased approach of this project was guided by the Medical Research Council (MRC) framework for developing complex interventions (9). It defines complex interventions as flexible interventions containing many interacting components. Notably, they argue that most interventions include a level of complexity.

The MRC framework provides a non-linear, flexible process consisting of four key stages: Development, Feasibility/Piloting, Evaluation, and Implementation. As postulated by Craig et al. (9), ideas for complex interventions may emerge from a range of sources: previous experience, existing evidence, theory, a researcher, policy makers, and other. The framework proposes that “‘best available’ methods, even if they are not theoretically the optimum, may yield useful results” (9). This view fits well with this project’s pragmatic underpinnings.

This doctoral project involved the first two stages of the MRC framework: Development and Feasibility/ Piloting. The Development stage focuses on developing the conceptual and theoretical basis for the intervention (Phase 1 of this doctoral project) and defining the intervention and protocol (Phase 2). It then progresses to the feasibility testing (Phase 3) which focuses on acceptability, usability, and feasibility of the intervention, and may also provide tentative findings on the intervention’s effectiveness.

Figure 1 presents the studies included in each of the three phases of this doctoral project.

Figure 1. Study design.



Phase 1 consisted of two studies: a systematic literature review (Study 1A) and a focus group study (Study 1B). The systematic literature review was conducted to explore the evidence base regarding strategies addressing staff turnover and psychosocial outcomes for support workers that could be incorporated into a peer-mentoring intervention. Following this, approval was sought from the University Postgraduate Office to carry out focus groups with aged care stakeholders. Findings from the systematic review were summarised and formed part of an interview guide used during the focus groups. The aim of Phase 1 was to establish the conceptual and theoretical basis to define the peer mentoring intervention protocol in Phase 2.

Phase 2 involved ongoing literature reviews and consultation with the project's advisory group to develop the intervention protocol. It concluded with a usability study (Study 2) of the proposed intervention with aged care support workers which was focused on testing the usability of the protocol and technology. This stage was crucial to ensuring the proposed intervention and protocol were easy to use, relevant, safe, and responsive to the needs of its potential users.

Phase 3 included a feasibility testing study (Study 3) focusing on evaluating the feasibility, acceptability and safety of the proposed intervention, as well as providing the data required to plan a future randomised controlled trial. Over 20 support workers from around NZ took part in a six-month programme. This study explored whether the proposed intervention could work in 'real-life' conditions and was feasible in the NZ context.

Specific methods used in each study are presented in the respective chapters.

Project advisory group

As part of this project, an advisory group was established to provide ongoing advice on the intervention development. I identified three key areas of expertise that I hoped to draw on in the advisory group:

1. Aged care management – although I had experience as a support worker and worked on a number of aged care-related projects, I did not have any experience in managing aged care workforce. I believed that including people with this expertise would help me to better understand the issues the aged care sector and workforce faced at the time, provide pragmatic advice relating to potential implementation of the intervention, and allow me to establish relationships that would reach potential participants.
2. Cultural – the cultural and ethnic structure of the NZ aged care workforce is diverse. By including cultural expertise in the advisory group, I aimed to ensure that the proposed intervention was culturally safe and acceptable.

3. Support worker experience – to supplement my own experience of working as a support worker, I also sought someone with a lived experience of providing care in a residential aged care facility.

The advisory group included five experts from within my professional network who expressed an interest in being involved in this project, and who offered advice in these areas of expertise:

- Ed Budomo – an aged care Support Services Coordinator, and an experienced support worker and a NZ immigrant.
- Dr Hinemoa Elder – a senior lecturer, consultant psychiatrist and a Māori Strategy Leader; provided advice on Māori and indigenous issues, mental health, and collaborative research.
- Melanie Tata – an executive officer in an organisation providing Kaupapa Māori-based health and social services; previously responsible for managing a team of over 60 community support workers.
- Lee Keegan – an aged care human resources manager; 20 years of experience in the Aged Care sector.
- Geet Sharma – a senior aged care operations manager with over 10 years of experience in the Aged Care sector.

Consultation with this group occurred throughout the study, particularly during Phase 1 and 2. Meetings and consultation with the members of the group occurred on a one-on-one basis and was timed to be responsive to research needs, status, and direction. Modes of engagement were varied (e.g., face-to-face, via email). The primary focus of consultation was seeking guidance on specific aspects of the intervention development, identifying effective strategies for engaging with this workforce, and/or informing the development of the intervention manual. Their involvement enhanced research quality, the intervention's cultural safety and helped to keep it relevant and responsive to the needs of support workers.

Phase 1: Developing the conceptual and theoretical basis

4 Chapter 4: Study 1A - Systematic review of interventions to improve work-related psychosocial outcomes and reduce turnover of support workers in residential aged care.

4.1 Prologue

Beginning Phase 1, I wanted to use peer mentoring as a platform for improving psychosocial outcomes for support workers. The aim of Study 1A was to conduct a systematic literature review of interventions that were, or could be, led by a peer mentor. This would allow me to identify the most promising candidate strategies which I would then discuss with NZ aged care stakeholders in Study 1B. I expected that findings from these two studies would inform the selection of interventions that could form a toolkit of strategies available to a peer mentor in the proposed programme.

4.2 Introduction

The adverse consequences of the increasing aged care demands and shortages required immediate action involving use of effective evidence-based interventions (1, 84). Given the pressures on aged care organisations and the urgency of these issues, priority should be given to interventions that can be delivered within the existing structures, with minimal training and ongoing costs. Ideally, such interventions should directly involve and affect support workers (84).

Several approaches aiming to lessen the issues of high turnover and deteriorating psychosocial outcomes that can be delivered within the existing structures have been evaluated. These included provision of educational materials (85, 86), interpersonal skills training (87, 88), and a combination of strategies (8, 89). Some studies reported positive changes (86), while others reported no changes (90) or even negative findings (91).

Furthermore, the studies varied widely in terms of their design, methodological quality, duration, and other factors. However, as explained in Chapter 2, the programme proposed by Pillemer et al. (8), using peer mentoring as a platform for delivery of a range of supportive strategies, was identified as a promising candidate for a workplace-based intervention to improve outcomes for aged care support workers in NZ. To achieve this purpose, peer mentoring needed to be further developed to include strategies that were evidence-based and effective.

Best practice in developing complex interventions is to build on the best available evidence (9). Systematic reviews, including meta-analyses, are invaluable in enabling this process (92). They are a fundamental and efficient scientific technique, with a well-established rationale for their use (92, 93). Thus, conducting a systematic literature review was the next step in the process of developing an intervention to improve outcomes for support workers.

4.3 Methods

The primary aim of the systematic literature review was to evaluate the scientific evidence on effectiveness of strategies improving psychosocial and turnover-related outcomes for support workers in aged care that could be incorporated into a peer-mentoring intervention. As this review aimed to guide development of the proposed intervention in terms of what does and does not work, it included a range of study designs and outcome measures broadly related to the review's primary aim.

The review question was:

Which workplace interventions that could be carried out by a peer-mentor have been shown to improve support workers' work-related psychosocial outcomes and/or reduce their turnover-related outcomes?

4.3.1 Protocol and registration

The review protocol was registered and published with PROSPERO ((94); registration number: CRD42017059007) in accordance with the criteria in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement for systematic reviews (95).

4.3.2 Eligibility criteria

Studies using experimental or quasi-experimental designs (including randomised controlled trials [RCT], nonrandomised controlled trials [nRCT], and single-arm pre-post studies [Pre-Post]) and evaluating effectiveness of interventions were included. Multiple publications reporting on the same study were counted as a single study. Only studies published in English were eligible. No restrictions were placed on date or study location.

Studies were included if: a) they were conducted in a long-term aged care facility setting (for example nursing homes or rest homes); b) they included support workers as the primary population of interest; c) the intervention or strategy being tested could reasonably be delivered by a peer mentor; and d) they were evaluating workplace interventions (individual-based and organisation-based) aiming to improve support workers' work-related psychosocial outcomes and/or reduce support workers' turnover-related outcomes.

Studies were excluded if they were: a) conducted in settings other than institutional long-term aged care (e.g. acute care, residential rehabilitation facility); and/or b) testing interventions requiring a system-level change (e.g. facility restructuring) or where the cost of implementation would preclude uptake in the current context.

4.3.3 Search strategy

The following databases were searched: MEDLINE (via PubMed), EMBASE (via Scopus), CINAHL (via EBSCO). In addition, I searched the British Journal of Healthcare Assistants.

The search strategy included terms related to:

1. Population: Aged care support workers – search terms included: support workers, nursing assistants, caregivers, and other.
2. Outcome: Turnover and work-related psychosocial outcomes - search terms included: turnover, retention, job satisfaction, quality of work life, stress, and other.
3. Setting: Long-term aged care facility - search terms included nursing home, rest home, and other.

The detailed search strategies used for the databases listed above are presented in Appendix 1.

4.3.4 Study selection

Titles and abstracts returned using the above search strategy were screened for relevance. The titles and abstracts retrieved were screened by myself. A random sample of titles and abstracts of 50 articles were screened independently by a second reviewer (Frances Czuba). Interrater agreement between both reviewers' inclusion and exclusion decisions was 100%.

Full texts of potentially eligible studies were then retrieved and independently assessed by myself. Where the eligibility of studies was unclear, it was discussed and resolved with the second reviewer, and/or with study supervisors.

4.3.5 Data extraction

To develop an initial description of findings from the included studies a data extraction table was created. Data about the design, country, setting, participants, intervention, and study outcomes were extracted by myself. Missing data were requested from study authors, with eight authors providing additional data (88, 90, 96-101).

4.3.6 Risk of bias assessment

All papers selected for the main review were assessed for risk of bias level using A Critical Appraisal Checklist from the Scottish Intercollegiate Guidelines Network (102). The categories proposed by the Checklist's authors were relabelled as follows:

- High quality → low risk
- Acceptable → moderate risk
- Low quality → high risk
- Unacceptable → very high risk

Each study was assessed and placed into a risk of bias category – low, moderate, high, or very high. All studies using single-arm pre-post designs were rated 'very high risk of bias', in line with the Cochrane Collaboration's guidelines for systematic reviews of interventions (103).

4.3.7 Data synthesis and analysis

All studies were grouped and clustered by intervention type and study design. All interventions were evaluated for their key components, including specific intervention activities (e.g. teaching communication skills), and structural (e.g. intervention duration) and contextual factors (e.g. intervention setting). Summary tables were created for each intervention type (see Appendix 3, Appendix 4, Appendix 5 and Appendix 6).

To combine data on effectiveness of the proposed interventions a meta-analysis was conducted. I used RevMan 5.3 (104) to calculate standardised mean differences (SMD) for continuous outcomes, and odds ratios (OR) for dichotomous outcomes, using mixed-effects models. Where specific outcomes were measured across multiple time points, the last reported result for that outcome was used. Meta-analyses were conducted when there were at least two studies reporting the specific outcome. Heterogeneity across studies was assessed through consideration of studies' population and comparator groups, interventions'

components and duration, and also with the I^2 statistic and Chi-squared test, with consideration for effect magnitude and direction. A Chi-squared test with p-value <0.10 suggests presence of heterogeneity (103). The I^2 statistic (the percentage of variation across studies that is due to between-study heterogeneity as opposed to chance) was used to assess the extent of heterogeneity (0%–25%, low; 26%–50%, moderate; over 50%, high) (103). I did not perform any baseline-adjustments. When an outcome measure was used with scores incrementing in the opposite direction than on the other commonly used measures for that type of outcome, I multiplied its scores by ‘–1’. The threshold for statistical significance was set at 5% against two-sided alternatives, with no correction for multiple testing.

Effect sizes were interpreted using interpreted using Chen et al. guidelines (105). For OR, baseline probabilities were pooled across studies.

4.3.7.1 Subgroup analyses

Where possible, I assessed the impact of different follow-up lengths: short-term (<3 months post-implementation), medium-term (3-12 months post-implementation), and long-term (>12 months post-implementation).

4.3.8 Sensitivity analyses

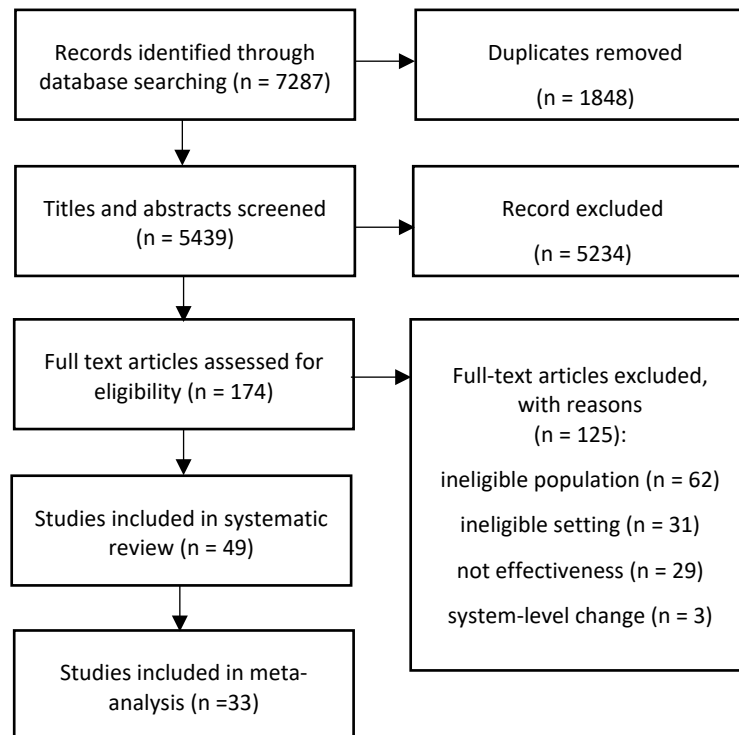
Sensitivity analyses were performed with respect to study design (RCT vs nRCT vs Pre-Post) and comparator type (placebo vs non-placebo). Provision of no intervention or a waitlist control group were defined as non-placebo control groups.

4.4 Findings

Our initial search yielded 7378 records. After duplicates were removed and screening was completed, 49 studies from 48 publications were included (Figure 2, Table 1), including 15 RCTs, 18 nRCTs and 16 Pre-Post studies. Some of the most common exclusion reasons

were: studies about family caregivers, studies about care recipients, studies not conducted in an aged care setting, qualitative studies, survey studies, editorials.

Figure 2. PRISMA flow chart



To manage the high heterogeneity of the included sample, we clustered the studies into four groups by intervention type. Each study's intervention type was determined by its main component/s (Appendix 2) and the primary focus of the intervention. The four intervention types were:

1. Knowledge-based interventions (27 studies)– included interventions focusing primarily on enhancing staff's knowledge and understanding of issues related to provision of aged care and ageing. The most common main intervention component was education sessions and materials.
2. Interpersonal skills-based interventions (12 studies)– included interventions focusing primarily on enhancing staff's interpersonal skills, especially in interactions with other staff

member or residents. The most common main intervention component was interpersonal skills training.

3. Team building interventions (9 studies) – included studies focusing primarily on empowering the staff through organising their teamwork, involving them in team meetings or in decision making. The most common main intervention component were team meetings, mentoring, and education sessions and materials.

4. Exercise and fitness interventions (1 study) – included interventions focusing primarily on including staff in exercise sessions and provision of fitness-related materials.

Table 1. Study characteristics.

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
(106)	Knowledge-based	PrePost	Very high	USA N=29, SW ³ only Nursing home	D: 6 weeks F: general long-term care knowledge; C: education sessions and interpersonal skills	Life satisfaction 0	Y
(107)	Knowledge-based	RCT ⁴ , placebo	Moderate	Portugal N=53, SW only Residential aged care facility	D: 2 months; F: work-related stress and coping strategies; C: education sessions, mentoring, relaxation and exercise	Perceived stress - Burnout + Job satisfaction 0	Y
(96)	Knowledge-based	NRCT ⁵ , non-placebo	High	Sweden N=225, SW only Residential aged care facility	D: a few weeks; F: palliative care training; C: education sessions	General job satisfaction - Satisfaction with nursing care - ; + Strain - Stress of conscience 0	Y
(100)	Interpersonal skills	NRCT, non-placebo	High	Netherlands N=111, mixed sample Nursing home	D: 9 months F: communication skills with focus on dementia; C: education sessions, interpersonal skills	Job satisfaction 0	Y
(108)	Knowledge-based	PrePost	Very high	USA N=NA, SW only Nursing home	D: a few weeks; F: understanding dementia; C: education sessions	Burden 0	N

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
(109)	Interpersonal skills	NRCT, non-placebo	High	Australia, N=52, mixed sample Nursing home	D: 1 day; F: communication skills with focus on dementia; C: interpersonal skills;	Satisfaction 0	Y
(97)	Exercise and fitness	RCT, non-placebo	Moderate	Norway N=129, mixed sample Nursing homes	D: 6 months; F: Improve overall fitness; C: relaxation and exercise	Job satisfaction 0 Sick leave utilisation -	Y
(110)	Team-building	NRCT, non-placebo	High	USA N=72, SW only Nursing home	D: 2 months; F: teamwork and problem solving; C: team meetings	Turnover 0 Organisational commitment 0 Perceived influence 0 Satisfaction with service role 0 Satisfaction with influence 0 Satisfaction with higher order needs 0 Satisfaction with organisational policies 0	Y
(111)	Knowledge-based	PrePost	Very high	Taiwan N=90, mixed sample Nursing home	D: 3 weeks; F: understanding dementia; C: education sessions	Attitude + Perceived self-efficacy + Caregiving stress + Job satisfaction 0 Health perception + Quality of life 0	N
(91)	Knowledge-based	PrePost	Very high	USA N=53, mixed sample	D: a few months; F: understanding dementia; C: education sessions, mentoring	Extrinsic job satisfaction + Intrinsic job satisfaction 0 Career commitment -	Y

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
				Long term care facility and in-home care			
(112)	Interpersonal skills	PrePost	Very high	USA N=97, SW only Nursing home	D: 1 day; F: communication skills with focus on dementia; C: interpersonal skills	Turnover 0 Sick leave utilisation 0	Y
(99)	Knowledge-based	PrePost	Very high	Brazil N=25, mixed sample Long term care facility	D: 6 weeks; F: understanding dementia, work-related stress; C: education sessions, communication skills	Burden 0 Depression 0 Anxiety 0 Quality of life 0	Y
(113)	Knowledge-based	NRCT, placebo	High	Germany N=290, mixed sample Nursing home	D: 18 months; F: person-centred care, staff attitudes; C: education sessions	Job satisfaction - Burden - Staff attitudes -	Y
(85)	Knowledge-based	PrePost	Very high	USA N=45, SW only Nursing home	D: 1 day; F: compassion fatigue, coping strategies; C: education sessions	Compassion satisfaction 0 Burnout + Stress + Retention rates 0	Y
(114)	Knowledge-based	RCT, placebo	Moderate	Netherlands N=99, SW only Nursing home	D: 7 months; F: empathy; C: education sessions, mentoring	Perceived work stress 0 Stress + Work satisfaction 0 Absenteeism 0	Y
(115)	Knowledge-based	NRCT, placebo	High	USA N=39, SW only	D: 3 months; F: health promotion; C: education sessions, mentoring	Job satisfaction 0 Job stress 0 Work ability and demands +	Y

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
				Long term care facility			
(116)	Knowledge-based	PrePost	High	USA N=24, mixed sample Long term care facility	D: 3 months; F: safe work environment; C: education sessions, mentoring	Staff attitude +	N
(117)	Interpersonal skills	NRCT, placebo	High	Germany N=116, mixed sample Nursing home	D: a few months; F: communication skills with focus on dementia; C: mentoring, interpersonal skills	Mental stressors at work + Occupational mental stress +	N
(118)	Knowledge-based	NRCT, non-placebo	Moderate	Japan N=400, mixed sample Long term care facility	D: 1 month; F: understanding dementia; C: education sessions	Burnout 0	Y
(87)	Interpersonal skills	NRCT, non-placebo	High	Germany N=53, care worker group not specified Nursing home	D: 7 weeks; F: communication skills with focus on dementia; C: interpersonal skills	Job stress +	N
(119)	Knowledge-based	NRCT, non-placebo	High	USA N=11, SW only Special dementia care unit	D: 2 weeks; F: understanding dementia; C: education sessions, mentoring, interpersonal skills	Turnover 0	Y

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
(59) Study A	Team-building	NRCT, non-placebo	High	USA N=NA, SW only Nursing home	D: 3 months; F: peer mentoring to develop staff; C: mentoring, education sessions, interpersonal skills	Retention rates +	Y
(59) Study B	Team-building	PrePost	Very high	USA N=NA, SW only Nursing home	D: 6 months; F: peer mentoring to develop staff; C: mentoring, education sessions, interpersonal skills	Retention rates +	Y
(89)	Team-building	PrePost	Very high	USA N=15, mixed sample Long term care facilities	D: 1 month; F: group debriefing; C: team meetings	Quality of work life + Intention to quit +	N
(120)	Knowledge-based	NRCT, non-placebo	High	Taiwan N=112, mixed sample Nursing home	D: 2 months; F: understanding ageing, work-related stress and coping strategies C: education sessions	Caregiver stress 0	Y
(121)	Knowledge-based	PrePost	Very high	Italy N=50, mixed sample Nursing home	D: 8 months; F: understanding ageing, work-related stress and coping strategies C: education sessions	Stress -; +	N
(122)	Knowledge-based	RCT, placebo and	Low	Germany	D: 3 months; F: understanding dementia;	Burnout 0 Health complaints 0	Y

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
		non-placebo		N=96, mixed sample Nursing home	C: education sessions, interpersonal skills		
(123)	Knowledge-based	NRCT, non-placebo	High	Taiwan N=35, SW only Long term care facility	D: 3 months; F: empowerment; C: education sessions	Work stressors -	N
(124)	Knowledge-based	PrePost	Very high	USA N=753, mixed sample Long term care facility	D: a few months; F: general long-term care knowledge; C: education sessions	Turnover 0	Y
(125)	Knowledge-based	NRCT, non-placebo	High	Canada N=41, mixed sample Long term care facility	D: 1 month; F: managing challenging work situations; C: education sessions	Self-efficacy + Burnout + Satisfaction with teamwork and co-workers 0	Y
(126)	Interpersonal skills	RCT, non-placebo	Moderate	USA N=88, SW only Nursing home	D: a few months; F: communication skills with focus on dementia; C: interpersonal skills	Turnover +	Y
(127)	Knowledge-based	NRCT, non-placebo	High	USA N=NA, care worker group not specified Long term care facility	D: 1 year; F: general long-term care knowledge, rewards for good performance; C: education sessions, mentoring, rewards	Turnover + Absenteeism 0	N

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
(128)	Knowledge-based	RCT, non-placebo	High	USA N=71, mixed sample Long term care facility	D: 1 week; F: Acceptance and Commitment Therapy; C: education sessions	Stress + Absenteeism +	Y
(101)	Interpersonal skills	PrePost	Very high	USA N=26, SW only Long term care facility	D: 1 month; F: communication skills with focus on person centredness; C: interpersonal skills	Happiness 0 Burnout 0	Y
(129)	Team-building	PrePost	Very high	Sweden N=200, mixed sample Nursing home and in-home care	D: 18 months; F: peer mentoring to develop staff; C: mentoring, education sessions	Workload 0 Staff resources - Health and well-being - Health resources 0	N
(130)	Interpersonal skills	RCT, non-placebo	Moderate	USA N=655, mixed sample Nursing home	D: 1 day; F: communication skills with resident's family; C: interpersonal skills	Depressive symptomatology 0 Burnout 0 Intention to quit +	Y (some)
(8)	Team-building	RCT, non-placebo	Moderate	USA N=762, mixed sample Nursing home	D: 1 year; F: peer mentoring to improve retention; C: mentoring, education sessions	Job satisfaction 0 Stress 0 Turnover + Job commitment +	Y (some)
(86)	Knowledge-based	RCT, placebo	Moderate	USA N=556, SW only Nursing home	D: 1 year; F: restorative care approach; C: education sessions, mentoring	Job satisfaction +	Y

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
(131)	Interpersonal skills	RCT, non-placebo	Moderate	USA N=384, mixed sample Nursing home	D: 1 day; F: communication skills with focus on dementia; C: education sessions, interpersonal skills	Depression 0 Burnout 0 Job satisfaction 0 Job stress 0 Intention to quit 0	N
(132)	Interpersonal skills	RCT, non-placebo	High	Netherlands N=300, care worker group not specified Homes for elderly	D: 1 year; F: communication skills with focus on dementia; C: education sessions, mentoring, interpersonal skills	Job satisfaction + Burnout + Work situation 0 Sick leave utilisation 0	N
(88)	Interpersonal skills	NRCT, non-placebo	High	Netherlands N=24, SW only Nursing home	D: a few weeks; F: communication skills with focus on dementia; C: interpersonal skills	Job satisfaction 0 Caregiver distress +	Y
(133)	Knowledge-based	PrePost	Very high	USA N=301, SW only Nursing home	D: 1 month; F: understanding dementia; C: education sessions	Job satisfaction 0 Intrinsic job satisfaction +	Y
(134)	Interpersonal skills	RCT, non-placebo	High	USA N=25, SW only Assisted living facility	D: 2 months; F: communication skills with focus on dementia; C: interpersonal skills, education sessions	Job satisfaction 0	N
(135)	Team-building	RCT, non-placebo	High	USA N=64, mixed sample	D: 2 months; F: including SWs in team meetings;	Self-esteem 0 Stress 0 Coping style +	Y

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
				Long term care facility	C: team meetings	Turnover 0	
(136)	Knowledge-based	PrePost	Very high	USA N=NA, care worker group not specified Long term care facility	D: a few weeks; F: general long-term care knowledge; C: education sessions, mentoring	Turnover 0	N
(137)	Team-building	NRCT, non-placebo	High	USA N=98, SW only Nursing home	D: 6 months; F: rewards for good service; C: rewards	Job satisfaction 0 Staff morale 0 Empowerment 0 Turnover + Retention rates 0	Y
(138)	Knowledge-based	RCT, non-placebo	High	Canada N=NA, care worker group not specified Nursing home	D: a few months; F: abilities-focused care approach; C: education sessions	Caregiver stress 0	Y
(90)	Team-building	NRCT, non-placebo	High	USA N=353, SW only Nursing home	D: 17 months; F: involving SWs in making decisions; C: team meetings	Self-esteem 0 Burnout 0 Job satisfaction 0 Empowerment + Intention to quit 0 Absenteeism 0 Turnover 0 Job commitment 0	Y

Study	Intervention type	Design	Risk of bias	Setting and population ¹	Intervention duration (D); Intervention focus (F); Core components (C)	Outcomes ²	Data available ³
(98)	Knowledge-based	RCT, non-placebo	Moderate	USA N=662, mixed sample Long term care facility	D: 6 weeks; F: understanding dementia; C: education sessions, interpersonal skills	Work stress - Job satisfaction + Role recognition 0	Y

¹ 'NA' – not reported.

² '+' – some statistically significant positive changes reported; '-' some statistically significant negative changes reported; '0' – no statistically significant changes reported.

³ SW – support workers

⁴ RCT -Randomised controlled trial

⁵ NRCT – Non-randomised controlled trial

4.4.1 Knowledge-based interventions

Twenty-seven studies evaluated knowledge-based interventions (mean study sample size was $n=176$, interquartile range (IQR)=217; $n=4$ studies did not report the sample size; Table 1). Only one study was rated 'low risk of bias' (122) and five studies were rated 'moderate risk of bias' (86, 98, 107, 114, 118). The remaining studies were rated 'high' or 'very high risk of bias' ($n=11$ and $n=10$, respectively; Table 1). The most common issues affecting the risk of bias in the included studies were lack of randomisation, inadequate concealment methods, lack of blinding and baseline differences between study groups.

Eleven studies focused exclusively on support workers. Other studies either included other health staff groups (for example registered nurses; $n=13$) or did not provide enough information to determine what the participants' actual work roles were (for example, "study included professional caregivers"; $n=3$). Eleven studies used a Pre-Post design, nine studies used a nRCT design, and seven were RCTs. Fourteen studies were conducted in USA, three in Taiwan, two in Canada, two in Germany, and one study in each of the following: Brazil, Italy, Japan, Netherlands, Portugal and Sweden. The most common setting was nursing homes ($n=12$), followed by long-term care facilities (11), residential aged care facilities ($n=2$), a special dementia care unit ($n=1$) and a mixed setting of long-term care facility with in-home care ($n=1$).

Intervention durations varied between one day and 18 months, with a median of two months. Six studies did not report the duration of intervention.

Thirteen studies tested interventions using development of staff's knowledge (education) as the core intervention component. The remaining studies tested interventions using a combination of components: education with mentoring ($n=7$), education with interpersonal skills ($n=4$), education with mentoring and exercise and

fitness (n=1), education with mentoring and interpersonal skills (n=1), and education with mentoring and rewards (n=1). The most common focus of the tested interventions was on improving staff knowledge of dementia and ageing (n=11); four studies focused on general long-term care knowledge, and another four on work-related stress issues. Other foci included empowerment, safe work environment, empathy, and a range of care approaches/philosophies (e.g. Person-Centred Care). Seven studies did not report their interventions to be underpinned by a theoretical model. Three studies reported testing interventions underpinned by person-centred care approaches, and another three by self-efficacy theories; with a range of different theories being reported by the remaining 14 studies. All studies tested new interventions.

The included studies evaluated 13 types of psychosocial and turnover-related outcomes. The most commonly reported outcomes were stress-related outcomes (n=18) and job/life satisfaction (n=12). For the full list of reported outcomes please see Appendix 7. However, due to no data being available for meta-analysis or fewer than two studies in the comparison group, only five types of outcomes were analysed (Table 2) and are reported below.

Table 2. Summary of effect sizes for each outcome comparison for knowledge-based interventions (statistically significant effect sizes are bolded and marked with '*').

Outcome	Number of studies	Number of participants	Odds Ratio or SMD [95% CI]	I ² (heterogeneity)
Turnover (OR)				
All studies	2	769	*0.47 [0.37, 0.60]	0%, p=0.52
RCT	0	-	-	-
NRCT	1	16	0.21 [0.02, 2.52]	NA
Pre-Post	1	753	*0.48 [0.38, 0.60]	NA
Placebo-controlled	0	-	-	-

Outcome	Number of studies	Number of participants	Odds Ratio or SMD [95% CI]	I ² (heterogeneity)
Non-placebo-controlled	1	16	0.21 [0.02, 2.52]	NA
Short-term follow-up	1	16	0.21 [0.02, 2.52]	NA
Medium-term follow-up	1	753	*0.48 [0.38, 0.60]	NA
Long-term follow-up	0	-	-	-
Absenteeism (SMD)				
All studies	2	151	-0.36 [-1.01, 0.29]	73%, p=0.05
RCT	2	151	-0.36 [-1.01, 0.29]	73%, p=0.05
NRCT	0	-	-	-
Pre-Post	0	-	-	-
Placebo-controlled	1	93	-0.06 [-0.46, 0.35]	NA
Non-placebo-controlled	1	58	*-0.72 [-1.26, -0.19]	NA
Short-term follow-up	1	58	*-0.72 [-1.26, -0.19]	NA
Medium-term follow-up	1	93	-0.06 [-0.46, 0.35]	NA
Long-term follow-up	0	-	-	-
Stress-related outcomes (SMD)				
All studies	12	1124	0.02 [-0.09, 0.14]	0%, p=0.67
RCT	5	346	0.03 [-0.22, 0.28]	25%, p=0.25

Outcome	Number of studies	Number of participants	Odds Ratio or SMD [95% CI]	I ² (heterogeneity)
NRCT	5	708	0.04 [-0.11, 0.19]	0%, p=0.87
Pre-Post	2	70	-0.07 [-0.50, 0.35]	31%, p=0.23
Placebo-controlled	5	426	0.01 [-0.19, 0.20]	0%, p=0.92
Non-placebo-controlled	6	666	0.07 [-0.10, 0.24]	10%, p=0.35
Short-term follow-up	7	679	0.05 [-0.17, 0.28]	47%, p=0.08
Medium-term follow-up	8	571	-0.08 [-0.25, 0.08]	0%, p=0.83
Long-term follow-up	1	171	0.04 [-0.28, 0.35]	NA
Job/life satisfaction (SMD)				
All studies	11	1787	0.06 [-0.07, 0.18]	38%, p=0.09
RCT	4	1059	-0.07 [-0.34, 0.21]	73%, p=0.01
NRCT	3	395	0.18 [-0.03, 0.38]	0%, p=0.90
Pre-Post	4	333	0.14 [-0.04, 0.32]	0%, p=0.67
Placebo-controlled	5	915	0.02 [-0.23, 0.28]	60%, p=0.04
Non-placebo-controlled	2	539	0.02 [-0.30, 0.34]	69%, p=0.07
Short-term follow-up	6	726	0.01 [-0.12, 0.15]	0%, p=0.51
Medium-term follow-up	6	1087	0.09 [-0.12, 0.29]	57%, p=0.04

Outcome	Number of studies	Number of participants	Odds Ratio or SMD [95% CI]	I ² (heterogeneity)
Long-term follow-up	1	171	0.18 [-0.13, 0.50]	NA
Other satisfaction (SMD)				
All studies	4	494	0.10 [-0.26, 0.46]	75%, p=0.008
RCT	0	-	-	-
NRCT	2	226	-0.12 [-1.33, 1.09]	91%, p=0.001
Pre-Post	2	268	0.14 [-0.08, 0.35]	0%, p=0.40
Placebo-controlled	0	-	-	-
Non-placebo-controlled	2	226	-0.12 [-1.33, 1.09]	91%, p=0.001
Short-term follow-up	3	441	-0.03 [-0.44, 0.39]	74%, p=0.02
Medium-term follow-up	2	238	*0.39 [0.16, 0.62]	0%, p=0.44
Long-term follow-up	0	-	-	-

4.4.1.1 Meta-analysis of staff turnover in knowledge-based interventions

Two studies measured staff turnover (119, 124) (Table 2). The studies were rated high to very high risk of bias. Overall, the meta-analysis showed the odds of staff turnover were 53% lower in the intervention group. With a control probability of turnover of 34% as found in the data, such an odds ratio corresponds to a relative risk of 0.57, i.e. 43% less risk of staff turnover in the intervention group. However, this result was largely based on a very high risk of bias study using a pre-post design.

No subgroup or sensitivity analyses were conducted due to an insufficient number of studies in this outcome group.

4.4.1.2 Meta-analysis of absenteeism in knowledge-based interventions

Two studies measured staff's absenteeism (114, 128) (Table 2). Both studies were RCTs. They were rated high to very high risk of bias. Overall, the meta-analysis showed that the standardised mean difference for staff absenteeism favoured the intervention group. The result was not statistically significant.

No subgroup or sensitivity analyses were conducted due to an insufficient number of studies in this outcome group.

4.4.1.3 Meta-analysis of stress-related outcomes in knowledge-based interventions

Twelve studies measured staff's stress-related outcomes (85, 99, 107, 113-115, 118, 120, 122, 125, 128, 138) (Table 2). They were rated low to very high risk of bias. Overall, the meta-analysis showed that the standardised mean difference for stress-related outcomes marginally favoured the control group/no intervention. The result was not statistically significant.

Stratified by study type, the standardised mean differences for stress-related outcomes in RCT, nRCT and Pre-Post studies marginally favoured the control group. There were no significant differences between the study design subgroups.

Stratified by comparator type, the standardised mean difference in controlled trials using placebo control groups suggested no intervention effect. The standardised mean difference in controlled trials using non-placebo control groups marginally favoured the control group. There were no significant differences between the comparator type subgroups.

Subgroup analysis by follow-up duration included two subgroups: short-term and medium term. At short-term follow-up the standardised mean difference marginally favoured the control group. On the other hand, at medium-term follow-up the

standardised mean difference marginally favoured the intervention. There were no significant differences between the follow-up duration subgroups.

4.4.1.4 Meta-analysis of job/life satisfaction in knowledge-based interventions

Eleven studies measured staff's job/life satisfaction (4, 6, 17, 45, 57, 63, 66, 67, 139-141) (Table 2). They were rated moderate to very high risk of bias. Overall, the meta-analysis showed that the standardised mean difference for job/life satisfaction marginally favoured the intervention. The result was not statistically significant.

Stratified by study type, the standardised mean difference for job/life satisfaction in RCT studies marginally favoured the control group. Importantly, the largest contribution to the high heterogeneity for this comparison was from the Finnema et al. study (114) (rated moderate risk of bias) which reported statistically significant results favouring the control group. In nRCT and Pre-Post studies, the standardised mean differences favoured the intervention group. Overall, there were no significant differences between the study design subgroups.

Stratified by comparator type, the standardised mean differences in controlled trials using placebo and non-placebo control groups both marginally favoured the intervention group. There were no significant differences between the comparator type subgroups. Similarly to the study type comparisons, the largest contribution to the high heterogeneity for studies using placebo control was from the Finnema et al. study (114).

Subgroup analysis by follow-up duration included two subgroups: short-term and medium term. At short-term follow-up the standardised mean difference suggested no intervention effect. At medium-term follow-up the standardised mean difference favoured the intervention. There were no significant differences between the follow-up duration subgroups. Again, the Finnema et al. study (114) was the largest contributor to heterogeneity in the medium follow-up comparison. Excluding this study resulted in

achieving statistical significance for the medium follow-up comparison, favouring the intervention group.

4.4.1.5 Meta-analysis of other satisfaction in knowledge-based interventions

Four studies measured staff's other satisfaction outcomes, such as intrinsic satisfaction or satisfaction with nursing care (91, 96, 125, 133) (Table 2). They were rated high to very high risk of bias. Overall, the meta-analysis showed the standardised mean difference for stress-related outcomes favoured the intervention. Notably, the largest contribution to the high heterogeneity for this comparison was from the Mackenzie et al. study (125) (rated high risk of bias) which reported results favouring the control group. Excluding this study resulted in achieving statistical significance for this comparison.

Stratified by study type and also by comparator type, the standardised mean difference for other satisfaction outcomes in two non-placebo nRCT studies favoured the control group. In Pre-Post studies, the standardised mean difference favoured the intervention group. There were no significant differences between the study design subgroups.

Subgroup analysis by follow-up duration included two subgroups: short-term and medium term. At short-term follow-up the standardised mean difference marginally favoured no intervention. At medium-term follow-up, the standardised mean difference favoured the intervention. This result was statistically significant. Overall, the difference between the follow-up duration subgroups was approaching statistical significance ($p=0.09$).

4.4.2 Interpersonal skills-based interventions

Twelve studies evaluated communication skills-based interventions (mean study sample size was $n=161$, $IQR=116$; Table 1). Three studies were rated 'moderate risk of bias' (126, 130, 131). The remaining studies were rated 'high' ($n=7$) or 'very high risk of

bias' (n=2; Table 1). The most common issues affecting the risk of bias in the included studies were lack of randomisation and baseline differences between study groups.

Five studies focused exclusively on support workers. Other studies either included other health staff groups (for example, registered nurses; n=5) or did not provide enough information to determine what the participants' actual work roles were (for example, "study included professional caregivers"; n=2). Five studies used an RCT design, five studies used a nRCT design, and two used a Pre-Post design. Six studies were conducted in the USA, three in the Netherlands, two in Germany, and one in Australia. The most common setting was nursing homes (n=9); one study included long-term care facilities, one homes for elderly, and one assisted living facilities. Intervention durations varied between one day and nine months, with a median of two weeks. Four studies did not report the duration of intervention.

In seven studies the core intervention component was interpersonal skills training. Three studies used a mix of interpersonal skills training and education sessions; one study used interpersonal skills training and mentoring; one study used interpersonal skills training, education sessions and mentoring. Ten studies tested interventions focusing on improving staff's interpersonal skills with people with dementia. One study looked at improving interpersonal skills with a focus on person-centredness, and one study focused on interpersonal skills in interactions with residents' families. Five studies did not report their interventions to be underpinned by a theoretical model. The remaining seven studies each reported testing interventions underpinned by a different theory. Apart from two studies testing an original intervention and its adaptation (130, 131), all studies tested different interventions.

The included studies evaluated seven psychosocial and turnover-related outcomes. However, due to no data being available for meta-analysis or less than two studies in the comparison group, only three types of outcomes were analysed (Table 3) and are reported below.

Table 3. Summary of effect sizes for each outcome comparison for interpersonal skills-based interventions (statistically significant effect sizes are bolded and marked with ‘**’).

Outcome	Number of studies	Number of participants	Odds Ratio or SMD	I ² (heterogeneity)
Turnover (OR)				
All studies	2	192	0.48 [0.05, 4.23]	79%, p=0.03
RCT	1	88	*0.15 [0.03, 0.71]	NA
NRCT	0	-	-	-
Pre-Post	1	104	1.38 [0.41, 4.69]	NA
Placebo-controlled	0	-	-	-
Non-placebo-controlled	1	88	*0.15 [0.03, 0.71]	NA
Short-term follow-up	1	104	1.38 [0.41, 4.69]	NA
Medium-term follow-up	1	88	*0.15 [0.03, 0.71]	NA
Long-term follow-up	0	-	-	-
Stress-related outcomes (SMD)				
All studies	2	51	-0.12 [-0.68, 0.45]	30%, p=0.23
RCT	0	-	-	-
NRCT	1	26	-0.49 [-1.29, 0.32]	NA
Pre-Post	1	25	0.11 [-0.45, 0.66]	NA
Placebo-controlled	0	-	-	-
Non-placebo-controlled	1	26	-0.49 [-1.29, 0.32]	NA

Outcome	Number of studies	Number of participants	Odds Ratio or SMD	I ² (heterogeneity)
Short-term follow-up	2	51	-0.12 [-0.68, 0.45]	30%, p=0.23
Medium-term follow-up	0	-	-	-
Long-term follow-up	0	-	-	-
Job/life satisfaction (SMD)				
All studies	3	188	0.28 [-0.11, 0.66]	42%, p=0.18
RCT	0	-	-	-
NRCT	2	163	0.31 [-0.30, 0.92]	65%, p=0.09
Pre-Post	1	25	0.14 [-0.42, 0.70]	NA
Placebo-controlled	0	-	-	-
Non-placebo-controlled	2	163	0.31 [-0.30, 0.92]	65%, p=0.09
Short-term follow-up	2	77	0.05 [-0.35, 0.46]	0%, p=0.65
Medium-term follow-up	1	111	*0.58 [0.17, 0.98]	NA
Long-term follow-up	0	-	-	-

4.4.2.1 Meta-analysis of staff turnover in interpersonal skills-based interventions

Two studies measured staff turnover (112, 126) (Table 3). The studies were rated high to very high risk of bias. Overall, the meta-analysis showed the odds of staff turnover were 52% lower in the intervention group. With a control probability of turnover of 12%

as found in the data, such an odds ratio corresponds to a relative risk of 0.51, i.e. 49% less risk of staff turnover in the intervention group.

No subgroup or sensitivity analyses were conducted due to an insufficient number of studies in this outcome group.

4.4.2.2 Meta-analysis of stress-related outcomes in interpersonal skills-based interventions

Two studies measured staff's stress-related outcomes (88, 101) (Table 3). They were rated high and very high risk of bias. Overall, the meta-analysis showed that the standardised mean difference for stress-related outcomes favoured the intervention group. The result was not statistically significant.

No subgroup or sensitivity analyses were conducted due to an insufficient number of studies in this outcome group.

4.4.2.3 Meta-analysis of job/life satisfaction in interpersonal skills-based interventions.

Three studies measured staff's job/life satisfaction (100, 101, 109) (Table 3). They were rated high to very high risk of bias. Overall, the meta-analysis showed that the standardised mean difference for job/life satisfaction favoured the intervention group. The result was not statistically significant.

Stratified by study type, the standardised mean difference for job/life satisfaction in non-placebo nRCT studies favoured the intervention group. The Pre-Post subgroup included only one study. The two groups were not significantly different.

Subgroup analysis by follow-up duration included one subgroup: short-term follow-up. At short-term follow-up the standardised mean difference marginally favoured the intervention.

4.4.3 Team-building interventions

Nine studies evaluated team building-based interventions (mean study sample size was $n=223$, $IQR=208$; $n=2$ studies did not report the sample size; Table 1). One study was rated 'moderate risk of bias' (8). The remaining studies were rated 'high' ($n=5$) or 'very high risk of bias' ($n=3$; Table 1). The most common issues affecting the risk of bias in the included studies were lack of randomisation and baseline differences between study groups.

Six studies focused exclusively on support workers. Three studies included other health staff groups (for example, registered nurses). Two studies used an RCT design, four studies used a nRCT design, and three used a Pre-Post design. Eight studies were conducted in the USA and one in Sweden. The most common setting was nursing homes ($n=6$); two studies included long-term care facilities, and one a mix of nursing homes and in-home care. Intervention durations varied between one and 18 months, with a median of six months.

In four studies the core intervention component were team meetings. Two studies used a mix of mentoring, education sessions and interpersonal skills training; two studies used a mix of mentoring and education sessions; and one study used rewards. Four studies tested interventions focusing on using peer mentoring to develop staff's skills or improve their job retention. Three studies focused on empowering staff through involving them in making decisions about service. One study looked at facilitating post-shift debriefing sessions, and one offered rewards for good service. Three studies reported their interventions to be underpinned by empowerment-based theories (for example, Zimmerman's Empowerment Theory); two studies reported their interventions to be based on peer mentoring concepts; one on the Participative Decision Making Theory, and three did not specify any underpinning theories. Apart from two studies testing one intervention and reported in the same paper (59), all studies tested new interventions.

The included studies evaluated twelve psychosocial and turnover-related outcomes. However, due to no data being available for meta-analysis or fewer than two studies in the comparison group, only five types of outcomes were analysed (Table 4) and are reported below.

Table 4. Summary of effect sizes for each outcome comparison for team-building interventions (statistically significant effect sizes are bolded and marked with '*').

Outcome	Number of studies	Number of participants	Odds Ratio or SMD	I ² (heterogeneity)
Turnover (OR)				
All studies	5	8604	0.65 [0.33, 1.28]	79%, p=0.0008
RCT	2	7684	1.09 [0.69, 1.71]	0%, p=0.35
NRCT	3	920	0.45 [0.16, 1.25]	82%, p=0.004
Pre-Post	0	-	-	-
Placebo-controlled	0	-	-	-
Non-placebo-controlled	5	8604	0.65 [0.33, 1.28]	79%, p=0.0008
Short-term follow-up	1	32	3.21 [0.32, 32.60]	NA
Medium-term follow-up	3	925	0.55 [0.16, 1.97]	87%, p=0.0005
Long-term follow-up	1	757	*0.56 [0.42, 0.75]	NA
Intention to quit (SMD)				
All studies	2	132	-0.32 [-0.82, 0.18]	32%, p=0.22
RCT	0	-	-	-
NRCT	2	132	-0.32 [-0.82, 0.18]	32%, p=0.22
Pre-Post	0	-	-	-

Outcome	Number of studies	Number of participants	Odds Ratio or SMD	I ² (heterogeneity)
Placebo-controlled	0	-	-	-
Non-placebo-controlled	2	132	-0.32 [-0.82, 0.18]	32%, p=0.22
Short-term follow-up	0	-	-	-
Medium-term follow-up	1	25	-0.73 [-1.56, 0.10]	NA
Long-term follow-up	1	107	-0.16 [-0.54, 0.22]	NA
Stress-related outcomes (SMD)				
All studies	2	145	-0.08 [-0.52, 0.37]	40%, p=0.20
RCT	1	46	-0.36 [-0.94, 0.22]	NA
NRCT	1	99	0.11 [-0.29, 0.51]	NA
Pre-Post	0	-	-	-
Placebo-controlled	0	-	-	-
Non-placebo-controlled	2	145	-0.08 [-0.52, 0.37]	40%, p=0.20
Short-term follow-up	1	46	-0.36 [-0.94, 0.22]	NA
Medium-term follow-up	0	-	-	-
Long-term follow-up	1	99	0.11 [-0.29, 0.51]	NA

Outcome	Number of studies	Number of participants	Odds Ratio or SMD	I ² (heterogeneity)
Job/life satisfaction (SMD)				
All studies	2	193	-0.07 [-0.50, 0.37]	56%, p=0.13
RCT	0	-	-	-
NRCT	2	193	-0.07 [-0.50, 0.37]	56%, p=0.13
Pre-Post	0	-	-	-
Placebo-controlled	0	-	-	-
Non-placebo-controlled	2	193	-0.07 [-0.50, 0.37]	56%, p=0.13
Short-term follow-up	0	-	-	-
Medium-term follow-up	1	81	-0.30 [-0.75, 0.14]	NA
Long-term follow-up	1	112	0.14 [-0.23, 0.52]	NA
Self-esteem (SMD)				
All studies	3	232	-0.08 [-0.34, 0.18]	0%, p=0.42
RCT	1	46	0.26 [-0.32, 0.84]	NA
NRCT	2	186	-0.16 [-0.45, 0.13]	0%, p=0.81
Pre-Post	0	-	-	-
Placebo-controlled	0	-	-	-
Non-placebo-controlled	3	232	-0.08 [-0.34, 0.18]	0%, p=0.42

Outcome	Number of studies	Number of participants	Odds Ratio or SMD	I ² (heterogeneity)
Short-term follow-up	1	46	0.26 [-0.32, 0.84]	NA
Medium-term follow-up	1	80	-0.12 [-0.56, 0.32]	NA
Long-term follow-up	1	106	-0.20 [-0.58, 0.19]	NA

4.4.3.1 Meta-analysis of staff turnover in team-building interventions

Five studies measured staff turnover (8, 90, 110, 135, 137) (Table 4). The studies were rated moderate to high risk of bias. Overall, the meta-analysis showed the odds of staff turnover were 35% lower in the intervention group. With a control probability of turnover of 32% as found in the data, such an odds ratio corresponds to a relative risk of 0.73, i.e. 27% less risk of staff turnover in the intervention group. Notably, the largest contribution to the high heterogeneity in comparisons for this outcome was from the Webb et al. study (137) (rated high risk of bias) which reported results favouring the control group. However, excluding this study did not result in achieving statistical significance in any of the comparisons.

Stratified by study type, the odds of staff turnover were 9% higher in the intervention group in RCT studies. With a control probability of turnover of 10% as found in the data, such an odds ratio corresponds to a relative risk of 1.08, i.e. 8% more risk of staff turnover in the intervention group. In nRCT studies, the odds of staff turnover were 55% lower in the intervention group. With a control probability of turnover of 54% as found in the data, such an odds ratio corresponds to a relative risk of 0.64, i.e. 36% less risk of staff turnover in the intervention group. The two groups were not significantly different.

All five studies used non-placebo control groups, so no additional analysis by comparator type was necessary.

Subgroup analysis by follow-up duration included one subgroup: medium-term follow-up. The odds of staff turnover were 45% lower in the intervention group. With a control probability of turnover of 20% as found in the data, such an odds ratio corresponds to a relative risk of 0.61, i.e. 39% less risk of staff turnover in the intervention group.

4.4.3.2 Meta-analysis of intention to quit in team-building interventions

Two studies measured staff's intention to quit (90, 110) (Table 4). Both studies were nRCTs. They were rated moderate to high risk of bias. The meta-analysis showed that the standardised mean difference favoured the intervention group. The result was not statistically significant.

No subgroup or sensitivity analyses were conducted due to an insufficient number of studies in this outcome group.

4.4.3.3 Meta-analysis of stress-related outcomes in team-building interventions

Two studies measured staff's stress-related outcomes (90, 135) (Table 4). They were rated high risk of bias. The meta-analysis showed that the standardised mean difference for stress-related outcomes favoured the intervention group. The result was not statistically significant.

No subgroup or sensitivity analyses were conducted due to an insufficient number of studies in this outcome group.

4.4.3.4 Meta-analysis of job/life satisfaction in team-building interventions

Two studies measured staff's job/life satisfaction (90, 137) (Table 4). They were rated high risk of bias. The meta-analysis showed that the standardised mean difference for job/life satisfaction favoured the control group. The result was not statistically significant.

No subgroup or sensitivity analyses were conducted due to an insufficient number of studies in this outcome group.

4.4.3.5 Meta-analysis of self-esteem in team-building interventions

Three studies measured staff's self-esteem (90, 135, 137) (Table 4). They were rated high risk of bias. The meta-analysis showed that the standardised mean difference for self-esteem favoured the control group. The result was not statistically significant. All three studies used non-placebo control groups, so no additional analysis by comparator type was necessary.

In nRCT studies, the standardised mean difference marginally favoured no intervention.

Subgroup analysis by follow-up duration included one subgroup – medium-term follow-up. The standardised mean difference marginally favoured no intervention.

4.4.4 Exercise and fitness interventions

One study (97) evaluated an exercise and fitness intervention Table 1. It was rated 'moderate risk of bias'. The issues increasing the risk of bias in this study were lack of reporting about blinding, concealment and randomisation methods, and the differences between study groups at baseline.

This randomised controlled trial included a mixed population of care workers (support workers and registered nurses). The study was conducted at a Norwegian nursing home. The intervention duration was six months. The core intervention component was a weekly one-hour exercise session. The intervention was underpinned by the Aerobic Fitness Model. The study included a non-placebo control group and evaluated SW's absenteeism and general satisfaction.

As there was only one study in this group, no meta-analysis was conducted.

4.4.5 Summary of findings relating to interventions' effectiveness

In this section I summarise findings relating to interventions effectiveness. I first look at the interventions' effectiveness as reported by the included studies' authors. This is followed with a summary of the interventions' effectiveness as evaluated through the meta-analysis.

Table 5 presents the summary of interventions that were found to report statistically significant improvement in work-related outcomes for support workers. Knowledge-based interventions were reported most often to improve workers stress-related and satisfaction-related outcomes. Interpersonal skills-based interventions were found to be most effective in improving stress-related outcomes. Team-building interventions were most often reported to improve turnover-related outcomes. The study evaluating the exercise and fitness intervention did not report any improvements in its primary and secondary outcomes. Caution is warranted when generalising these results as a large majority of these studies were rated high or very high risk of bias.

Table 5. Top 6 most reported positive outcomes.

Outcome	Number of studies	Number of studies reporting a desired and statistically significant change (total)		
		Knowledge	Interpersonal	Team building
Stress-related	29	9 (18)	3 (7)	0 (4)
Job/life satisfaction	21	2 (12)	1 (6)	0 (3)
Turnover	11	1 (4)	1 (2)	3 (5)
Intention to quit	7	0 (1)	1 (2)	3 (4)
Absenteeism	6	1 (3)	0 (2)	0 (1)
Other satisfaction	5	3 (4)	0 (0)	0 (1)

Table 6 presents the summary of meta-analyses findings. Most of the main comparisons showed positive changes, however, the effect sizes were small or very small. Apart from the knowledge-based interventions effect size on staff turnover, none

of the pooled effect sizes were statistically significant. Comparisons for knowledge-based and interpersonal skills-based interventions stratified by follow-up duration favoured medium-term follow-up (3-12 months), albeit the results were not statistically significant.

Table 6. Summary of main meta-analysis findings (effect sizes).

Outcome	Knowledge	Interpersonal	Team building
Turnover (OR)	+ (*0.47) ¹	+ (0.48) ²	0 (0.65) ³
Intention to quit (SMD)	NA	NA	+ (-0.32)
Absenteeism (SMD)	+ (-0.36)	NA	NA
Stress (SMD)	0 (0.02)	0 (-0.12)	0 (-0.08)
Job/life satisfaction (SMD)	0 (0.06)	+ (0.28)	0 (-0.07)
Other satisfaction (SMD)	0 (0.1)	NA	NA
Self-esteem (SMD)	NA	NA	0 (-0.08)
'0' no effect or very small; '+' positive small effect size; '++' positive medium effect size; '*' - statistically significant			

4.5 Discussion

In this review, I synthesised findings from studies evaluating the scientific evidence on the effectiveness of strategies that could be incorporated into a peer-mentoring intervention improving psychosocial and turnover-related outcomes for support workers in aged care. This study has highlighted that while some of the included interventions may lead to improvements in some key outcomes, the evidence is of low certainty due to a range of limitations relating to the study design and substantial heterogeneity of the included studies.

Studies included in the systematic review represented a broad range of approaches, from interventions focusing on teaching staff about symptoms of dementia to studies

¹ Baseline probability $P_0=0.34$

² Baseline probability $P_0=0.12$

³ Baseline probability $P_0=0.32$

trialling exercise classes for support workers. Knowledge-based interventions were the most evaluated intervention type (n=27) and reported by their authors to be particularly effective in improving stress-related and 'other satisfaction' outcomes. Interpersonal skills-based interventions were next (n=12), and also reported to be particularly effective in improving stress-related outcomes. Team-building interventions (n=9) were reported by their authors to be especially effective in improving staff turnover and intention to quit. Only one exercise and fitness intervention was identified, and its authors did not report any improvement in its primary or secondary outcomes. There may be benefit in future studies with this population exploring this type of intervention more.

The meta-analysis showed that knowledge-based, interpersonal skills-based and team-building interventions may lead to declines in staff turnover rates. Adding to this, team-building interventions showed positive effects on intention to quit, while knowledge-based interventions on absenteeism. Interpersonal skills-based interventions, compared with the other two interventions, had a stronger effect on decreasing workers' stress levels and increasing their job/life satisfaction.

With no one type of intervention showing superior effects, high between-study heterogeneity (intervention- and outcome-wise), scarce high-quality evidence and most of the meta-analyses not yielding any statistically significant results, the evidence provides limited guidance in relation to the effectiveness of the identified interventions. One of the key findings of this review is that the effectiveness of any specific approaches varies between settings. This review found that similar interventions (e.g. knowledge-based interventions focusing on understanding dementia) may lead to contradictory (e.g. studies by Cheng et al. (111) and Zimmerman et al. (98), see Table 1) or no effects (99) when used in different countries/contexts (Taiwan vs USA vs Brazil). One possible explanation for this is that these contrasting effects may result from between-study differences in the intervention fidelity, adherence, the outcome

measure used, or a combination of these. Importantly, most of the included studies did not report any findings relating to intervention fidelity, and many used 'home-grown' or unvalidated outcome measures. Using validated measures and reporting intervention fidelity are crucial for accurate interpretation of study findings, and it is strongly recommended they are included in studies evaluating intervention effectiveness (142, 143).

Another plausible explanation for observing contradictory or no effects is that the needs and preferences of these studies' participants were diverse, therefore requiring an adaptation of the existing approaches. Adapting and tailoring interventions to the needs of its intended users is particularly important in the cultural context of health care delivery (144-146). This consideration is especially relevant when developing an intervention to be implemented in NZ – a bicultural country with a multicultural society. Thus, the current project should focus on developing an intervention which can be tailored to the support worker's personal needs and preferences. Such intervention could include elements of all the intervention types included in this review, albeit adapted to the specific population of NZ support workers.

The results of subgroup meta-analysis by follow-up duration indicated the effects of the interventions were more pronounced when follow-up scores were collected between three- and 12-months post-implementation. This was perhaps unsurprising, given that the majority of the studies tested interventions lasting two or more months. This finding suggests that interventions aiming to improve psychosocial and turnover-related outcomes may need to last longer than two-three months. On the other hand, interventions with long duration may lead to lower adherence and higher drop-out rates (147), which can be impacted further by high staff turnover reported for support workers (22). Therefore, the current project would consider an intervention duration between three and twelve months, with follow-up measurements at baseline, three-months and completion of the intervention.

4.5.1 Study limitations

Systematic reviews and meta-analysis usually limit studies for synthesis to randomised controlled trials (148). However, in order to develop the conceptual and theoretical basis for intervention development in Phase 2 of this doctoral project, I included both experimental and quasi-experimental studies aiming to evaluate effectiveness of interventions for support workers. Furthermore, I did not exclude studies based on their methodological quality. While including such studies may provide additional evidence on potential causal inferences, the increased risk of bias this inclusion carries requires caution in interpreting and generalising the review findings. I believe that these risks were mitigated by the subsequent exploration of the review findings in Study 1B: Focus groups with aged care stakeholders. As argued by Rockers et al. (148), any review should serve a practical aim of informing policymakers, practitioners and researchers. Employing this approach allowed me to identify solutions that could, rather than 'definitely did', work for improving outcomes for support workers.

Due to the wide inclusion criteria, I included many studies testing a diverse range of interventions. To manage the high intervention heterogeneity, I arbitrarily grouped them into intervention types. A different grouping might have produced different results. Furthermore, despite the relatively large number of included studies, due to high heterogeneity, the number of studies in many subgroups was still small. However, given the scarcity of high-quality studies and them reporting mostly very small or small effect sizes, the overall conclusion of this review would likely remain the same even if different grouping approach was used.

The included studies used over 50 different outcome measures, with many of them not psychometrically tested or validated. This meant that many studies could not be included in the meta-analyses, or that their inclusion led to an increased heterogeneity, making the interpretation of results even more challenging.

4.6 Summary

The main findings of this systematic review and meta-analysis were:

1. A wide range of interventions had been proposed to improve psychosocial and turnover-related outcomes for support workers and could be incorporated into a peer-mentoring intervention.
2. Studies evaluating these interventions could be grouped into knowledge-based interventions, interpersonal skills-based interventions, team-building interventions, and exercise and fitness interventions.
3. The most often targeted outcomes of these interventions were stress-related outcomes, job/life satisfaction, and turnover-related outcomes.
4. Most of the studies were considered to carry 'high' or 'very high risk of bias' due to their methodological limitations. Only one study was rated 'low risk of bias'.
5. The identified interventions were generally associated with positive, albeit small and mostly non-significant changes in study outcomes. No one type of intervention appeared to result in a superior effect.
6. Overall, the evidence on the interventions' effectiveness is of low certainty, with the evidence on specific intervention parameters lacking.

These findings were presented and explored during focus groups with aged care stakeholders in Study 1B to guide further development of the proposed mentoring intervention.

5 Chapter 5: Study 1B - Focus groups exploring NZ aged care stakeholders' perspectives on interventions improving outcomes for support workers.

5.1 Prologue

In the previous chapter, I presented the main types of previously proposed interventions improving psychosocial and turnover-related outcomes for support workers and concluded that the evidence on their effectiveness is limited and of low certainty. In this chapter I report the findings from Study 1B which aimed to explore the perspectives of NZ aged care stakeholders on interventions improving outcomes for support workers to inform further development of the proposed peer-mentoring programme. Findings from Study 1B had a fundamental impact on this doctoral projects' course.

5.2 Introduction

In Study 1A, a range of strategies that could be included in the proposed peer-mentoring intervention were identified. However, none of them were developed in NZ, included perspectives of NZ aged care stakeholders, or accounted for the specific cultural and sociodemographic context. The MRC framework strongly recommends to consider these factors when developing or refining complex interventions (9).

The specific characteristics of the NZ aged care support workforce were presented in Chapter 2 (Aged care support workers in NZ). At the time when this intervention was being developed, the NZ government announced the Pay Equity Bill (formally the Pay Equity Settlement Act 2017). The Bill was introduced to implement changes to funding, wages and training for support workers in residential aged care (149). It was welcomed by many of the aged care stakeholders and brought unprecedented changes

addressing longstanding discrimination of support workers (149). However, due to its recency, it was unclear what the actual impact of these changes would be on the challenges this workforce had been experiencing.

Implementing evidence-based interventions into the real-world settings does not always result in the anticipated outcomes (150, 151). Inclusion of the relevant stakeholders in intervention development and/or refinement is proposed to facilitate successful implementation (9, 152). As Argued by Brown et al. (151), understanding the local context and perceptions of the involved communities and organisations is key to acceptability and successful implementation of a new intervention. Focus groups are commonly used to engage potential stakeholders in the development process and to develop understanding of the contextual factors that could impact intervention implementation (153-156).

Therefore, the next step in developing the proposed peer mentoring intervention was to explore NZ aged care stakeholders' perspectives on Study 1A findings and how these findings fit within the realities of NZ aged care sector.

5.3 Methods

The aim of Study 1B was to explore the aged care stakeholders' perspectives on the interventions identified in the systematic literature review (Study 1A) with a focus on their likelihood for uptake in the NZ aged care context as part of a peer-mentoring workplace-based intervention.

It is important to note that following the first focus group a major intervention implementation barrier was identified, i.e. it became apparent that the proposed workplace-based mentoring approach (while desirable) was not viable to the aged care sector. I will explain this in more depth in the findings section.

After identifying this barrier and informed by other findings and consultation with the advisory group, a decision was made to re-focus on the potential for an online-based

(rather than workplace-based) peer mentoring approach as this appeared to be a more feasible and promising approach to improving outcomes for support workers in NZ in the current context. As such, the focus group guide was modified for the second focus group to explore this possibility in more depth to inform intervention development. A more detailed rationale for this is presented in the findings section.

In the following sections I present methods used in Study 1B.

5.3.1 Study Design

A qualitative descriptive research approach (157), or Qualitative Description, was used to explore the stakeholders' perceptions of what strategies might work for improving retention and psychosocial outcomes for support workers in NZ aged care.

The focus of Qualitative Description is on collecting information directly from people experiencing the phenomenon under investigation, where time and resources are limited (158). Qualitative Description methodology is broadly underpinned by the epistemological assumptions of Naturalistic Inquiry (63) as it aims to investigate a given phenomenon in its natural setting, uses qualitative methods and the application of findings is tentative rather than absolute (63). It is also well aligned with pragmatism (140), as it seeks to understand human experience from participant's perspective and within their context. Qualitative Description assumes that the reality is subjective, and as such it lends itself to relativism (ontologically) and interpretivism (epistemologically) (158).

Qualitative Description builds on the expert knowledge of a researcher whose interest and experience in the area inform their research approach (140). To that extent, interview guides in Qualitative Description can be more prescriptive than in other qualitative approaches, as they seek to collect information on relatively well-defined practice-based problems. The final product of Qualitative Description is a direct account of participants' perspectives and provides clear information on how to improve

practice (140). Thus, this approach aligns well with the pragmatic focus of this doctoral project aiming to develop an intervention to improve outcomes for support workers.

5.3.2 Ethical approval

Ethical approval was obtained from Auckland University of Technology Ethics Committee (Ethics approval number: AUTE17/218).

5.3.3 Participant selection

Participants were aged care workforce stakeholders. They were recruited from within known professional networks (aged care professionals I had previously worked with) using purposive sampling (159). This non-random sampling method allows recruitment of participants who can and are willing to provide information because of their experience and knowledge.

The primary sampling criterion was to include two main groups of stakeholders who currently: 1) worked as support workers; and 2) were involved in managing and developing this workforce (including aged care managers, researchers, educators). I focused on this criterion, as it was essential to gain perspectives from those who would be the future intervention's users and those who may be facilitating or implementing the intervention within the sector.

I aimed to recruit five support workers and five participants representing the other stakeholder groups to take part in two or three focus groups. Given the clearly defined aim of the study and its population, the proposed sample size of ten participants was deemed to hold sufficient information power (160).

5.3.4 Data collection procedure

Focus groups are commonly used in studies developing new interventions as they provide an opportunity for discussion between the researcher and the target population, and allow a deeper understanding of factors that may facilitate or impede

implementation (161). Their key advantage over another commonly used method, i.e. individual interviews, is that in a focus group the participants both query and explain themselves to each other (162). This allows a unique opportunity to observe the extent of agreement and disagreement between participants and is a particular strength of using focus groups (162). Using focus groups in this study allowed an in-depth understanding of the perceived barriers and facilitators of an intervention improving outcomes for support workers from the perspective of a range of aged care stakeholders.

Purposively selected participants were contacted, and an appointment arranged for a focus group at one of AUT's campuses. To create a safe environment for exchanging ideas, I decided to have a separate group for support workers given other stakeholders were likely to have different and potentially competing interests. Furthermore, group homogeneity on important characteristics, such as occupational status, may facilitate a more comfortable environment for participants (161).

Three focus groups were arranged in this study. The first one was for 'other stakeholders' (not support workers) and included four participants. The second one was only attended by one support worker (three other people did not attend). As such this functioned as an individual interview while following the same structure as the first focus group. The third focus group was attended by six support workers. Thus, in the following sections I refer to 'focus groups/interview'.

I facilitated all focus groups/interview using a guide (Appendix 8). All started with introductions and setting the ground rules for the discussion. This was followed by a short presentation to set the context for the discussion:

1. For the first focus group and interview – the presentation focused on the literature review findings and the proposed workplace-based peer mentoring (Appendix 9).

2. For the second focus group (following identification of the major implementation barrier) – the presentation focused on the online-based mentoring (Appendix 10).

In addition, I prepared a set of pamphlet-sized summaries of key findings from the systematic review (Appendix 11). These were handed out to participants before the presentation as a reference for the discussion.

Following the presentation, participants were asked to respond to a series of topics and questions exploring their views on and experiences with the interventions identified in the systematic review and the proposed intervention approach, and the factors they perceived might promote or hinder the uptake of the interventions' into practice.

Questions included, for example: Which interventions/strategies are known to you?

What would it take to integrate these interventions into practice? What should be the components of the Aged Care Support Specialist training? (see Appendix 12 for the full interview guide).

Focus groups/interview lasted between 90 and 120 minutes. They were audiotaped and transcribed verbatim with names, institutions and other identifying features removed. Participants were each given a pseudonym for the purpose of reporting.

5.3.5 Data analysis

Focus groups/interview transcripts were analysed using Directed Content Analysis (163). Directed Content Analysis is a deductive approach where a preliminary coding framework is developed informed by existing theory, evidence and/or aim and purpose as the starting point analysis. In the current project, the coding framework was informed by the systematic literature review findings. Data collection and data analysis occurred simultaneously, i.e. one informed the other. An example of how this occurred is provided in the following sections where I explain how the first focus group/interview data informed a shift in direction for the second focus group.

Analysis of the first focus group and interview data focused on four pre-specified categories: work environment/context, interventions and strategies (particularly peer mentoring), intervention outcomes, and implementation considerations. Focus on these categories would enhance my understanding of the key intervention development areas highlighted by Study 1A findings and the MRC framework (9): context, components, aim and implementation.

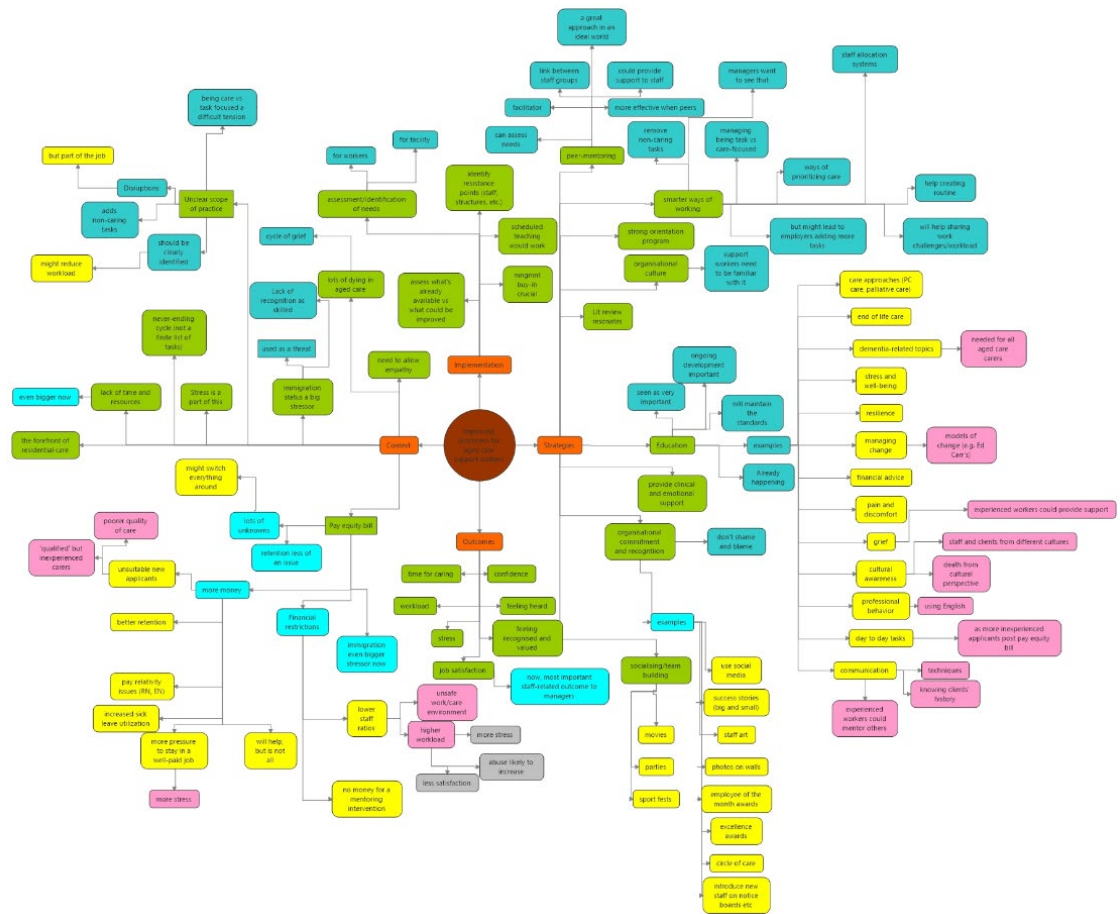
Following preliminary analysis of the first focus group, several barriers to implementation relevant to the current context were identified and, as a consequence, the originally proposed intervention was perceived as unlikely to be taken up by the aged care sector. Focus group and interview, and systematic review findings were reviewed and were followed by further literature review and consultation with the advisory group, study supervisors, and colleagues with interest and/or experience in aged care and intervention development. These reviews and consultation focused on identifying strategies to address the abovementioned implementation barriers. Through this work, I identified what appeared to be a very promising and fitting intervention, i.e. online-based mentoring which has the potential to overcome the limitations of the workplace-based mentoring. As such, following the first focus group and interview, the focus of subsequent data collection shifted to exploring support workers perspectives on e-mentoring as a potential intervention approach to improve their psychosocial outcomes. I drew on the e-mentoring approach described by Neely et al. (164) for this purpose. This e-mentoring approach was flexible and easy to tailor to the specific needs of its potential users. Neely et al. (160) highlighted the importance of considering the following features of e-mentoring during intervention development: format, matching process, mentor and mentee characteristics, mentoring relationship/process, and training. The specific characteristics of the model are discussed in more detail in Chapter 6.

Given the shift in focus between focus groups, analysis of the second focus group data was carried out separately. Analysis at that stage focused specifically on the online-based peer mentoring approach and three pre-specified categories: acceptability, outcomes, and key features of e-mentoring (as identified by Neely et al. (164)).

Initially, I listened to the interview audio recordings, and then read and reread the transcripts. During this process I marked all text that appeared to relate to any of the pre-specified categories (or features thereof). Next, I inductively coded these passages by adding labels, for example 'work environment' or 'becoming more busy', and noted any other comments in the margins (for examples see Appendix 13). All codes and comments were then imported into a mind-mapping software MindManager 2017 (165), where I grouped them into subcategories within the pre-specified categories (for an example of this see Figure 3).

When writing up the findings, my analytic focus was on how they expand, challenge and/or augment the systematic review findings and the Neely et al. e-mentoring model (164) and on identifying key considerations for defining the intervention protocol in Phase 2. To illustrate how the findings were grounded in the data, I selected relevant quotes from the interview transcripts for the purpose of reporting.

Figure 3. Map of codes and categories from the first focus group and interview (Study 1B; colours indicate the level of coding; zoom in to enlarge).



5.4 Findings

The following sections report the findings for this phase. I start by reporting findings from the first focus group and interview, which focused on four pre-specified categories: work environment/context, interventions and strategies (particularly peer mentoring), intervention outcomes, and implementation considerations. Next, I discuss how I refined the focus of Study 1B in response to identifying a major implementation barrier following the first focus group and interview. Findings from the second focus group are then reported in a separate section, as it specifically explored the support workers' perceptions on an e-mentoring approach to improving their health and well-

being outcomes. I conclude with a summary of findings and recommendations for development of the proposed intervention.

Please note that I arranged three focus groups. The first focus group was attended by four aged care stakeholders (other than support workers). However, only one participant attended what was meant to be the second focus group (for support workers only). Therefore, I refer to this as the interview. This interview was followed by another focus group, which was attended by six support workers from the same facility and is referred to as the second focus group. Table 7 presents participants demographic characteristics.

Table 7. Study 1B participants.

Pseudonym	Stakeholder group	Experience (years)	Ethnicity	Participation
Wanda	Manager	10	NZ Euro	Focus group 1
Kelly	Manager	20	NZ Euro	Focus group 1
Charlotte	Educator/Researcher	17	NZ Euro	Focus group 1
Tina	Manager/Researcher	15	Māori	Focus group 1
Ben	Support worker	12	Filipino	Interview
Hanna	Support worker	19	Cook Island Māori	Focus group 2
Sophia	Support worker	27	Indian	Focus group 2
Mark	Support worker	2	Filipino	Focus group 2
Suzy	Support worker	25	Niuean	Focus group 2
Roger	Support worker	10	Filipino	Focus group 2
Peter	Support worker	1	Filipino	Focus group 2

5.4.1 Focus groups 1 and interview findings

The following sections report the analysis findings from the first focus group and interview. Four main categories were derived. *Support workers' work context* included findings relating to the working conditions and two key factors affecting them at the

time: implications of the Pay Equity Bill and the unclear scope of practice. *Potential intervention outcomes* reports participants' perspectives on key outcomes that should be seen as priority for interventions for support workers'. In *Potential interventions for support workers*, I report findings relating to participants' views on strategies that had been or could be implemented to support the aged care staff. Finally, in the *Intervention implementation considerations* I report findings relating to participants' views on how to successfully implement the proposed intervention in the aged care context. Within each major category, several subcategories were identified. The major categories and their subcategories are discussed below.

5.4.1.1 *Support workers' work context*

Participants described the aged care support workers as a group at the forefront of care delivery. These workers are responsible for most of the day-to-day support received by aged care residents. Support workers are usually working shifts and have groups of clients and tasks allocated to them. As the participants pointed out, an aged care facility is a 24/7 work environment, where residents' needs and related tasks are constantly changing, and as a result support workers can easily fall behind on their tasks. However, in some facilities, the staff have a good understanding of the 24/7 nature of their work environment and have learnt to share their duties.

“...Because there is a 24hr organisation and all of the teams will support each other so the PM team will help that morning team.”⁴ (Charlotte)

Nevertheless, lack of time and resources was considered as one of the biggest challenges affecting this workforce. Reportedly, one important factor contributing to the above is an unclear scope of practice for support workers. This creates a lot of additional stress for the workers, in an environment which the participants considered to be inherently stressful. This had become an even bigger issue after the new Pay Equity Bill was implemented on the 1st of July 2017. Issues relating to the Pay Equity

⁴ Double quotes were used throughout this section to present participants' quotes.

Bill and the unclear scope of practice were discussed in detail during the first focus group. The key points are presented below.

The Pay Equity Bill

The purpose of the Pay Equity Bill was to eliminate and prevent discrimination, in remuneration and other terms and conditions of employment. One of the most significant changes the bill brought to aged care industry were substantial pay rises to all support workers. Focus group participants believed this would affect the industry in several ways including:

- A. Support workers' retention rates were likely to improve, as they will be paid up to 25% more;
- B. Because of the above, the facilities would be under even more financial pressure;
- C. Financial restrictions would likely result in lower staff-to-resident ratios and therefore increased workloads;
- D. Work stress levels would continue to increase and job satisfaction decrease.

Participants suggested that the increase in support workers' hourly rate will bring both positive and negative changes to the aged care sector. In the words of one of the participants, "throwing money out there" is likely to improve worker retention. Given support workers are a historically underpaid workforce, it was argued to be "the solution to the problem". However, all participants believed it would influence many aspects of support workers life and brings with it a range of potential risks.

First, being paid more was considered to create more pressure to stay in a "damn stressful" job. Some participants suggested this pressure would lead to worse psychosocial outcomes, including a decrease in job satisfaction and an increase in work stress levels. Inadvertently, sick leave utilisation may increase as workers will

become even more “stressed-out” and will feel “they can afford a sickie”, and creating further financial pressure on facilities.

Second, under the new rules, many support workers would be paid close to what some of the professional healthcare staff were paid. This will likely lead to a range of pay relativity issues, e.g. professional staff feeling underpaid. The participants believed these issues would have to be resolved through further pay increases, this time for enrolled nurses and registered nurses, and that may bring further financial pressure.

Third, all participants were concerned about a new wave of potentially unsuitable job applicants. Participants reported this workforce consists of a very high proportion of immigrant workers, as the market had historically been seen as not competitive due to low pay and poor working conditions. It was noted that the higher hourly rate following bill implementation might attract people who are not drawn to the ‘care’ aspect, but the ‘money’ aspect of this job. Furthermore, the higher hourly rate is likely to create a recruitment challenge between recruiting an inexperienced, money-focused work permit holder and a healthcare-qualified, experienced, care-focused migrant worker. This was perceived to be a major risk to the quality of care provided to clients, but also as a huge stressor for immigrant support workers, who are faced with annual work visa renewals. Granting of their visas depends on the availability of ‘suitable’ workers in NZ. Participants were concerned that many of those qualified and experienced support workers and their families would be forced to leave NZ, due to the new wave of applicants who may potentially apply due to the pay, rather than their passion for caring.

All participants expressed concern about the immediate and future financial pressure the Pay Equity Bill would contribute. Their main concern was that the facilities would now be forced to pay their caregiving staff more and that this may lead to the facilities not being able to employ adequate numbers of staff. Two main negative consequences of this issue were discussed.

The potential low staff-to-resident ratio would lead directly to an increased workload for all support workers. While the current recommended ratio of five clients to one support worker (5:1) was suggested as the bare minimum, this might have to drop even further. Participants argued that an increase in what was already considered an extremely high workload, would result in more stress for staff and even less job satisfaction. They were also worried about an increase in client abuse directed at “stressed-out staff”. A ratio lower than the current 5:1 was considered not acceptable by the participants.

“I fought with my board and said if we reduce the ratios any less than one staff member to five residents, you have my resignation on the table and I am not... they can do what they like after that if I go, but I will not tolerate, I will not accept it.” (Kelly)

Participants were also worried that the lower ratio would lead to an unsafe work environment, for both staff and clients. They argued that the higher workload and more stress would lead to staff trying to save time by not following the safety protocols, which could then lead to more clients having falls and other accidents.

Additionally, participants believed that due to this new financial pressure and its currently unknown consequences (N.B. at the time of data collection it had only been two months since the Pay Equity Bill came to fruition), most aged care facilities in NZ would not be able to invest money in other interventions, such as initiatives aiming to improve support workers work conditions. This included the work-based peer mentoring intervention which was intended to be the primary focus for these focus group discussions.

“It’s the time pressure all the way through. It honestly is... and the money, because time is money, so if you free them up for money, who the hell is going to pay for that...” (Wanda)

Overall, participants discussed a range of potential changes and risks that were brought by the Pay Equity Bill. On the positive side, the historically problematic staff retention, was anticipated to improve and staff did not appear to feel underpaid anymore. However, participants expected to observe other consequences, such as

higher workload, more stress and less job satisfaction. Immigration, which has already been identified as a stressor for support workers in NZ, was likely to become an even bigger issue. Aged care recipients could be facing lower quality of care, and less safe care environments. Furthermore, as the bill had been introduced only recently, the full extent of its impact was still unknown. Participants believed that it would take some time to understand how the Pay Equity Bill was going to change the aged care sector and support workers' work life.

"The problem is again not having that crystal ball because we don't know the full impacts yet and it's going to take us... oh, I would say a year at least, to say, get a good understanding of that." (Kelly)

Findings relating to the Pay Equity Bill highlighted that any interventions needed to be able to adapt and be responsive to the changing work context and any new challenges it may cause. It also became apparent that focusing on staff retention was not a primary outcome of interest for employers. Finally, it appeared that work-based interventions may not be feasible given the financial pressures introduced through the changing landscape.

Unclear scope of practice

All participants agreed that one of the biggest issues affecting the support workers jobs is that there is no officially regulated scope of practice for this group in NZ. Their scope of practice is completely "reliant on their qualification and the way their employer interprets it". The support workers are not clear on what the expectations towards them are. This may lead to unnecessarily high workload for this workforce.

Having no clearly defined scope of practice, support workers are constantly dealing with a range of distractions from actual caring tasks. Charlotte talked about a study reporting that an average support worker gets interrupted every single minute. These interruptions could be someone talking to them (e.g. client's relative) or having to simply pick up something they have dropped. These potentially small interruptions can

take them away from the task they should be concentrating on. However, as one of the participants pointed out, these distractions are also something to be expected:

“I expect to be interrupted constantly in that task because people are going to need things and these people are unwell so for me that’s an expectation that I am going to get interrupted from my tasks.” (Ben)

While support workers are not formally recognised as healthcare professionals in NZ, they do have to deal with similar work challenges. One example discussed by participants was the tension between being task-focused versus care-focused. Each shift, the support workers are allocated to a group of clients. There are a number of specific tasks that are expected to be completed, e.g. give a client a shower, take them to an activity, and so on. Focusing on these tasks was described as a task-focused approach. Being only task-focused was perceived to be a rather poor approach. However, participants pointed out that there are several things a support worker could do to improve the quality of care they provide and quality of life for their clients. For example, “the friendly hugs, the pats, the putting the make up on the oldies, or doing their hair as it should be done...”. Focusing on these elements was considered a care-focused approach and was more desirable. Managing the tension between being task vs care-focused, in the context of an unclear scope of practice, high workload and stress, was very difficult. Participants suggested that over time most support workers develop a system which allows them to be efficient and “still provide caring”. The workers who are new, stressed out or burnt out, revert to a task-focused approach.

“They are like the mum (N.B. the support workers) you know who has got the 3 kids and who picks up everything as they are going and has them in the arms and don’t even realise they are doing it. The person who is learning or is hurt withdraws back and only provides task and they are the ones who get easily distracted and get angry at the distraction.” (Charlotte)

One of the participants explained that to help manage the abovementioned tensions, aged care facilities should spend sufficient time on an orientation process for new staff. The orientation process should be a time when they can simply observe other, more experienced workers doing the work. The orientation needs to be not just about the

task, but also about the caring and about understanding that the facility is the client's home. According to the participants, such an approach is crucial in helping the support workers manage the tension between being task versus care-focused.

The unclear scope of practice was reported to also further complicate the already complex immigration status for many support workers. As previously explained, many of the aged care support workers face annual visa renewals and experience high levels of stress during that process. One of the biggest issues during that process is that there is no clear scope of practice for their occupation and they are not recognised as skilled workers by the NZ Immigration Office. Interestingly, one of the participants explained that the NZ Certificate in Aged Care Support (which many of the support workers have completed) is the only Level 4 qualification (on NZ Qualification Authority's list) not recognised as "Skilled Migrant" by NZ Immigration Office.

"Ever since I came here, it's been a struggle. I mean, being recognised and being part of the, you know, acceptable workforce, you know. You have to be eligible for residency because that will eliminate most of the immigration problems." (Ben)

Participants also talked about how aged care facilities used to be a place where people were spending the last years of their lives. Nowadays, the participants suggested, aged care tends to have much more of a palliative care approach, with some people dying just a couple of days after admission. This was reported to have a big influence on the care staff. On one hand, the support workers need to know how to comfort the clients and "just let them die quietly". On another hand, the staff are on a constant "cycle of grief".

"They call it a cycle yeah that's it it's on the cycle that's what they say we invest our love in this person and we really care about them and they die and they say well get on with it the next one is coming in so they said we are on this cycle of grief." (Charlotte)

As explained above, the unclear scope of practice was identified by participants to contribute to a range of challenges experienced by support workers, both professionally and personally. It adds to their workload, makes their work visa renewals

more stressful, and potentially affects the quality of care and quality of life of their clients. Furthermore, their scope of practice appears to be constantly evolving. For example, with more patients requiring a palliative care approach. According to the participants, it would be beneficial to clarify the scope of practice, as it is likely to reduce support workers' workload and lead to positive outcomes for most of the involved stakeholders. It appears that the proposed mentoring intervention could help with this by increasing its users' understanding of what is expected of them (as support workers) and how they can perform well as support workers.

Section summary

In this section, a range of work features and events relevant to aged care support workers work experience were presented. Participants described the support workers' job as inherently stressful, with high workloads, and a range of complexities around their daily duties. Focus was given to the Pay Equity Bill and the unclear scope of practice, as these two issues appeared particularly pertinent to the focus group's topic. The Pay Equity Bill was expected to bring about significant changes to the sector. Participants suggested that more focus would be needed on maintaining and improving support workers job satisfaction and helping them cope with high workloads. Also, participants' stories around the unclear scope of practice accentuated the complexity of support workers jobs and how much it intersects with their private lives (immigration, feeling accepted, grief). However, participants believed that the increasing financial pressures on the aged care sector meant that most facilities in NZ would not be able to invest money in any initiatives aiming to improve support workers outcomes.

5.4.1.2 Potential intervention outcomes

One of the aims of the focus groups was to understand participants' views on priority outcomes for interventions for support workers. In the following sections I report participants' reflections relating to these outcomes.

Participants suggested that the recent changes in the NZ aged care sector would shift focus from retention and staff turnover to outcomes like job satisfaction and stress. The Pay Equity Bill was seen as a single factor that was likely to improve retention and staff turnover, i.e. through increasing support workers' pay. However, the predicted increased financial pressure and workload would lead to declines in outcomes such as stress or job satisfaction. Participants were worried that the support workers, encouraged by higher monetary benefit, would sacrifice their own health.

"You can have people who are getting the best money they have had in their lives but they will want to stay but actually the stress will kill them." (Wanda)

Hence, as argued by participants, one of the main aims in managing the well-being for this workforce would be keeping them engaged and their stress levels as low as possible. Participants suggested that outcomes such as job satisfaction, self-esteem, feeling recognised and valued should be at the centre of any initiatives attempting to improve the overall situation of support workers in the aged care sector.

"Job satisfaction... has to be job satisfaction, doesn't it? They have got to be happy with what they are doing." (Wanda)

One of the participants suggested that stress is an inherent feature of working as a support worker. Importantly, as they explained, stress levels at work are not a result of only work stressors or poor stress management by the organisation, but also stressors relating to other areas of one's life. Therefore, they recommended evaluating also outcomes that consider participants' life outside of work.

"There will be stress you know I mean no matter because family problems you know issues outside the office and outside work can also cause stress even if the organisation is you know very good and maintaining stress... (...) you know, it's being human, it's really hard to separate what's going on outside work."
(Ben)

Participants also mentioned two other areas which could be affected by recent changes in the sector and which could become a target for future interventions:

- 1) Time for caring – the amount of work time spent on carrying out caring activities (as opposed to non-caring). Participants wanted to see new strategies that would help free up support workers from non-caring tasks.
- 2) Workload – participants suggested that the workload was likely to increase in the nearest future. While most of the discussed strategies were unlikely to affect the actual workload, participants wondered if it was possible to change the support workers perception of what an acceptable level of workload was. They also wondered if anything could be done to help support workers manage their workload better.

5.4.1.3 Potential interventions for support workers

Overall, the interventions identified in the systematic review (Study 1A) resonated well with participants. They suggested that one of the priorities would be to focus on providing better clinical and emotional support to the workers. Education-based strategies were reported as commonly used and very important. Peer mentoring was considered a great approach, potentially including components of all other strategies, but likely too expensive for most providers.

Participants felt that in light of the changes caused by the Pay Equity Bill, it would become even more important to engage support workers in their work (through promoting positive events, celebrating success, and team building). Finding smarter ways of working was considered timely and a way to alleviate the predicted financial pressure faced by the aged care sector. The following sections will discuss these findings in more detail by drawing on examples provided by participants.

Education-based strategies

Education-based strategies were the most discussed type of intervention. Participants saw ongoing staff education as very important and something that will help “maintain standards”. All participants reported that education-based strategies had been used in

the aged care sector and would traditionally focus on clinical skills and knowledge.

However, given the recent changes in the sector, participants thought it would be worth focusing more on educating the support workers about personal well-being and health.

“The main thing of education should be that middle bit their own personal wellbeing and how they are managing their stress or whatever the stress triggers are that could be the time pressure it could be the repeated facing of death.” (Charlotte)

Participants suggested several potential topics on which education-based strategies could focus. They are briefly presented in Table 8.

Table 8. Proposed topics for education-based approaches.

Topic	Comments
Communication	Communication techniques targeted at less experienced staff; for example, active listening and giving feedback, both with the residents and co-workers.
Care approaches	Exposure to relevant care approaches such as Person-Centred Care, Palliative Care, and End of Life Care and their implications for care practices.
Dementia-related topics	General knowledge about dementia characteristics and processes.
Stress, resilience, and well-being	Helping support workers to manage their stress and to stay well.
Cultural awareness	Increasing support workers' awareness of how different cultures interact and respond, including on specialist topics such as how different cultures approach grief.
Managing pain and discomfort	Developing skills in recognising and managing pain and discomfort given this was observed as an increasingly common complaint among clients.
Financial advice	General advice and guidance for personal financial management.
Care tasks	Training on standard care tasks targeted at care workers without prior health and social care experience Pay Equity Bill.
Professional behaviour	Key components of professional behaviour such as how to interact with senior staff, use of language, etc.
Managing change	How to manage and cope with change given this is becoming a feature of the aged care sector e.g. drawing on ADKAR ⁵ (166) model of change.

While education was considered a key strategy for improving staff's work-related outcomes, there appeared to be a tension between educating staff to help them

⁵ ADKAR – A-Awareness; D-Desire; K-Knowledge; A-Ability; R-Reinforcement.

manage their well-being versus upskilling them which might result in demands of higher remuneration. Reportedly, due to the Pay Equity Bill implications (its proposed remuneration levels), some facilities might consider making their 'overqualified' staff redundant and only employ workers with the minimum, entry level qualifications. The implications of the above on the well-being of support workers and the quality of care they provide were unclear, but likely negative.

"We don't want all level 4's because there's also those tasks that you don't require somebody from that level and in terms of a financial model you need that balance. So we are almost getting to the point where ok we need to get rid of some of these level 4's" (Tina)

Overall, participants agreed that education-based strategies were an important and common practice in aged care sector. They suggested that more focus should be placed on teaching support workers about stress, resilience, and their personal well-being and health. However, some participants were concerned about the implications upskilling the workforce might have on the increasing financial pressure for organisations.

Staff recognition and engagement

One of the strategies proposed by participants was focusing on engaging support workers through celebrating them and their stories and moving away from more critical approaches. Participants suggested that a positive organisational culture could help with staff's job satisfaction. Some participants mentioned that a 'shame and blame' approach, although less common these days, has been quite common in the past and made workers very stressed.

"That shame and blame still exists across the health sector, not just age care, and we have to turn that around, because that does definitely make people feel absolutely mortified and causes massive stress." (Tina)

Participants suggested that it would be worth focusing on making support workers more visible within the facilities and communities. Some of the examples included: photos of staff with clients on the walls, use of social media to promote staff's success,

and excellence awards. It was argued that one of the crucial times for increasing staff's visibility is during orientation. Reportedly, at some facilities, many existing staff do not know new staff's names and faces for months. One of the participants argued that this could be easily improved by simply having a board with the new staff's names and short bios. Increasing staff's visibility and presence appeared an important issue for focus groups' participants.

Another aspect of celebrating staff's role that was discussed was showing staff how important they were to the clients and organisations. As argued by Tina, it is very important to show staff appreciation for what they do, and to surround them with a support network. During orientation, managers present new staff with a diagram which depicts their role and helps create a supportive culture.

"It's a diagram called the circle of care and it has the resident in the middle, and then the clinical assistant is the next person, and then it goes through all the layers of people. So it's about 10, and I point out to them this is all the support that you have available because you and the resident are the most important person in our organisation, because you do all the day to day care. Me, I am just here to make sure you can do that." (Kelly)

Participants also discussed the role of team building and socialising in improving staff engagement. One of the participants reported that cinema outings for staff are quite common, and that staff happily attend events organised for them and their families outside of working hours. It made the staff feel like "one big family". It was also suggested that organising a sport fest within the organisation could be popular amongst staff. Participants felt that such initiatives would help to create a more supportive work environment.

[Smarter ways of working](#)

Participants felt that it was timely to put an extra effort into finding new, smarter ways of working. They wanted to find ways of removing non-caring tasks and sharing work challenges and workload better.

Two issues of particular concern were how to prioritise work and how to manage being task versus care-focused. Participants argued, that with the increasing workload and limited resources, support workers would benefit from systems that help them make decisions regarding which tasks need to be attended to first. Wanda explained that attempts had been made to clearly identify the 'support worker tasks', and to ensure that these are the only tasks the support workers are focused on. Such an approach could help with saving money for the facility and limiting workload for support workers. Participants proposed that working smarter could be also achieved by improving staff-to-resident allocation systems and limiting the daily variation in their tasks. One of the participants argued that in facilities where there are multiple houses, corridors or wings (used as allocation units), it would be smart keeping staff allocated to that unit for a week, rather than only a day. It would help the support workers get to know their clients better, and subsequently improve their efficiency and the quality of care.

"Because if you rotate them every day people's small changes get missed, so you need a consistency of someone going "oh that little mark on her that was like that today I see it every day therefore by Sunday I know it's 3 times the size". If you have someone going in everyday it's that size and that's what it always was." (Tina)

Peer mentoring

Participants liked the proposed approach of using peer mentoring to improve support workers' outcome. They argued it was a "great idea" and liked that it was a structured and ongoing initiative. It was reported that mentoring was already happening in many facilities, but was not peer-based or structured, and was usually focused on the orientation period. Further, these mentoring relationships were strictly work-related, e.g. caring tasks, health and safety, medication administration, etc. However, it missed many other aspects that support workers valued, for example family life, immigration, career development.

As argued by Ben, one of the big advantages of peer mentoring was that support workers preferred to learn from a support worker, rather than a manager or a nurse.

Ben believed that support workers would be happy to mentor their peers, and to be mentored. Another appealing aspect of peer mentoring was that the mentor could become the support workers' voice and bring up any existing problems with the management. However, some potential difficulties in organising time for mentoring were identified. As argued by Charlotte, tasks take longer when being mentored, and support workers workloads would often get in the way. To address those issues, work-based peer mentoring would have to be coordinated and supported by the management team.

Participants thought that a peer-mentor could function well as a staff development facilitator. Participants argued that it provided a good platform for delivering components of many strategies discussed in this section. Peer-mentors could assess any existing needs, identify issues, and bring them up to the management. They could identify training needs and liaise with clinical educators to organise workshops and education sessions. Lastly, they could provide clinical and emotional support to their peers and also play a role in promoting the organisational culture. However, participants argued that workplace-based peer mentoring was likely too costly. As most aged care organisations were currently dealing with the challenges caused by the Pay Equity Bill, any interventions requiring financial inputs from them would likely be turned down.

Section summary

This section presented the range of interventions discussed during the focus groups. They included staff education (clinical knowledge, personal well-being, communication), staff recognition and engagement initiatives (awards, team building, celebrating success), smarter ways of working (staff allocation systems, removing non-caring tasks), and peer mentoring (which could serve as a platform for combining many of the other strategies). Participants felt that the orientation period was a critical time for establishing a good relationship with new staff, and that it was important to promote

positive organisational culture amongst the staff. At present, however, most organisations would not be well-positioned to support any interventions or strategies requiring their financial investment, so other means of delivery would need to be considered.

5.4.1.4 Intervention implementation considerations

Implementation considerations for the future intervention was the last prespecified category. Participants talked about implementation of an intervention for support workers in general, rather than any specific approach.

First, participants suggested that it would be crucial to start with assessing the current situation and establishing what strategies were already in place, and what their benefits and running costs were. This would help to build a business case to justify any diversion in organisation's expenditure, i.e. to commit funds to any new approaches.

Second, it would be worth identifying workers' and organisations' support and training needs. Additionally, participants suggested identifying any potential resistance points, e.g. staff who might be unwilling to buy-in to a new initiative. One of the participants, argued that there would always be someone who would not want to accept the change, and convincing these people might sometimes be crucial to success.

"I have got 80% on the bus so let's just drive the bus away. And he was saying: no, you know those 80% are going to go with you anyway. You need to focus on this 20% because if you get them on the bus they will only drive it they will make it go faster and faster and more efficiently because you can't just think 'oh well if they leave it doesn't matter' but actually they are probably the people that you need to influence more." (Wanda)

Third, the implementation process would need to be well planned, and ideally have a schedule accepted by all involved stakeholders. Importantly, staff's workload would often dictate what activities were possible, so it also needs to be taken into account.

Finally, participants argued that it would be worth using a model of change to guide future implementation. One of the participants proposed ADKAR Model of Change

(166) as an applicable and useful model for residential aged care facilities. The model identifies five conditions for change:

- 1) Awareness – people need to know about the change and why it is happening
- 2) Desire – people need to want to change
- 3) Knowledge – people need to get the tools and education on how to change
- 4) Ability – goals need to be reasonable, monitored and adjusted throughout the process
- 5) Reinforcement – provision of positive feedback, rewards and recognition.

In summary, participants suggested carrying out specific assessments prior to implementing any intervention. Those assessments would need to focus on the existing initiatives, and their benefits and costs. The implementation schedule would need to be accepted by all involved stakeholders, and importantly, have the management “on board”. Using a theoretical model of change, could improve the chances of a successful uptake of any new initiative.

5.4.1.5 Summary: Focus group 1 and interview

This section reported findings from the first focus group and interview. The four categories presented in this section describe the experience and perspectives of participants regarding key factors relating to context, outcome, intervention and implementation that need to be considered in the development of interventions aiming to improve outcomes for support workers in aged care.

Participants described the support workers’ job as inherently stressful, with high workloads, and a range of complexities around their daily duties. Contextual factors identified to be important for any future initiatives included the Pay Equity Bill and the unclear scope of practice. Participants’ believed the new Pay Equity Bill would have important implications for aged care facilities and support workers. They suggested that more focus would be needed on maintaining and improving support workers job

satisfaction and helping them cope with high workloads (versus a sole focus on retention) given staff retention was likely to improve. Also, participants' stories around the unclear scope of practice accentuated the complexity of support workers jobs and how much it intersects with their private lives (immigration, feeling accepted, grief).

Participants discussed a range of interventions and strategies for support workers. These were categorised into four groups and included staff education (clinical knowledge, personal well-being, communication), organisational commitment and recognition initiatives (awards, team building, celebrating success), smarter ways of working (staff allocation systems, removing non-caring tasks), and peer mentoring (which could involve components of all other strategies). Participants felt that the orientation period was a critical time for establishing good relationships with new staff, and that it was important to promote positive organisational culture amongst the staff. However, the increasing financial pressures on the aged care sector meant that most facilities in NZ would not be able to invest money in any initiatives aiming to improve support workers work conditions.

Findings helped understand which outcomes should become the foci of the future intervention, which strategies could be included, and the implementation issues that need to be considered. These findings, together with the systematic literature review findings were discussed with the study supervisors and advisory group, before the final focus group was conducted.

5.4.2 Refining the intervention approach to address the implementation cost barrier

As explained in previous chapters, I was initially planning to develop a workplace-based peer mentoring intervention. However, following the first focus group and interview analysis it became apparent that the original approach was not feasible due to the implementation (and likely operational) costs it would impose on the aged care

providers. I further discussed this finding with my advisory group who agreed that an alternative approach, free of costs to aged care organisations, may be necessary. To put things into perspective, first focus group and interview participants and members of the advisory group collectively represented over 40 out of approximately 700 aged care facilities in NZ. The organisational commitment the proposed workplace-based intervention required and the sectors reluctance to invest further resources in support workers, necessitated a refinement of my original approach.

Findings from the systematic literature review and the first focus group interview indicated that support workers were experiencing increasingly high levels of stress, and their job satisfaction was predicted to decline given the challenges the NZ aged care sector was experiencing. Support workers' continued professional development was recognised as important. However, lack of effective and accessible psychological support was identified as one of the key challenges. Moreover, focus group and interview participants argued that support workers' well-being depended on a range of factors, which overlap their professional (e.g. work demands or supportive team) and private lives (e.g. family or immigration). As the two could not be easily separated, it was crucial to find an approach that considered the workers holistically. Additionally, it seemed that if a new intervention incurred any costs to aged care organisations, it would not be taken up.

The originally proposed workplace-based peer mentoring approach, although it was not cost-free, appeared particularly applicable to support workers and the challenges they face. It could improve work stress and job satisfaction, serve an educative and supportive function, its scheduling was very flexible, and it was seen favourably by the aged care stakeholders. Importantly, recent technological advances enabled a cost-effective and boundary-free form of mentoring – online-based mentoring (164).

Online-based mentoring, also known as online mentoring, e-mentoring, tele-mentoring, and internet mentoring, is a process in which a mentor supports a mentee via digital

channels of communication. It can have the same goals and outcomes as traditional mentoring but is performed using digital communication. In the work context, it can reward mentees by improving their job satisfaction, expanding their support network, improving their knowledge, and increase their communication, teamwork skills, and perceived job control (167, 168). Furthermore, as the mentoring relationship is bidirectional, e-mentoring benefits mentors in a similar way (164). The concept of e-mentoring is presented in more detail in section 6.2 'E-mentoring to improve job/life satisfaction and perceived stress levels'.

As explained in the previous section, focus group and interview participants called for an intervention which could consider the workers holistically to account for their professional, as well as personal life challenges. They also proposed that peer rather than supervisor-led mentoring was more likely to succeed. E-mentoring, when organised as a voluntary activity taking place outside of working hours, could consider all areas of a person's life. Moreover, this approach could be cost-free to aged care organisations, while still allowing them to benefit from support workers improved psychosocial outcomes, thus increasing the likelihood of its uptake.

Therefore, following consultation with my supervisors and advisory group, for the following stages of this doctoral project I decided to focus on a voluntary e-mentoring intervention for aged care support workers in NZ. This flexible approach would likely not incur any costs to aged care organisations, consider the support workers holistically, and offer similar (and potentially more) benefits as workplace-based peer mentoring.

My next step was to discuss the e-mentoring approach with the support workers in a focus group. I wanted to find out whether an online-based intervention was acceptable to them and their perspectives on its potential benefits. I also wanted to explore their views on the main features of a mentoring programme: format, matching process, mentor and mentee characteristics, mentoring relationship/process, and training. These

data would allow me to define the e-mentoring approach to suit the preferences and needs of NZ support workers.

5.4.3 Focus group 2: An e-mentoring intervention for support workers

The last focus group (FG3) started with a short introduction on the concept of e-mentoring. The discussion that followed centred around participants' perspectives on an e-mentoring intervention for NZ support workers. All participants of the last focus group were support workers who knew each other from working for the same facility (Table 7). The analysis findings were grouped into three prespecified categories: e-mentoring acceptability, its benefits, and participants perspectives on its main features.

5.4.3.1 Acceptability of the e-mentoring approach

Participants expressed a general enthusiasm about e-mentoring and willingness to become involved in it. They discussed a range of potential benefits of e-mentoring and thought it was a good strategy to address the challenges they faced.

“I think the e-mentoring is a good thing for young generations and the old. They can share their knowledge... they could share ideas and strengthen the relationship of mentors and mentees, the young and the old.” (Roger)

While they were familiar with the concept and all had participated in some form of mentoring, none of them had come across an online version of it. Most participants appeared to endorse the proposed video format of e-mentoring and preferred it over text-based communication (e.g. emails). Mark's reason for this was that they simply *“did not like typing”*.

For others, emails or messaging was a good option, and they argued it would suit people who are *“shy or are not confident facing other people”*. However, it appeared that some support workers might be hesitant about trying e-mentoring. For example, Hanna noted that she would prefer in-person interaction, rather than via a mobile device.

“I prefer like a meeting. I prefer. Because with the emails, the Facebook, I don’t know who is that? I like sit together, talk together.” (Hanna)

Additionally, some participants were concerned about their privacy with having to use their private email accounts or phones. They argued that some might want to have a designated email account just for the mentoring interactions. It could help with knowing *“who one was talking to, what environment they were in”*.

Overall, e-mentoring appeared to be an approach that was acceptable to this group. They considered it a good way of letting support workers share their experience with other workers, it could help them feel valued and allow them to discuss work and other issues affecting them, e.g. immigration or career decisions.

“We could share our thoughts on how we could be more effective in our job or line of work, by pointing out the values we are motivated for, and not only because of money, but it is also about how we feel that we are valued in/or supported in our other achievements that we want to achieve.” (Mark)

5.4.3.2 E-mentoring benefits

Participants discussed a range of potential benefits of e-mentoring. They thought it could facilitate support workers’ professional and personal development. They suggested mentors could help the mentees develop their caregiving skills and support them in becoming more effective at their jobs. Roger argued this could be particularly important for migrant workers.

“One way that e-mentoring could support any worker would be how this programme could actually support our professional development in order for us to achieve to be qualified as a skilled migrant” (Roger)

Importantly, participants argued that the proposed approach could also help with managing their work-life balance. They imagined that mentors could share their perspective on how they dealt with their work demands, or how they managed other competing demands such as caring for young children.

“You are not going to be focusing only on the professional, but you are going to be supporting them as well in their personal life. [As a mentor] I can help you have more time with your family.” (Peter)

Another potential benefit was the provision of support in a form of having someone to talk to. Participants suggested that many workers, especially immigrants, would really appreciate an opportunity to talk to others who had been through a similar experience of immigrating to a new country. All participants were NZ immigrants and reported that most of the workers they had worked with were also immigrants. Some immigrant support workers were finding it difficult to live in NZ and feeling homesick. Sophia, who moved to NZ from one of the Pacific Islands, found that having the support of her colleagues had slowly helped her adjusting to life in NZ.

“I was just homesick, so I started working with a group of, you know, our people [support workers] here. You think [of them as] family, [it] is now our family.”
(Sophia)

As part of the discussion on potential benefits, participants named some desired outcomes of taking part in e-mentoring. They suggested that it could improve job satisfaction, and that it was crucial to staff’s well-being and retention. Roger argued that improvements in job satisfaction would stem from improved job security and feeling supported.

“Job satisfaction is one of the basic things we need to feel or achieve as a worker, because otherwise we would not last long in this kind of job. It would not encourage us to develop our skills and professions if we are not satisfied with what we do. So, job satisfaction in the way of security, health, support... is one way of ensuring job satisfaction is in place. If you were focused on working and you were somehow troubled with other issues, you cannot really focus on what you are supposed to do.” (Roger)

Participants proposed that e-mentoring could also have benefits like making people feel valued and motivated to keep working as support workers. All participants agreed with Roger when he stated:

“Because one way or another, speaking for myself and the other people I know, this is a good idea to motivate us in what we are doing, and to value what we are doing.” (Roger)

Finally, participants suggested that one potential outcome of taking part in the proposed intervention for mentees could be to one day become a mentor.

5.4.3.3 Main features of e-mentoring

In this section, I present participants suggestions regarding the main features of e-mentoring, specifically the e-mentoring training, matching process and mentor qualities, and mentoring relationship focus.

E-mentoring training

All participants reported they were familiar with the general concept of mentoring, with some feeling ready to become mentors in the proposed intervention. However, they suggested some areas they would like to be covered in the training. First, it was argued that confidentiality and privacy were two key issues that should be addressed in the training. This encompasses confidentiality and privacy for mentees, mentors, their co-workers and care recipients. Participants suggested there should be reminders for mentees and mentors to maintain confidentiality and protect each other's privacy.

“There should be (...) somewhere you can tick you are going to maintain the privacy of the mentee and the mentor, and mentee relationship, and also about the information that we would be sharing. And as much as possible we would also try to avoid any identifiers with regards to our experience, sharing experience, and I would also trust that this mentee would also uphold my trust that they would not break it. Because otherwise the relationship...um...is not gonna work.” (Roger)

Second, participants highlighted the important role trust and respect played in the mentoring relationship. Peter suggested that the right mentor was “*someone you can trust*”. Additionally, and as mentioned in the previous section, some people may not feel comfortable with digital interactions. This highlighted that mentor training may require specific focus on building trust and rapport in the e-mentoring context

Regarding any technical training needs, Hanna suggested that some support workers did not feel competent using computers and other digital devices. However, all participants reported using computers on a daily basis. It appeared that as part of training it may be beneficial to offer some assistance in setting up any online account and guidelines on troubleshooting some of the common technical issues.

Matching process and mentor qualities

A very important aspect of any mentoring intervention is the mentee-mentor matching process. Participants discussed this process and proposed some recommendations. First, they identified some important matching criteria, which included: ethnicity, age, first language, and culture. Participants argued that it was important to match similar people so that they can easily relate with one another, especially given the potentially unfamiliar digital reality of e-mentoring. Matching people from same ethnic or cultural groups could ensure the similarity.

“Speaking the same language, well, if we could understand even by heart what I am trying to say, so as much as possible, them being the same ethnicity as well, so we could use our own language.” (Roger)

As mentioned above, another important consideration in the matching process was suggested to be the mentor’s age. It appeared that some participants would find it difficult to be matched with a mentor younger than them, as they would question the mentor’s competence.

“Age is going to be a big difference. Because when you are looking at young ones age, I mean sometimes you got look at older person, well not necessarily older, but mature enough to know what we are doing. And that’s got to be expected that’s going to be a bit difficult.” (Hanna)

Finally, the participants believed that giving mentees a choice of mentors would be a good way of ensuring a compatible match.

Mentor qualities

Related to the matching process, were participants reflections on qualities of a good mentor. Participants argued that a mentor needs to be passionate and value their job. They thought that job experience was an important factor and suggested that a mentor should be “*ahead of others in workplace*”. Adding to that, some participants believed that mentors should be older than mentees. Others argued, however, that it was not as much about age as it was about maturity and being respectful. It appeared that

participants believed a mentor should be an experienced and skilled support worker, who was passionate about their role, and was respectful towards others.

“[Mentor is] A person that listens to you. The age gap is different, but someone who listens what you say and what you are telling them.” (Suzy)

Participants appeared to agree that one important characteristic that a mentor should have is willingness to share their knowledge and experience. Suzy defined a mentor as:

“A friendly person who wants to share with the other person, support and to be honest to each other.” (Suzy)

Furthermore, to enable the knowledge sharing, participants suggested that mentors should be good communicators and listeners. They proposed that being from the same ethnic group or speaking the same language could aid that communication.

“We are working in a diverse work force. For the mentor and mentee to communicate well they should speak the same language.” (Mark, SW)

Overall, participants reported wanting a mentor with a positive attitude, someone friendly and approachable. They wanted a mentor who was an honest person and who truly cared about mentee’s well-being.

“The significant things are that the person must possess the values of the job they are doing. And the skills, and the passion for the job they are doing.” (Peter, SW)

Mentoring relationship focus

Participants suggested that a good way for focusing a mentoring relationship and structuring it would be setting goals and identifying topics the mentee would like to discuss.

“Topics that you would like to talk about, your interests. Like the interests of the mentee and the interests of the mentor. Where you could see you have a common goal towards these kinds of area, in regards to professional development in health care profession, I’m interested in doing this course, what can you say about this, and those kinds of stuff.” (Mark)

Participants believed this relationship should revolve around the concept of sharing: sharing of knowledge, experience, ideas, skills. They argued the focus should be on the whole person; intersect their professional and personal lives. Peter listed:

“Personal development, professional opportunities and like how you can be more effective not just as a worker, but as a father and mother as well.” (Peter)

Participants also reported that there had already been some strategies in place which aimed to equip them with technical skills to perform their jobs (e.g. dementia care workshops). However, participants argued more support was needed, with focus also on their lives outside of work, e.g. on issues relating to being an immigrant.

“If immigration is something that will worry us every year, that is something that is going to be affecting how we work towards... how we would achieve our satisfaction in our job.” (Roger)

Participants suggested keeping the mentoring relationship rather informal and flexible. For example, they were concerned about having to attend their mentoring sessions when it did not suit them. They would like to have a say on what times would work for them. Additionally, participants argued that monthly meetings would be ideal, with more frequent meetings taking place if desired or necessary.

“You can start monthly, and if you want to interact more, since you are already in this, you can probably connect with someone whom you are interested in or whom has the same interests in a shorter time as the time passes through. Weekly or fortnightly might be too often.” (Roger)

5.4.3.4 Summary: Focus group 2

In summary, the majority of the second focus group participants considered the proposed e-mentoring approach to be acceptable. They believed it was a good way of addressing the challenges they were experiencing, both professionally as well as personally. While most appeared to endorse the proposed videoconference format, some appeared hesitant about meeting with people online and raised concerns about privacy and confidentiality.

Although participants believed they had a good understanding of how to be a mentor, some areas requiring specific focus for training were identified. They included: maintaining privacy and confidentiality, techniques for building trust and rapport, and guidelines on using any digital applications as part of the intervention.

Participants argued that mentee-mentor matching should focus on similarities, and that mentees should be given a choice and make the final decision. They believed all mentors should be good and experienced at their jobs, have a positive attitude, and be friendly and approachable.

The mentoring relationship should be informal and flexible, with monthly meetings structured around the mentees' goals or topics of interest. Participants argued the intervention should focus more on their lives in general, rather than only on their work. This appeared particularly important for when the mentee was an immigrant.

Findings from this focus group suggested the proposed approach was acceptable and identified a range of refinements and components to include to the proposed online-based peer mentoring intervention for support workers in NZ.

5.5 Discussion

The overall aim of Study 1B was to establish the conceptual and theoretical basis to define the peer mentoring intervention protocol, and specifically to explore NZ aged care stakeholder perspectives on interventions improving outcomes for support workers. This qualitative study found there were increasing demands to support this workforce in NZ, focus on their psychosocial outcomes (job and life satisfaction, stress, and other), and use flexible approaches that can be tailored to the individual needs and preferences of support workers. Peer-mentoring was identified as an approach able to address these demands, with participants expressing their endorsement and willingness to use it. However, the reported inability of the aged care organisations to invest further resources in support workers was identified as a major barrier to

implementing any workplace-based intervention, and necessitated a modification of the originally proposed mentoring approach. In the following sections I discuss the key findings from this study and their implications. I conclude with a list of key recommendations to guide development of the proposed mentoring intervention. These findings will inform the process of defining the intervention in Chapter 6: Defining the intervention.

Until recently, support workers in NZ were a severely underpaid workforce. In July 2017, NZ government introduced the Pay Equity Bill. The purpose of the Bill was to eliminate and prevent discrimination, in remuneration and other terms and conditions of employment. The current study (conducted in August 2017) was one of the first to identify the potential consequences of this change, including:

- Facilities would be under even more financial pressure
- Workload was likely to increase, because of the financial restrictions and even lower 'staff to resident' ratios; negatively affecting quality of care
- Support workers' retention rates were expected to improve, as they would be paid up to 30% more
- Work stress levels would increase and job satisfaction decrease.

A recent report published by the NZ Work Research Institute (149) confirmed most of these predictions, specifically emphasising the increased financial pressures and workload, and ongoing lack of support for this workforce. It further highlighted the lack of recognition of the value of the support worker role in provision of aged care, and the challenges they face in their careers.

Study 1B had a major impact on this project's course. First, its findings presented the need for an intervention that did not incur cost to organisations or put additional pressure on a sector that was already experiencing major difficulties. The proposed intervention had to be provided outside of support workers' work hours, independently

of their employers. Furthermore, the approach had to be flexible and essentially boundary-free to accommodate support workers' 24/7 roster. An online delivery of the intervention appeared to be perfectly suited to meet these needs. It could include the same goals and outcomes as the originally proposed in-person mentoring, reward mentees by improving their job satisfaction, expanding their support network, and improving their knowledge and interpersonal skills (164). Furthermore, as the mentoring relationship is mutually-beneficial (55), e-mentoring can benefit mentors in a similar way. Therefore, I decided to use e-mentoring as the platform for improving outcomes for support workers.

Second, findings highlighted the proposed intervention had to be adaptable and responsive to the changing work context and arising personal and professional challenges. Furthermore, participants called for focus on their strengths, empowerment and creation of a supportive environment. Thus, it seemed appropriate and necessary to allow the potential users to identify their own goals and tailor the intervention focus to their individual needs. Embedding goal planning techniques, for example the goal-setting technique (169), into the mentoring process which involves people identifying their own goals and working towards achieving them would address this (169).

Importantly, it was also identified by the current study participants as an appropriate strategy to provide structure for the mentoring intervention. Goal-setting is a widely used and validated behaviour change technique (169), especially when it is combined with self-monitoring and action-planning (170). Thus, goal-setting would provide structure for the mentoring intervention and help to ensure it is tailored to the individual needs of users.

Third, my original intention was to focus on turnover-related outcomes and only include psychosocial (stress, satisfaction) as secondary outcomes. There were two main reasons for this. First, staff turnover had been historically problematic in managing this workforce, estimated between 30 and 60 percent per annum (2). Second, as my

original approach required the aged care organisations to be financially supporting implementation of the intervention, it appeared necessary to focus primarily on outcomes that could be easily translated into monetary savings for these organisations. However, I found (and this was later confirmed in the Douglas and Ravenswood report (149)) that the turnover was predicted to decrease and was not considered to be an issue over the coming years. Their focus shifted to work-related psychosocial outcomes, including perceived stress, job satisfaction and other. Furthermore, as the proposed intervention was going to be delivered outside of workplace, I was able to give primacy to outcomes relating to the health and well-being of the workers, rather than organisation outcomes like staff turnover.

Job satisfaction and stress were identified as the key outcomes by participants. Participants expected that given the better remuneration, support workers will be willing to accept even higher workloads which in turn were expected to translate to higher levels of stress and decreased satisfaction. This is in line with a range of studies conducted with other occupational groups, e.g. general practitioners, janitors and police (171-173). Given that participants, especially those who worked as support workers, argued the proposed intervention should help them deal with both personal and professional challenges, it appeared necessary to focus on general satisfaction with life, rather than only on job satisfaction. Thus, I proposed to focus on job and life satisfaction, and perceived stress levels. I decided to also include a measure of self-efficacy, given its theoretical proximity and potential moderating effect on the other two outcomes (174, 175).

Fourth, the opportunity to gather feedback from aged care stakeholders helped clarify the specific aspects of the proposed intervention. Participants argued that a mentoring approach could incorporate many of the intervention components identified through the systematic review (Study 1A), offer flexibility, and be appealing and acceptable to this workforce. It became apparent that online-based mentoring was not an approach

already used in NZ aged care. The mentoring initiatives that were on offer were focused primarily on staff orientation, were not peer-led, not structured, and focused only on work-related issues. As such, they were not addressing support workers' needs identified in the current study. On the other hand, the proposed online-based peer mentoring intervention could address those needs and was a potentially appropriate approach to improving their psychosocial outcomes. Table 9 presents the key recommendations resulting from Study 1B analysis. These recommendations guided development of the proposed intervention's protocol (Chapter 6).

Table 9. Key recommendations for development of the e-mentoring intervention.

Recommendation	Comments
Use online-based mentoring as the format	As it appeared to address the key implementation barriers to the originally proposed approach
Use goal-setting to provide structure and create change	Participants were familiar with this concept. It was identified as an appropriate way of structuring the mentoring relationship. Would allow users to tailor the intervention to their needs. Use in conjunction with self-monitoring and action-planning
Focus on satisfaction, stress and self-efficacy	These outcomes were argued to require immediate attention
Ensure privacy and confidentiality	These were identified as potential barriers to engagement and could be addressed as part of intervention training
Help building trust and rapport	These were identified as potential enablers to engagement and could be addressed as part of intervention training
Ensure clarity of roles	Participants' preunderstanding of mentor and mentee roles varied and could be clarified as part of training
Ensure technical aspects of the process are clear	Some participants might require assistance with setting up internet connection and accounts. Some advice should be included as part of training
Match people who are similar	Participants wanted to be matched with mentors/mentees who were similar to them to ensure compatibility
Mentors need to be skilled and experienced	Specific inclusion criteria for mentors relating to skills and experience needed to be established
Ensure the mentoring relationship revolves around sharing	Participants wanted this relationship to focus be about sharing skills, ideas and knowledge

Recommendation	Comments
Enable users to focus on both personal and professional life aspects	Users need to feel enabled to focus on any area of their life as support workers; and on both skills and attitudes. This should be clarified during training
Keep it flexible and informal	Participants wanted the intervention to let them feel relaxed and be able to make changes to their schedules on the go
Encourage monthly meetings	Participants felt this would be the appropriate frequency, with more frequent meetings only if desired by users
Ensure clarity of language in all study documents	Participants argued this intervention could be particularly useful and appealing to immigrant workers who use English as second language
Promote the role of support workers	Participants argued that this intervention could help them feel valued as support workers
Give examples of goals and topics	Participants suggested a range of examples: managing stress and workload, settling in NZ as an immigrant, opportunities for personal and professional growth

5.5.1 Study limitations

The findings of this study should be considered within this project's context. They were not produced to form generalisations and a different study sample may have yielded different findings. Rather, the findings present perspectives of a purposefully sampled group of stakeholders to inform development of the proposed peer mentoring intervention in the NZ aged care context. They provided rich data and helped to develop a solution that could work in this particular context, which was central to the overall aim of this pragmatic project.

One of the key limitations of focus groups is that the resulting findings rely on the facilitation of the discussion (176). Ideally, the facilitator should not be affiliated with the research (176). As is often the case in doctoral research, as the lead researcher I was also the person moderating the focus groups in the current study. This meant that the participants may have withheld any critical comments that they may have given to a

more impartial moderator. However, participants and I were aware of my potential bias as a facilitator. My intention to develop a peer-mentoring intervention was acknowledged before each of the focus groups, as well as in this thesis. To minimise my influence on direction of the discussion between focus group participants I used open-ended questions and prompts and refrained from expressing my opinions on what was being discussed. Importantly, my personal experience as a support worker and understanding of NZ aged care were helpful in building rapport and trust with the participants.

A further limitation of this study was the order of conducting focus groups, particularly in light of the composition of focus group 1 and 2. It could have been beneficial to present the initial model of workplace-based peer mentoring to both the stakeholder group and the support worker group (instead of just the stakeholder group and one support worker). Presenting the initial workplace-based and the revised e-mentoring approaches to both groups may have produced additional findings given the potentially different perspectives between groups. Notwithstanding, the findings from focus group 1 meant an overhaul of the originally proposed approach was required, regardless of the support workers views on this. Moreover, the advisory group included people who worked as managers and worker rights advocates, and they advised on development of the proposed approach as the study progressed.

Another important limitation is that the second focus groups participants all knew each other and worked at the same facility. It is possible that, even though they took part voluntarily, they may have felt unsafe to express some of their opinions in front of their colleagues. However, the second focus group was specifically about using an online peer mentoring intervention and most of the discussion was focused on hypothetical aspects of implementing and using that intervention rather than on participants' specific experiences. Furthermore, given that there may have been an established hierarchy within the group affecting the level of participants' involvement in the discussion, I

aimed to facilitate the conversation to go around the table by asking each participant for their views.

Additionally, it could have been beneficial to also include people who were involved in policy and planning for this workforce at the government level.

Overall, the inherent limitations of using focus groups and my overall aim to develop a peer-mentoring intervention may have inevitably influenced the validity of this study. In spite of these limitations, Study 1B enhanced my understanding of what intervention could work for improving outcomes for NZ aged care support workers.

5.6 Summary

Phase 1 revealed a wide range of interventions that could be peer-led had been proposed. However, the meta-analysis found that evidence on the effectiveness of these interventions was inconclusive.

These findings were then presented to aged care stakeholders during focus groups. Focus group participants were familiar with the identified approaches and argued that most of them were commonly used in NZ. They expressed their enthusiasm about using peer mentoring in a tailored and holistic way to identify and work towards achieving specific goals for individual support workers. However, they believed that the NZ aged care sector was not financially capable to invest further resources to support this workforce. This contributed to a decision to propose e-mentoring as a strategy to improve outcomes for support workers. This approach would minimise any costs to the organisations, while still offering a wide array of potential benefits to the workers and other stakeholders. Participants in the last focus group thought this approach was promising and acceptable. They highlighted some areas that needed attention in planning and implementing the e-mentoring intervention.

Findings from Phase 1, including the key recommendations (Table 9) are integrated in the next chapter, where I define and propose the process for delivering an e-mentoring intervention for support workers.

Phase 2: Defining the intervention

6 Chapter 6: Defining the intervention and developing the protocol

6.1 Prologue

The overall aim for this doctoral project was to improve outcomes for aged care support workers in NZ. The work I carried out to this point was guided by the MRC framework for developing complex interventions (9) and focused on understanding what the key outcomes for improvement were and how they could be improved.

Initially, I focused on using workplace-based peer mentoring as a platform to deliver a range of strategies to improve staff turnover. Findings from Phase 1 made me realise that: 1) none of the identified strategies were particularly effective, 2) that the intervention had to be holistic, flexible and responsive to specific needs and preferences of each support worker, 3) the focus on improving staff turnover had shifted to improving psychosocial outcomes (satisfaction, perceived stress), and 4) the proposed workplace-based delivery of the programme would not be feasible. In response to Phase 1 findings, I decided to use e-mentoring to improve support workers job and life satisfaction, and perceived stress levels.

This chapter presents a rationale for using this approach and provides a detailed description of the proposed intervention's process. Crucial to this phase was the usability testing study (Study 2) that informed final refinements to the intervention before carrying out the feasibility study in Phase 3.

6.2 E-mentoring to improve job/life satisfaction and perceived stress levels

E-mentoring is a process in which a mentor supports a mentee via digital channels of communication. It is a form of mentoring that has become available thanks to the rapid technological advancements and availability of internet (164, 177). Its key advantages, when compared to traditional mentoring, include lower costs, no geographical

restrictions and increased flexibility (164, 177). These advantages were particularly relevant to addressing the intervention implementation issues identified in Study 1B – the need for an intervention free of costs to the organisations, and one that is not restricted geographically and flexible to accommodate the 24/7 work roster of support workers.

Contrary to a popular belief, it is not true that mentoring is only a process in which a knowledgeable elder can offer advice and teaching to an inexperienced novice (178). Rather, it is a very adaptable method that can be applied to a variety of settings, including nursing, medicine, higher education and can benefit both the mentor and mentee (178-182).

E-mentoring offers benefits similar to the traditional in-person mentoring, including increased job and life satisfaction, staff retention, self-efficacy, knowledge, communications skills and perceived job control and decreased perceived work stress (164, 177, 183-187). All of these outcomes were identified as potential target outcomes for interventions included in the systematic review (Study 1A), with satisfaction and stress being discussed as particularly important by focus group participants in Study 1B. Considering the above, e-mentoring appeared to be well-suited to serve as a platform for improving the priority outcomes for support workers.

There is an overall agreement that mentoring is an effective way of offering support to the mentee, be it psychosocial, emotional or career, and that often mentors can serve as role models (185). However, one of the main features and key driving mechanisms of a mentoring relationship is goal setting (164, 177, 184-186). Goal setting theory (188) states that setting a goal influences an individual's behaviour and performance. The resulting behaviour and performance depend on the goal's difficulty, relevance and importance, and the person's level of commitment and ability to attain the goal (188). These factors highlight the importance of a person's ability to self-determine their goals. This was also proposed as Study 1B participants' preference for the e-mentoring

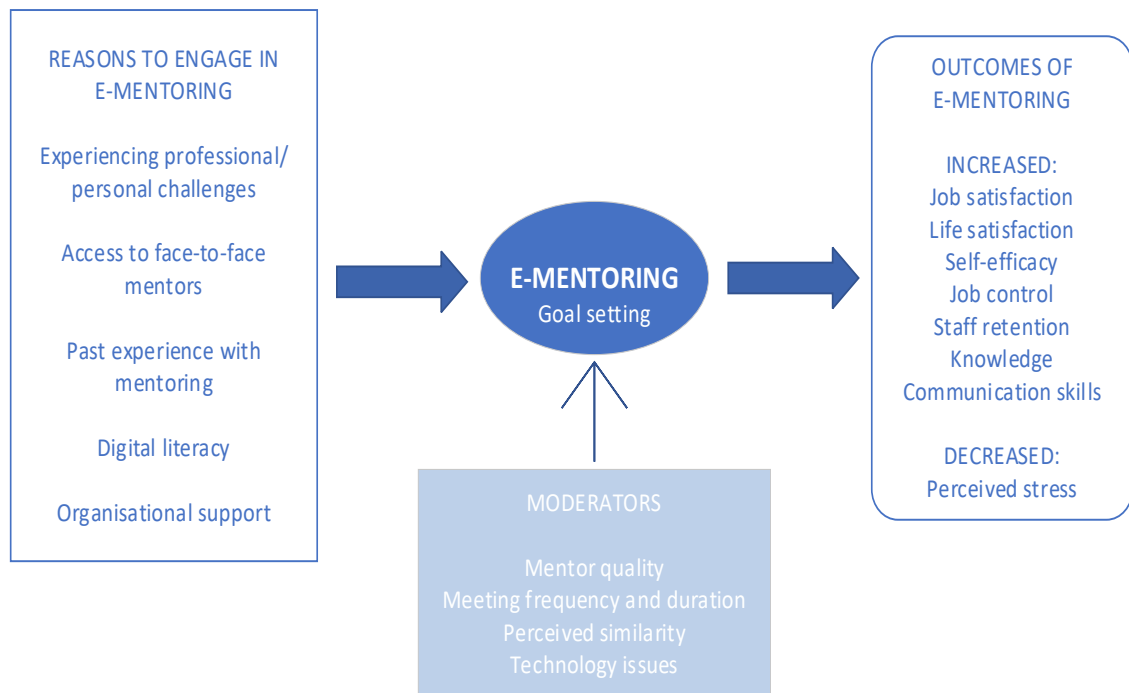
intervention. They wanted to be able to choose their own goals and not be limited to goals that were only work-related or imposed by their employers.

However, it is important to decide between using goal setting in the manner proposed by Locke and Latham (188) that challenges people to set difficult goals and risks not attaining them, versus using goal setting as a technique to tailor the focus of the mentoring programme to participants' specific needs and preferences. Focus group participants in Study 1B argued that the proposed e-mentoring interventions should empower them, rather than focus on their weaknesses. They also suggested that goal setting should be used as a means of providing structure for their mentoring meetings. In this light, it appeared appropriate to use goal setting only as a tool that will help the intervention users identify the areas of their lives they would like to focus on and discuss during mentoring sessions.

While it has been proposed that e-mentoring can benefit nearly every person (185), it is not the most appropriate or preferred form of support for everyone. Researchers (164, 185) report that people's reluctance to engage in e-mentoring may stem from poor digital literacy, concerns regarding privacy and confidentiality, and/or unsatisfactory past experience with mentoring. These reports resonate with the concerns expressed by Study 1B participants. Although they may act as barriers to engagement in the proposed intervention, some of them would be addressed in response to the recommendations listed in Table 9.

E-mentoring is an evidence-based intervention that uses goal setting to provide support to its users. It has been shown to be effective in increasing job and life satisfaction and decreasing perceived stress levels in many occupational groups, including health and nursing (177, 183, 184). Figure 4 summarises this section by presenting a conceptual model of e-mentoring (adapted from Ensher and Murphy (185)). In the following sections I will describe specific components and parameters of the proposed e-mentoring intervention.

Figure 4. Conceptual model of e-mentoring (adapted from Ensher and Murphy (163)).



6.3 Core components of the e-mentoring intervention

The development of core components of this intervention was informed by previously published approaches to mentoring, Phase 1 findings and consultation with the project advisory group and my PhD supervisors. In the following sections I describe the core components of the proposed e-mentoring intervention and provide the rationale behind them.

6.3.1 The intervention name – WeCare Mentoring Programme

When choosing a name, I looked for one that had some relevance to the intervention's users. I asked my colleagues, some of whom were support workers, about the words that came to their mind when they thought about the intervention I was proposing. Their examples included: caring/care, sharing/share, people, New Zealand, aged, support, aged care mentoring, and other. It reminded me of how much pride support workers

take in providing care. To reflect this and as this intervention was for them, I decided to call it the WeCare Mentoring Programme.

6.3.2 Key guiding principles

To ensure clarity of roles and intention of the WeCare programme a set of three key guiding principles was proposed.

1. Developed for and with support workers

My intention was to develop an intervention for aged care support workers to support them in navigating through the challenges they were experiencing. In Phase 1, but also in my previous research (6, 7, 189), I found that many of these workers would value more support and opportunities for professional and personal development. Developing this intervention with its potential users is also consistent with the MRC framework for developing complex interventions (9).

2. Mentee is central to the mentoring relationship

Mentee's needs were the main reason for this relationship, but also the driving force behind it. They had to decide what the focus of the relationship should be, what the goals were, and how they were going to achieve them. As such they were central to their mentoring relationship and also the impact of this programme.

3. Mentor is the most valuable resource of this programme

Mentors provided an ongoing relationship for general support, encouragement and guidance. Their main task was to create a safe and privileged time for their mentee to concentrate and reflect on themselves. Importantly, previous research proposed that the quality of mentors (their skills, experience and personality) was an important moderating factor in e-mentoring interventions (185).

6.3.3 WeCare Mentoring participants

6.3.3.1 *Mentees*

Any residential aged care support worker who was seeking support or advice could take part as a mentee. Taking part was particularly relevant for those seeking to share their experiences with someone who understood their perspective and explore opportunities to help them manage their ongoing health and well-being in the context of their role.

6.3.3.2 *Mentors*

Being experienced and skilled in caregiving were identified by Study 1B participants as two important eligibility criteria for mentors. Therefore, to take part as mentors, participants had to have been working as a support worker for at least five years and hold an NZQA Certificate in Health Care Assistant Level 4 (or equivalent).

Five years of experience in the role would allow potential mentors to have an in-depth understanding of aged care. Additionally, given that focus group participants reported mentoring being used as part of on-boarding process for new recruits, it was assumed that a support worker with five or more years of experience would have had some experience in mentoring.

The requirement to hold an NZQA Certificate in Health Care Assistant Level 4 was proposed due to the inclusion of a Mentoring Module as part of the certificate's curriculum.

Additionally, following advisory group advice, all potential mentors were asked to provide a character reference, i.e. someone who could confirm that they were employed as a support worker and their suitability for the mentor role.

The above criteria were discussed with the advisory group and considered sufficient to ensure good quality of mentors.

6.3.4 Training

Training is an important part of preparation for taking part in a mentoring intervention, especially for mentors (164, 184). Neely et al. (164) argued that e-mentoring training needs to include specific expectations for mentors and mentees. Miller et al. reported that participants of their e-mentoring intervention were concerned about “not knowing enough” and “not being able to answer the mentee’s questions” (184). They recommended mentors should take part in role-playing exercises (as a mentee) prior to meeting their mentees. These reports are in line with the recommendations from Phase 1 (Table 9).

The format of training was discussed with the advisory group and PhD supervisors. It was proposed that the training had to be as short and inexpensive as possible, and standardised. One way of meeting these criteria would have been to record a series of training videos and share them with the potential participants. However, the costs associated with producing the required video content were estimated to exceed the designated budget.

Instead, I developed two written intervention manuals incorporating the recommendations from Phase 1 and other research to form the intervention training. I created two versions: one for mentee and mentor each (see Appendix 14 and Appendix 15 for final versions of the manuals). The manuals were intended to be stand-alone documents that would ensure participants preparedness for the intervention. These manuals provided content that could form the basis of training videos in the future should the intervention be found to be acceptable and feasible.

The mentor and mentee manuals were similar but included role-specific content. They included sections on introduction to e-mentoring, roles and expectations, benefits of mentoring, mentoring process, boundaries, safety, and other. As maintaining

confidentiality and privacy were found important to Study 1B participants, these two topics were also specifically addressed in the manual.

The mentor manual included two additional sections: 'Mentoring tips' and 'Focus of the mentoring relationship'. The mentoring tips section was included to help people be effective as mentors. One of the fundamental skills a mentor needs to use is active listening. As argued by Clutterbuck (55), an effective mentor will spend most of their time listening to their mentee, rather than talking to them. One of the focus group participants (Suzy) defined a mentor as *someone who listens*. Thus, the mentoring tips included in the manual centred around listening and included: 1) listen, listen, listen, 2) use open-ended questions, 3) reflect, 4) do not interrupt, and 5) keep an open mind (see Appendix 15, Mentor Manual, page 11).

The 'Focus of the mentoring relationship' section's purpose was to equip the mentors with a tool to help them guide the process of goal setting. The Meaningful Goals Map (190) was included as a brief tool that could help mentees and mentors set the goals (see Appendix 15, Mentor Manual, page 20). This strategy focuses on identifying things that matter most to the person (the why), anchoring concrete goals to what matters most, and planning the process of working towards achieving those goals (190). Nevertheless, the use of this strategy was not essential. The primary requirement was to engage in a process with Meaningful Goals providing an exemplar for that. This was explained in the mentor manual.

The manuals were reviewed by the advisory group and PhD supervisors who provided a range of comments relating to both format and content. Some of the suggestions were: inclusion of a 'welcome section', inclusion of images, examples of questions for the FAQ section.

The intervention manuals were shared with participants as digital and/or hard copies (depending on participant's preference). As the manuals were approximately 5000 words long and expected to take between 1-2 hours to read in total, participants were

given a week to familiarise themselves with the content before being matched with their mentoring counterpart.

Overall, the proposed training involved the participants reading the intervention manual and being able to ask questions if something about the intervention was not clear.

6.3.5 Matching

Matching mentees with mentors is central to a successful mentoring relationship (184, 185). Two commonly proposed recommendations for successful matching are: to 1) match people with similar personalities, goals, expectations, and 2) give mentees a choice (55, 164, 185, 191). These were also the focus group participants' preferences for mentee/mentor matching (Table 9).

As argued by Clutterbuck (55) an appropriate balance of similarity is fundamental to building strong rapport between mentee and mentor as it provides a common ground. The one area where dissimilarity was proposed to be beneficial is relating to skills and expertise as it allows mentee to learn new things from their mentor (192).

Nevertheless, both past (55, 164, 185) and current (Study 1B) research recommends allowing mentees to make their own choice of mentor. Clutterbuck (55) argued that mentees are more likely to engage in a mentoring relationship if they can select their mentor.

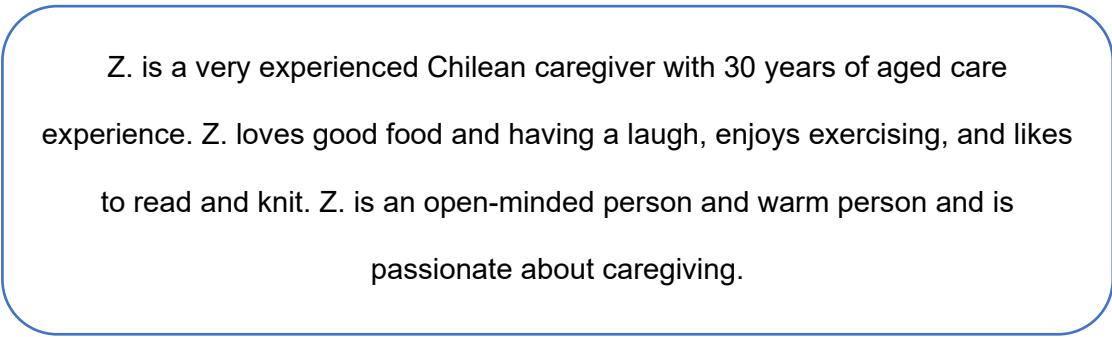
Considering these factors, I decided to match participants based on their demographic characteristics, personality, interests, and mentoring preferences. Demographic, interests, and mentoring preferences data was collected using forms that I developed for this study (Appendix 16, Appendix 17, Appendix 18). Personality match was guided by participants scores on the Ten Item Personality Inventory (TIPI, Appendix 19) (193). TIPI is a validated (193, 194) and brief measure of five personality dimensions: extraversion, agreeableness, conscientiousness, emotional stability, and openness to experiences. It asks the respondents to rate each of the ten items on a seven-category

Likert-type scale ranging from strongly disagree to strongly agree. Examples of items included: *I see myself as reserved, quiet; I see myself as disorganised, careless.*

The matching process was coordinated by myself once the training was completed. Participants were only matched if they worked at different facilities; making it unlikely for them to have met each other before and further enhancing the confidentiality and privacy of their participation. I aimed to match people who were similar (in terms of experience, age, gender, ethnicity, TIPI result, and any specific preferences) with the mentor being more experienced and/or older than the mentee.

For each mentee, I chose three best-fitting mentor profiles and sent them to the mentee for their consideration (see Figure 5 for a mentor profile example). The profiles were deidentified. Mentees were asked to choose one that they felt most comfortable with and email me their name. I then introduced them to each other via email and asked them to schedule their first mentoring session.

Figure 5. An example of a mentor profile for matching.



Z. is a very experienced Chilean caregiver with 30 years of aged care experience. Z. loves good food and having a laugh, enjoys exercising, and likes to read and knit. Z. is an open-minded person and warm person and is passionate about caregiving.

6.3.6 Mentoring relationship

The focus of the mentoring relationship was on identifying mentee's personal and/or professional goals and working towards achieving them. The final choice of goals and discussion topics belonged to each mentee.

The mentee and mentor were matched for six months, with a recommended meeting frequency of at least once a month for 30-60 minutes. The duration and frequency were

chosen based primarily on the preferences of focus group participants (Study 1B), and also the systematic review findings (Study 1A) and advisory group members' opinions.

6.3.6.1 Mentoring relationship phases

Three phases of the mentoring relationship were proposed, based on Clutterbuck' mentoring model (55): introduction (1st-2nd month; including rapport building and setting the direction), progression (2nd-5th month), and final evaluation (6th month; including winding down and moving on) (see Appendix 15, Mentor Manual, page 16). This timeline was presented in the manual to help the WeCare users understand what to expect during the programme. However, it was anticipated that the proposed timeline was flexible within the six-month timeframe and that some mentees may decide to end their mentoring relationship earlier than the proposed end point.

The aim of the introduction phase was for mentee and mentor to get to know each other, to discuss their expectations, agree on the ground rules, and develop a mentoring plan identifying goals to focus on through the programme (Appendix 15, Mentor Manual, page 41). In the progression phase, mentee and mentor were expected to continue to meet once or more a month. Their focus was on increasing mentee's responsibility for managing the relationship, including scheduling the meetings and preparing meeting plans. In this phase, the mentee was encouraged to work towards achieving their goals. The mentoring plan they had developed during the introduction phase was to be revisited during the progression phase and potentially developed further or changed. The final phase was focused on reviewing and celebrating what had been achieved in those six months. The last meeting was used to wind down and develop a 'where to from here' plan. This plan would focus on identifying any other supports and resources the mentee may find useful moving forward once they close the mentoring relationship with their mentor.

6.3.6.2 *Mode of delivery*

WeCare Mentoring is an online-based intervention and required its users to have access to internet, an email account and a Skype account. On signing up to the intervention, all participants were offered assistance with setting up a new email and/or Skype account.

Email was proposed as the primary form of communication between the mentoring meetings. Participants were asked to use email communication to schedule their mentoring meetings, but also to follow-up on previous meetings and forward any resources they might have discussed during one of their meetings.

Skype is a free and easy to use application that allows video calls and has over half a billion users worldwide (195). I expected that most of the potential participants would have heard of or used Skype before. Participants were asked to always use video during their mentoring sessions. This was considered important as being able to see the other person helps build trust and facilitates better understanding (164).

Furthermore, face-to-face meetings are for many cultures the most desired way of communicating, for example for Māori (196).

Included in the manuals were also practical tips on using Skype. These were included as both the focus group participants and past research identified technology issues as potential barriers/moderators to an effective e-mentoring relationship (164, 185).

6.3.7 *Mentoring meetings*

Participants were asked to schedule at least one mentoring meeting a month, for 30 to 60 minutes. The manuals included a plan for their first meeting (Appendix 15, Mentor Manual, page 40). Participants were asked to use their meeting plans to guide their discussion.

Following each meeting participants were asked to complete a short meeting report (Appendix 15, Mentor Manual, page 42) via an online link. Each report was then

reviewed by myself and used to prepare a plan for participants' next meeting. This process included copying content from the meeting report and pasting it into the next meeting's agenda. This process can be automated in the future should the intervention be found to be acceptable and feasible.

Meeting reports were an important part of the mentoring process as they prompted reflection following each meeting. Reflection has been previously highlighted as an integral part of the mentoring process as it helps people prepare for their meetings and review what they have learned (55). As such it was considered to be one of the key active ingredients of this intervention.

Additionally, these reports helped monitoring that both participants felt safe and were not experiencing any intervention-related challenges.

6.3.8 WeCare Mentoring – summary

The proposed intervention was a six-month online mentoring programme. Following a short training period using a written mentoring manual, mentees and mentors were matched based on similarity. They were asked to meet at least once a month for 30 to 60 minutes via Skype. The focus of their meetings was dependent on the mentee's needs and preferences and related to their personal and/or professional life. After each meeting participants were expected to complete a meeting report using an online form as a means of facilitating reflection and learning.

Before testing the full intervention, the proposed resources and format underwent usability testing in Study 2. The methods and findings of Study 2 are presented in the following sections.

6.4 Study 2: Usability testing of the proposed e-mentoring intervention

Usability testing is a type of study used widely in the development of digital applications (141). Usability has been defined as “the extent to which a product can be used by

specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use” ((197) p.2).

In Phase 1, I found that an online delivery (i.e. via a video-conferencing software) appeared to be the most appropriate way of administering the proposed mentoring intervention. Even though I did not develop any new application, but rather drew on existing digital platforms, it was still deemed beneficial to evaluate whether the proposed process was efficient and satisfactory to its intended users. Usability testing is an approach that helps answer these questions (198). Conducting a small-scale usability testing study was expected to provide valuable insights into the usability of the proposed process, as well as enhance my understanding of the intervention’s acceptability, perceived barriers, facilitators and benefits to inform refinements to the intervention process.

6.4.1 Methods

The primary aim of this study was to provide insight into usability issues with the proposed e-mentoring intervention, its acceptability, and perceived barriers, facilitators, and benefits. The focus was on testing the proposed intervention’s protocols and technical aspects. The findings from this phase informed final refinements to the intervention process and protocol (including the programme manual).

6.4.1.1 Study design

A qualitative usability testing study was conducted. As the project timeframes were constrained and I was planning to conduct a feasibility testing study in Phase 3 which would guide further protocol refinements, I decided to use only one round of usability testing in the current study. This approach is particularly suited for testing ideas that are well defined and stable (199). This was appropriate for this study given my aim was to test the first meeting agenda and widely used videoconferencing (Skype) and email applications, during one mentoring session.

I used multiple approaches to data collection: the Think Aloud interview method (200), the Stimulated Recall interview method (201), a standard semi-structured interview, and researcher field notes. I expected that by using multiple data collection methods I would gain a broader, more holistic understanding of the topic (202)

The Think Aloud (200) method requires participants to think aloud while solving a problem or performing a task. Researcher's participation in the interview is minimal and limited to giving tasks and basic prompts to the participants. It is commonly used in and well suited for usability testing studies as it focuses on identifying any specific technical or practical problems relating to using an artefact under investigation (203).

The Stimulated Recall interview (201) helps to explore participants' thought processes and impressions of the investigated artefact, by using a video recording (of them using the artefact) to stimulate recall of their thinking at the time of carrying out the activity (204). As it is conducted after the event being investigated, it is sometimes referred to as 'retrospective Think Aloud' (204). Thus, it allows further investigation of problems that may have been missed during the Think Aloud interview.

The semi-structured interview uses an interview guide and focuses on exploring participants' perspectives; in this case: on the intervention's perceived benefit, and barriers and facilitators to engaging in a mentoring relationship. Field notes were also taken, to record any relevant observations, such as participants experiencing issues while completing forms or video quality in the video-conferencing software. Table 10 outlines how the methods were used to explore specific intervention components.

Table 10. Methods used in each usability testing component.

Intervention components	Method
Scheduling of a meeting	Think Aloud interview
Mock mentoring session	Stimulated Recall interview
Reporting	Think Aloud interview
Completing surveys	Think Aloud interview

Intervention components	Method
Participants' perceptions on mentoring benefits, barriers and facilitators	Semi-structured interview
All components	Researcher field notes

6.4.1.2 Ethical approval

Ethical approval was obtained from the Health and Disability Ethics Committee (Ethics approval number: 18/NTA/120).

6.4.1.3 Participant selection

Potential participants were support workers who took part in Study 1B (n=7) and expressed interest in being involved in Study 2, and their colleagues. I was planning to purposively select participants who took part in Study 1B and were familiar with the purpose of the overall project, and some who did not (i.e. Study 1B participants' colleagues). They were eligible to participate if they: 1) were over 18 years old, 2) self-reported as digitally literate, and 3) worked as an aged care support worker. There were no exclusion criteria.

Given that the investigation was focused on the process of using existing applications (e.g. off the shelf videoconferencing software) by a relatively homogenous population (3), a sample size of five participants was considered sufficient for this type of study (205, 206). Thus, I aimed to recruit up to six participants to take part in the testing, as I hoped it would allow identification of the main usability issues in a relatively short timeframe.

Potential participants were emailed an invitation to take part in the testing. They were asked to pass this information on to their colleagues. Those who responded to the invitation were met in person and provided a brief study overview. They were then asked to agree to take part by signing the consent form.

6.4.1.4 Intervention training

In preparation for the usability testing, participants were asked to familiarise themselves with the programme manual (Appendix 14, Appendix 15).

Participants were emailed the programme manual after they consented to take part. Depending on their role, they were emailed either a mentor or mentee version. The decision on what their role was in the study was made by me. The key criterion I considered was whether the participants took part or not in Study 1B, as I wanted to see whether those without prior knowledge of the intervention were able to prepare well enough just by reading the manual. Therefore, I wanted for at least one mentor and one mentee to be new to the project. Importantly, as the focus of this study was for the participants to role play a mentor/mentee, there were no specific criteria for who could take part as a mentor and mentee.

The manual provided a detailed description of the programme, and the mentor and mentee roles. Participants had a week to read the manual and prepare for the mock mentoring session. They were asked to familiarise themselves with the manual before their session, and to let the researcher know if they needed more time. Immediately before commencing the session, participants were asked whether they had any questions about the manual or their role. Once the participants expressed their readiness, the mock mentoring sessions were arranged.

6.4.1.5 Data collection procedure

Data was collected using interview guides (Appendix 20, Appendix 21) from the same participants on two occasions: 1) during a mock mentoring session, and (2) within 72 hours after the session.

Each participant was asked to pilot-test the full process associated with a single mentoring session, including scheduling a meeting, carrying out a mock mentoring session via videoconferencing software, reporting and completing outcome measures.

The mock mentoring session and data collection took place at a location identified as preferred by participants (e.g. at home) The session started with an explanation of the procedure and a short demographic information survey (age, gender, and IT experience; see Appendix 16). For each session, data was collected from mentees and mentors simultaneously by two researchers (i.e. each with a mentor and a mentee at their respective locations). The researchers observed the mock mentoring session. The sessions were audio- and video-recorded.

Participants' role was to complete the tasks and talk aloud about what they did, their impressions, and any potential difficulties. Following the mock mentoring session, a short semi-structured interview was conducted exploring their perceptions on the mentoring training (i.e. reading the manual), benefits of mentoring, and barriers and facilitators to engaging in a mentoring relationship.

Within 72 hours of the mock mentoring session, participants took part in a Stimulated Recall interview, during which a video recording of purposefully selected section from their mock mentoring video recording was played to them. Recordings were purposefully selected to explore specific instances in more detail e.g. showing a section where participants appeared unsure about what to do, or where they did not follow the mentoring guidelines specified in the manual. They were asked to explain what was going on, what they were thinking, why they did what they did, and how this may have affected them. The interviews were audio-recorded.

6.4.1.6 Data analysis

Usability testing data analysis approach was similar to that used in Study 1B, i.e. Directed Content Analysis (163). Coding focused on the interventions usability (factors relating to the effectiveness and operationalisation of using the proposed intervention for its intended purpose) and acceptability (factors that affected the participants' willingness to use the proposed intervention for its intended purpose), perceived barriers and facilitators, and perceived benefits.

The interviews were transcribed by myself. Initially, I read and reread my field notes and coded them using the coding framework. I then studied the audio and video recordings from all data sources, and read and reread the transcripts. During this process I marked all text that appeared to relate to any of the pre-specified categories. Next, I coded these passages by adding labels, for example 'not enough time' or 'clear language' and noted any other comments in the margins. Data that did not relate to any of the prespecified categories or the study aim was left uncoded as it was not relevant to the study purpose. All codes and comments (from field notes and transcripts) were then imported into a mind-mapping software MindManager 2017 (165), where I grouped them into subcategories within the pre-specified categories.

When writing up the findings, my analytic focus was on identifying components needing clarification or refinement, and any other information that could increase usability and acceptability of the proposed intervention. To illustrate how the findings were grounded in the data, I selected relevant quotes from the interview transcripts.

6.4.2 Findings

First, I report findings broadly relating to the usability and acceptability of the proposed intervention, with a specific focus on the intervention preparation, mentoring session, and reporting and online survey. This is followed by presentation of the barriers and facilitators to engagement in the proposed intervention, and its perceived benefits. The section concludes with a brief summary of findings.

6.4.2.1 *Participants*

Six participants were recruited and consented to take part in the usability testing. However, two withdrew from the study just before data collection (for undisclosed personal reasons). Four participants (Table 11) took part in the testing in November 2018. Two took part as mentors, and two as mentees. They were matched into two mentor-mentee pairs. They knew each other from their workplace (a large, privately-

owned aged care facility in Auckland), but were asked to pretend they had never met before.

Table 11. Demographic characteristics of Study 2 participants.

Pseudonym	Age	Role	Years of aged care experience	Employment type	Ethnicity	Immigration status
Victoria	31	Mentor	7	Full time	Spanish, Filipino	NZ-immigrant
Eric	53	Mentor	13	Full time	Filipino	NZ-immigrant
Carol	30	Mentee	2	Full time	Filipino	NZ-immigrant
Marion	28	Mentee	7	Full time	Filipino	NZ-immigrant

6.4.2.2 Usability and acceptability of the proposed intervention

Overall, the participants appeared to like the format of the programme and expressed willingness to participate in it, if were to be offered to them. They thought it offered something beyond the supports available to them at the time, for example the Employee Assistance Programme.

“It will work. Especially in this kind of job. It is good, and I hope you will run something like that.” (Victoria)

The process associated with conducting one mentoring session appeared relatively easy to follow for the participants. They believed that the proposed length of six months was appropriate.

“I think six months is fine. For as long as both parties agree on the specific time in the schedule and availability.” (Marion)

“This [duration] is quite ideal to work your kinks out (laughter).” (Victoria)

Participants reported liking the simplicity of the programme and thought it offered an opportunity to talk to someone who could understand their perspective. However, several aspects were identified for refinement or clarification. These are discussed in the following sections.

Intervention preparation

All participants reported to have read the programme manual prior to the session. The participants thought that the manual was useful and helped them understand the process and their role. Two participants printed their programme manual out and used it during the session. The other two did not have the hard copies and felt it would have been easier to have the printouts in front of them during the session, rather than having to scroll through their phones or laptops.

Out of the four participants, two felt prepared (one mentor, one mentee). As Carol reflected:

"I would be blank without the manual". (Carol)

The other two, however, felt they needed more training or practice, and that the manual was lacking a clear outline guiding them through the whole process. They suggested adding an outline introducing the readers to the manual contents.

Eric and Marion thought the manual was written in a simple and concise way. The other two participants found the language of the manual unclear at times. They argued it was difficult to understand on first read. Victoria was not sure what some of the phrases meant, for example 'Key Actions'. She felt that some of the language could be simplified and some technical terms removed. Adding to that, she thought some phrases were introduced without sufficient contextual information, for example 'Meeting reporting'.

"For example, if you read it, it may sound simple, but then for example "meeting reporting ". what the hell is meeting reporting? Am I going to do it?" (Victoria)

Participants also asked for provision of more information on how to write the meeting reports, a clearer description of the appendices location in the manual, and for the wording of the meeting agenda template to be simplified.

"I kept on going back, I just kept going back to appendix 3, appendix 4. And I was like where is it?" (Marion)

Eric reported finding some of the guidelines in the manual difficult to adhere to. He recalled wanting to propose a solution to his mentee's problem, but thought he was not allowed to do that.

"I found it hard to really express myself as much as I feel I can. Because I'm supposed to listen and listen and listen..." (Eric)

Participants also felt that more training would have helped them to be more confident and know what to expect.

"They should explain it before (the start of the programme) for the mentor and mentee, make sure we really understand it." (Carol)

It appeared that it was not completely clear to the participants what was going to happen during the first session, nor that the programme was focusing on both personal and professional aspects of its users' lives. They described having a general idea of the purpose, but also that they felt nervous and unsure what they were supposed to achieve during their first meeting. Victoria reflected:

"We were reading the manuals, but then for something like this, the first time that this would happen, I was nervous for a bit, she was obviously nervous too, and then my expectations from a mentoring program. This was far from what I had in my mind." (Victoria)

Overall, participants thought that some training, over and above what was provided, was necessary for both mentors and mentees. They reported the manual gave them a general understanding of what the programme was about and considered it a helpful resource. However, it seemed that the way it was written and structured had to be improved, with a specific focus on clearer communication. It also appeared that more training than just the proposed pre-programme self-study was required.

[Mentoring session](#)

Immediately prior to starting their mentoring sessions, participants were asked to simulate the process of scheduling a meeting. Both mentors were asked to send introductory emails to their mentees and schedule their first meeting for a specific time. Both mentees responded to their emails with no difficulties and agreed to the

suggested meeting times. All participants reported finding the scheduling process easy to follow.

“I think the (scheduling via) email is good. For a start, it's really good. I think it's essential.” (Eric)

In one of the mentor-mentee pairs, the participants had some difficulties with establishing their Skype connection, i.e. there was no sound for one of the participants. We found that Skype had been just installed on this participant's computer and not fully set up. The participant was assisted by one of the researchers, who fixed the issue, and the session continued. Furthermore, we experienced some difficulties with the internet connection during the session, leading to the Skype video lagging behind its audio. One of the participants appeared to struggle with this lag more than the other one, and it was difficult for the two to have a conversation.

The two mock mentoring sessions lasted 26 and 28 minutes. At the beginning of the session, all participants appeared and reported to feel nervous. They explained it was due to this being their first time taking part in mentoring, and/or because there were researchers in the room observing them. Victoria stated that “first meetings are always awkward”, and that she expected it would improve over time:

“You have to go through the process of doing it until you built trust and rapport with your mentee.” (Victoria)

Both mentor-mentee pairs used the provided meeting agenda at the beginning, but both stopped using it as the meeting progressed. This resulted in the participants getting off track, with one pair moving on to discussing potential ways of achieving the mentee's goals, even before properly introducing themselves to each other. Both mentees, Marion and Carol, wanted to talk about their goals – “to achieve a result today”, and to not waste any time.

The mentees reported wanting to focus on their hopes and expectations and be able to talk about how they felt about certain things. Carol felt that her mentor was not leading

the conversation, so she decided to take over. She was getting frustrated with what she perceived as her mentor's lack of plan and not getting any answers.

"Well... is that really mentoring or... it's just like we are shitting around (laughs), wasting our time, talking, repeating... different words with the same meaning. That's how I felt." (Carol)

Marion thought the programme would be similar to counselling. She hoped she will be able to trust the mentor straight away and tell them how she felt about different things. On the contrary, Victoria was worried that the mentee would rely on her too much and see them as an absolute authority.

"Your mentee is relying on you not to help her but to guide her through what she's going through. She's actually expecting that you have more experience work-wise, life-wise, so whatever you say there as a mentor you would be expecting that your mentee will believe you moving forward. And that's where the nerves kick in. Because I had to be careful what I say. She might not follow it but there is high probability that she will actually, most likely, follow what I'm trying to say because she thinks of me as a mentor." (Victoria)

Both mentors reported that they did not know how to respond to their mentees' questions. It appeared that both mentors were focused more on identifying problems and solutions for their mentees, rather than hearing their mentees' out and letting them talk. Yet, mentors explained that their perception after reading the programme manual was that they were not supposed to be advising their mentees on how to solve their issues. They thought they were not supposed to be sharing any personal examples and were trying to focus on paraphrasing their mentees' words. They were trying to listen to their mentees and guiding them, but at the same time really wanted to give their mentees more specific advice on how to solve their issues. Eric talked about his intrinsic desire of wanting to give advice to the mentee, but at the same time felt restrained by the programme manual and decided not to share any personal examples with the mentee.

"I was listening and really, and trying to understand the concerns, trying to see if there is something that I can do to help." (Eric)

Victoria, on the other hand, was trying to find ways of providing some real-life examples but found the dynamic challenging, as she felt that the mentee wanted her to sort things out for her. She also felt that her mentee was giving one-word answers and was not engaged in the conversation.

When asked about not following the agenda, the participants reported several reasons why this had occurred. First, the mentees felt that their mentor did not lead enough and/or that they were not prepared. The mentees were expecting their mentors to explain the whole process at the beginning. Second, the participants said they were trying to follow the agenda but got distracted with the conversation as it unfolded.

“Because what I did, you know the manual was in front of me, and instead of , I was supposed to listen to her, focus on what she was saying, and I had to look down , and yeah I thought, because I was trying to look on the manual to see if I was on the right track. But then because you're doing it at the same time you are slightly distracted, and then you get back to her, yeah.” (Eric)

It appeared difficult for the participants to listen to what the other person was saying and to simultaneously be looking at the meeting agenda. The mentors reported thinking that they had to fully focus on what the mentee had to say, and not on the meeting agenda. Eric found the agenda distracting. However, he also explained that if he did follow the agenda, everything would have worked well. It was similar for Victoria:

“I had everything planned, in my head but then the plan flew out the window when you're actually doing it.” (Victoria)

Victoria reported wanting to see the programme manual on the screen while she was videoconferencing with her mentee but did not know how to do it. It made her think that Skype was not appropriate for this process. However, the other three participants did not appear to have any difficulties using Skype once they were conferencing with the other person.

“That's why I was browsing through the phone because I couldn't open it on the laptop. If you are skyping someone plus you've got the other thing open on the other side of the computer, it is a little bit confusing. Because you are trying to read from there and then you're trying to get back onto Skype.” (Victoria)

Additionally, both pairs forgot to discuss the last two items on their meeting agenda – completing meeting reports and scheduling their next meeting.

To sum up, the mentoring sessions appeared not very well structured, with mentors and mentees foci not fully aligned and the participants not following the provided meeting agenda. Mentees reported wanting to talk about what they wanted to achieve and get some advice, while mentors appeared more problem-focused but were not sure how to engage with their mentees in a meaningful way. Importantly, both mentors appeared to be very engaged in listening and trying to understand their mentees' perspective. They were aware of the importance of building trust and rapport at their first meeting. Despite those challenges, the participants expressed enthusiasm about the programme and willingness to participate in this kind of initiative in the future.

“The training manual, the programme itself, that is good. I just think, maybe training the mentors would be the next step.” (Eric)

Reporting and online survey

Immediately after finishing their mentoring session, the participants were asked to complete their meeting reports and an online survey. As mentioned above, they were not completely sure how to complete these reports and had to ask the accompanying researchers for assistance. The participants asked for clarification of some of the items on the report.

Even though all participants were advised to take notes during the sessions, none (or only very limited notes) were taken. This resulted in them having to complete their meeting reports from memory, with one of the participants admitting that it would have been easier if she had taken notes during the meeting. Notably, the participants considered the reports an opportunity to reflect on their mentoring sessions.

Lastly, the participants were asked to complete an online survey with the study's proposed outcome measures. They found the survey links in their emails. They found

the outcomes measures “*straightforward*” and easy to complete. None of the participants required more than five minutes to complete the survey.

Other intervention aspects

Participants who acted as mentees, reported liking the fact their mentors were also support workers. They saw them as someone who understands and can motivate them to achieve their goals. To help build an even better relationship, Victoria suggested it was important to explain to the mentee what the benefits were for the mentors, i.e. why would someone want to be a mentor, why should a mentee “*share their life stories*” with someone else. The participants also liked that in the proposed programme mentees would be able to choose their mentor.

“That would allow a very good result. (...) I think being able to choose the mentor will be more efficient and effective for the mentee.” (Carol)

Participants shared some of their thoughts on what the mentor’s role should be. They often referred to a mentor being a guide, someone who would help the mentee reflect on their experiences. The mentor should “listen to you, but not give solutions”, give suggestions, but “not telling what to do”. Eric recommended – “be a mentor if you have will to help others”.

Participants highlighted that crucial to mentoring is the relationship that develops between the mentor and mentee. For some, the mentor might become a part of a mentee’s life, where a friendship could develop. Victoria argued that it may not necessarily be friendship, but it could be something similar.

“There's a fine line between being a professional towards a person that you are helping. So you will be developing maybe not a friendship but a rapport. So actually, being in their shoes.” (Victoria)

Victoria also reflected on the potential power imbalance between the mentor and mentee that would have to be managed. She suggested that some mentors would need to control their egos, as they might be tempted to tell people what to do without an adequate consideration of who their mentees are. At the same time, as suggested

by Carol, a good mentor is someone who a mentee “will look up to” or be “impressed by”. Participants argued that mentors will be seen as authorities by their mentees, as people with more experience. Having that experience, as suggested by Eric, could make it easier for mentors to relate and provide support to their mentees.

“She (the mentor) should be leading the process. She should be a moderator. She needs to be a coach. She needs to read ahead of the meeting about what to do. So that we have an effective result.” (Carol)

Victoria mentioned her doubts on whether a mentor should be using any guidelines or manuals. She argued that it would have been easier to be a mentor, if one did not have to follow any specific guidelines and simply speak about their own life experience. She felt that the lived experience was an important characteristic of a mentor.

“You can't be a mentor without actually going through some similar situations, although with a guide it is helpful, yeah that is helpful. But then you don't really stick to your copy anyway. You just say whatever you feel like saying that would help your mentee anyway.” (Victoria)

During their post-session interviews, participants reflected on the privacy and confidentiality aspects of the programme. They reported feeling satisfied with how private it felt and that it was important to them, had they decided to participate in such programme. However, some participants mentioned not wanting to share their mobile numbers with their mentor/mentee. Carol asked whether it would be possible to be given an email account that she could use specifically for this programme.

6.4.2.3 Barriers and facilitators to engagement in the proposed programme

Participants identified a range of factors which they thought could influence support workers engagement in the proposed programme. As the programme was supposed to be delivered online, participants argued that computer literacy would be one of the crucial factors in recruiting potential participants. They thought it was particularly important for the potential mentors to be “good with computers”. As observed during one of the mock sessions, issues with internet connection, setting up the videoconference or even not looking at the other participant during the call are possible

and can cause frustration. Some of the participants suggested that poor digital literacy could act as a barrier to engagement in this programme.

Participants talked about mentor-mentee matching being one of the most important factors influencing the mentoring relationship. They argued that both people needed to be open and willing to share. This could be further improved by allowing them to join their mentoring sessions from places they consider safe, for example, their own home.

“If both parties do it in a setting that they are more comfortable with, for example at home, and the mentor would be home as well, that would make me more comfortable and it will be easier for them to say what they feel, you know?” (Victoria)

Feeling safe or comfortable with their mentoring match was important to all participants. On the other hand, ‘judgy’ mentors, lack of privacy and concerns regarding confidentiality were proposed as other potential barriers. One of the participants mentioned telling her co-workers about volunteering to be a mentor in the current study and hearing comments which made her feel “a little bit self-conscious”.

“They said oh you are picked to be a mentor? Why, why not me? That sort of thing. So maybe if you guys push this through one day, I wouldn't say it would be a secret, but probably it should be an agreement between a mentor and mentee.” (Victoria)

Similarities (i.e. similar values, beliefs, interests, background) were discussed as an important guiding factor in identifying good mentor-mentee matches. Participants thought it would help to have people who think alike. Carol argued that they do not need to have the same cultural background, but that they needed to have “similar views”.

While for all four participants, their mock sessions did not go exactly as they imagined, they all thought they would get better with practice and over time. As Eric suggested during the post-session interview, making sure that the programme and role description were clear would help people prepare better and have reasonable expectations. Marion added that positive feedback on the programme participants’ progress would help motivate them, and that some form of a reward would be a good addition.

“Give them lollies (laughs)! Give them some reward. For mentees. If they're finding it helpful, they will really engage. If it's helping them, you will get their attention. If you can show them that they are getting better, yes they'll do it.” (Marion)

Finally, both mentees and mentors discussed the association between the quality of mentors and the mentees' satisfaction with the mentoring relationship. Mentees argued that mentors needed to be experienced so that they could share examples from their own experience and were able to propose some solutions to the mentees' problems. As mentioned above, Carol was expecting solutions from her mentor, and the lack of solutions frustrated her. Both mentees noted wanting leadership from their mentor; more than what they experienced during the mock session. It appeared, that mentors could in fact be facilitators to their mentee's engagement in the programme. Participants suggested that paying mentors for contributing their skills and expertise to this programme, could help encourage them to take part.

“Because here in New Zealand nothing is free. So if you paid them to be a mentor. Then yeah... I think it would help. Practical.” (Marion)

6.4.2.4 Perceived benefits

During their post-session interviews, participants were asked about potential benefits of participating in the proposed programme. They suggested that this programme was something that support workers needed, and that it could be helpful in decreasing stress and increasing satisfaction levels. They argued participation in the programme could improve people's self-confidence and help getting to know oneself better.

“I think if I was going to be a mentee or a mentor one day, I think it would greatly help with my self-confidence.” (Victoria)

Participants mentioned some potentials benefits for mentors in the programme. Eric argued that taking part in the programme would be rewarding to mentors, as helping and seeing people develop can be satisfying and make people feel proud. Another participant suggested that being a mentor would be a good thing to have on their CVs.

“Probably you can use that If you want to find another job. They can see in your CV that you are a mentor. It means that you are experienced. Because you cannot mentor someone without experience.” (Marion)

However, participants’ focus was mostly on the potential benefits for the mentees in the proposed programme. Overall, participants thought that through taking part in this programme, mentees would become better support workers. They considered mentors had the potential to provide a much-needed support to workers, related to issues relevant to their personal and/or professional lives. Marion hoped that mentors would be able to help their mentees find ways of dealing better with their issues. Carol suggested that taking part in the programme could improve how well people cope with stress.

“We can learn that coping mechanism. We can learn from it. Because we can gather a lot of insights and advice from the mentor, and the stress level that the person is having with the issue. It will be helpful.” (Carol)

Participants reported liking the fact that mentors provided emotional support; that the mentees were getting someone to talk to, who understands and shares their perspective. Marion argued that this could be a great support for migrant workers, like herself.

“If they use this intervention, they will have someone to talk too, they will voice out they feelings, what they are experiencing. So it would really help them. Especially someone like me, I am a migrant, I have no one to talk to here. Apart from my closest friends. It would be very helpful.” (Marion)

She also mentioned that she enjoyed feeling listened to during the mock mentoring session. However, as Victoria suggested, the session should not be about the mentee “just talking and talking”. She felt that for this programme to be successful, the mentors need to sympathise and understand first, but also have an opportunity to guide their mentee and reflect on what they hear.

“Talking is good if you want to let something out. But I would want a mentor to help me go through with whatever I’m going through.” (Victoria)

6.4.3 Discussion and refinements

The primary aim of Study 2 was to provide insight into usability issues with the proposed e-mentoring intervention, its acceptability, and perceived barriers, facilitators and benefits. These insights were used to inform final refinements of the WeCare Mentoring Programme before feasibility testing in Study 3.

Overall, participants appeared to not have any significant difficulties with following the proposed process associated with conducting a mentoring session and expressed willingness to participate in the proposed intervention. However, a few areas for refinement were identified. Apart from a couple of technological faults, most of the reported challenges related to the manual's lack of clarity or insufficient information on what was expected. It also appeared that more training was required, especially for the mentors. Participants highlighted the importance of the quality of the mentor-mentee match and a preference for like-minded people to be matched.

The general acceptance of the proposed intervention was encouraging. The findings resonated well with findings from Phase 1 and past research, which were discussed in previous sections. The programme offered them a much-needed support beyond what was currently available. They liked the simplicity of the programme and believed that peer mentors would be able to understand mentees' perspective and challenges they face at work and in life. Although they did not experience the full programme, they argued that the proposed six-month duration appeared appropriate. Their reports highlighted the importance of training, clear expectations, having a structure, quality of mentors, active listening, matching similar people, being able to choose a mentor, and privacy and confidentiality aspects. Participants thought that completing meeting reports would facilitate reflection and learning, and that with time they would get more confident in their roles. They expected that taking part would benefit both mentees and mentors, and increase their job and life satisfaction, coping skills and self-confidence, and ultimately help them become better support workers.

The participants expressed an overall enthusiasm about and support for the WeCare Mentoring Programme and described the intervention as the type of support many support workers needed and would want to use. Importantly, findings from Study 2 highlighted a few areas for refinement. These areas and how they were refined are presented in the following section.

6.4.3.1 *Refinements following Study 2*

Central to Study 2 was identification of areas that did not work well or needed further clarification. The main area for refinement was the preparation for taking part in the programme, including training contents and clarity of the training manual. Table 12 presents the proposed refinements and their rationale.

Table 12. Intervention refinements following Study 2.

Refinement	Rationale
The training duration was extended from one to two weeks	Participants required more time for training
A briefing Skype session was added and included role-playing to familiarise participants with their role expectations and functionalities of Skype	<p>Participants, especially mentors, wanted to have an opportunity to gain more confidence in their role</p> <p>One of the participants Skype account was not fully set up for video calls</p> <p>Adding a brief one-on-one training session would create an opportunity:</p> <ul style="list-style-type: none"> - to confirm that participants completed reading their manuals - for participants to ask questions they might have - to ensure participants' expectations were aligned with the intervention's goal <p>Role-playing exercises were recommended by Miller et al. (184) to be included in mentoring training</p>
Offer hard copies of the mentoring manual to all participants	<p>Participants valued being able to see the manual while in the mentoring session</p> <p>Some found it difficult to switch between Skype and the manual when using a digital copy</p>
An introduction section with an outline was added to the manual	Participants felt the manual lacked a clear outline which affected their comprehension

Refinement	Rationale
A figure outlining the mentoring process was added	Adding an outline at the beginning of documents enhances the readers comprehension (207)
The training manual was revised with a focus on clarifying programme purpose, programme-related terms and limiting the use of jargon (e.g. 'meeting plan' instead of 'meeting agenda')	<p>Participants were not certain they could focus on both professional and personal goals</p> <p>Some participants expected the programme to be about counselling mentees</p> <p>Participants found some of the language unclear or that some terms were introduced without sufficient context (e.g. key actions or meeting reporting)</p> <p>Participants argued that mentees might want to know why someone wants to be a mentor</p>
Section 'mentoring sessions' was added to clarify the role and intervention expectations	<p>Participants were not sure what to expect from their first mentoring session and what its intended outcome was</p> <p>Participants did not use their meeting plans during usability testing</p> <p>Participants rushed to working towards goals before even introducing themselves to each other</p> <p>The reporting process was not clear to the participants</p> <p>None of the Study 2 participants took notes during their mentoring session</p>
First meeting plan was revised to limit use of jargon and provide more contextual information	Participants found the plan difficult to understand
Section 'Being a mentor' was revised and expanded to improve clarity of the role description. Specifically, to empower mentors to share their knowledge and expertise with mentees	<p>Participants found the mentoring guidelines restrictive and were not sure if they were allowed to voice their opinions and/or give advice</p> <p>Mentors rushed to finding problems and solutions, rather than hearing their mentees and letting them talk</p> <p>Participants thought that some mentors may be tempted to tell mentees what to do and be very prescriptive about it</p>
'Skype communication' section was revised to include information on potential internet connectivity issues and solutions	<p>Participants expected some connectivity issues and it negatively affected their experience of the mentoring session</p> <p>Technological difficulties can be a barrier to engagement in mentoring (164, 185)</p>

Refinement	Rationale
Addition of monthly progress emails to all participants (Appendix 22) and a Completion Certificate to those who complete the programme. These emails were sent by myself	Participants thought that positive feedback on their progress would help keeping them engaged in the programme Feedback on one's progress and rewards can improve their engagement (208-210)
Addition of a small reimbursement (\$20/mentee/month) for mentors	While it has been argued that mentors do benefit from being part of e-mentoring interventions (55, 164, 185), in practice they also act as people who deliver the mentoring intervention. Thus, a symbolic reimbursement would be a fair way of acknowledging their crucial role in this study
Addition of a question and answer in FAQ section of the manual regarding working with mentees who appear not engaged	One of the participants felt their mentee was not engaged and did not know how to respond in this situation
Addition of a section on goal setting in the mentee's manual (previously was only in mentor's manual)	Participants who took part as mentees were not sure how to set their goals

The refinements presented in Table 12 were discussed with the advisory group, incorporated into the mentoring manuals (Appendix 14, Appendix 15) and Study 3 protocol (Methods).

6.4.3.2 Study 2 limitations

I aimed to produce findings that were transferable, rather than generalisable, and so they should be interpreted with this characteristic in mind. Nonetheless, the key limitation of this study is the relatively small and homogenous sample size: four participants from the same facility, all were Filipino, NZ immigrants and spoke English as their second language (ESL). Thus, the participants' beliefs and attitudes towards mentoring might have been influenced by the same organisational culture/philosophy, and shared personal background (immigrants, Filipino, ESL). Furthermore, they were all interviewed by myself and were aware that I was the author of the study and

primarily responsible for the intervention development. This may have influenced how comfortable they felt with critiquing the proposed intervention.

These limitations posed a potential risk to the validity of the proposed approach. Thus, in Study 3 that followed, I aimed to recruit people from a range of backgrounds, relating to their demographics, culture, and workplace location. This approach would enhance the generalisability of this doctoral research.

Another limitation was that only one round of testing was conducted, i.e. the proposed refinements were not tested again in this Phase. This usability study offered no direct benefit to its participants. Furthermore, some of the potential participants who approached me about taking part, resigned after finding out this study involved only one-off mock mentoring session. In the next phase, as part of the feasibility and acceptability testing, participants would get to experience the benefits of taking part in the full programme. Moreover, in the next phase I would still explore participants' experiences of taking part in the intervention (including training and using programme resources), and therefore be able to further refine the proposed process. Considering the above, the potential participant burden that could result from further testing in Study 2 did not appear justifiable.

Finally, I used Directed Content Analysis (163) and coded the data using four prespecified categories: usability, acceptability, perceived barriers and facilitators, and perceived benefits. Data that did not fit any of these categories was left uncoded. Using this approach helped me to focus on supporting, and extending, the existing research and my own understanding of the topic. However, an inherent limitation of this approach is that researchers may be more likely to find evidence that supports, rather than disproves, the existing theory (163). Again, further testing of the proposed approach was planned in Study 3, and any relevant issues that might have been missed in Study 2, were likely to emerge.

6.5 Summary

In this chapter, I presented a rationale for using an e-mentoring intervention to improve outcomes for support workers. Based on Phase 1 and past research, I identified the priority outcomes as job and life satisfaction, perceived stress levels and self-efficacy. To improve these outcomes, I proposed an intervention called the WeCare Mentoring Programme.

The WeCare Mentoring is a six-month online programme. Its core components include the mentoring training, mentor/mentee matching, goal setting, monthly mentoring sessions via Skype and self-reflection through completing meeting reports. The focus of the programme depends on the mentee's needs and preferences and can relate to their personal and/or professional life. It is expected that both mentees and mentors benefit from taking part.

Crucial to this phase was the usability testing study (Study 2). It found that the intervention was acceptable to support workers who expressed willingness to take part in the full programme. Participants highlighted the importance of the quality of the mentor-mentee match and preference for like-minded people to be matched. Importantly, Study 2 resulted in several important refinements to the intervention, the majority of which related to the intervention training, participant manuals' clarity, and programme's and roles' expectations.

The refined intervention's feasibility and acceptability was then tested in a feasibility study. The study is presented in the next chapter.

Phase 3: Feasibility of the intervention

7 Chapter 7: The feasibility and acceptability of the WeCare Mentoring programme: A feasibility study.

7.1 Prologue

In the final phase of this doctoral project, I conducted a feasibility study (Study 3) of the proposed e-mentoring intervention, to determine if the intervention could work in a 'real-life' context and to inform study design for a potential future trial. The study's focal point was a six-month e-mentoring intervention named the WeCare Mentoring Programme.

7.2 Introduction

After developing the conceptual and theoretical basis, defining the intervention and then testing it in a usability study, the next step in the intervention development was to conduct a feasibility study of the WeCare Mentoring Programme. Feasibility studies are integral to developing complex interventions and recommended by MRC (9). They can provide a range of valuable insights about the intervention under development, before it is studied in a definitive controlled trial (9, 211). Specifically, they can provide information on recruitment methods, retention rates, intervention's acceptability and fidelity, and safety (211). To a lesser extent, they can also provide preliminary information about participants' responses to the intervention which can be used to estimate an adequately powered sample size for the main trial (212). Conducting a feasibility study was the natural next step in developing the WeCare Mentoring Programme.

The WeCare Mentoring intervention was developed in response to the difficulties aged care support workers in NZ experienced. Its online format was dictated by the apparent inability of the aged care organisations to be facilitating any workplace-based interventions. Although peer mentoring for support workers was reportedly used by

many NZ aged care providers (Study 1B findings), it was mandatory, during work hours and focused purely on work-related topics. In contrast, the proposed intervention was voluntary, outside of work hours and focused on any topic that the mentee considered important to them. In this light, it was unclear whether: 1) support workers would be interested in voluntarily partaking in an activity that falls outside of their work hours, and 2) aged care organisations would support a programme that focuses not only on work-related topics, but also on topics that are not directly related to work. Thus, this study also aimed to investigate the acceptability of the proposed intervention.

The study aimed to investigate feasibility and acceptability of the intervention, recruitment protocols, data collection procedures, and participants' preliminary response to the intervention.

7.3 Methods

7.3.1 Aims and objectives

The overall aim of the current study was to investigate the feasibility and acceptability of the proposed intervention, and to provide data required to plan a future randomised controlled trial. Working definitions of feasibility and acceptability were as follows (213, 214):

Feasibility – factors relating to the practicality, convenience and other parameters of the proposed intervention that are needed to design the main efficacy trial.

Acceptability – factors that affect the participants' willingness to use the proposed intervention for its intended purpose.

There were four study objectives:

1. To investigate the feasibility and acceptability of recruitment protocols.
2. To investigate the feasibility and acceptability of data collection procedures and outcome measures.

3. To investigate the feasibility and acceptability of the intervention.
4. To investigate participants' preliminary responses to the intervention.

7.3.2 Study design

This feasibility study consisted of two components: 1) a nonrandomised, single-arm, intervention study with follow-up at baseline, 3- and 6-month and an embedded process evaluation, and 2) a post-intervention qualitative descriptive study focused on exploring perceived acceptability and other feasibility aspects of the proposed intervention.

Participants, mentors, and mentees were matched into pairs and took part in a six-month mentoring intervention. A purposively selected subsample took part in post-intervention qualitative interviews.

7.3.3 Ethical approval and participant safety

Ethical approval was obtained from the Health and Disability Ethics Committee (Ethics approval number: 18/NTA/120/AM03).

During the study, both mentors and mentees had access to a hotline (i.e. were given an emergency number under which they could reach me) to report any concerns regarding themselves or the person they were matched with. Table 13 presents a risk assessment with proposed management strategies.

Table 13. Potential safety concerns.

Concern	Perceived probability	Action
Participant becoming upset with their mentee/mentor	Medium	<ul style="list-style-type: none"> - Study researcher discusses participant's concerns. - If possible, the concerns are addressed with the participant's match (i.e. their mentor or mentee). - If unable to settle, participants are unmatched and matched with someone else. - Participant may potentially be excluded from the study.

Concern	Perceived probability	Action
		- We may seek further advice from the Health and Disability Ethics Committee.
Participant reports receiving advice which may lead to harmful consequences to them (e.g. losing their employment)	Low	<ul style="list-style-type: none"> - Study researcher discusses participant's concerns. - If possible, the concerns are addressed with the participant's match. - If unable to settle, participants are unmatched and matched with someone else. - Participant may potentially be excluded from the study. - We may seek further advice from the Health and Disability Ethics Committee.
Participant pursuing an in-person meeting against their mentee/mentor's will	Very low	<ul style="list-style-type: none"> - Participants are unmatched. - We seek reports regarding what was said from both participants. - Participant may potentially be excluded from the study. - We may seek further advice from the Health and Disability Ethics Committee.

7.3.4 Participant selection

Participants were recruited from residential aged care facilities in NZ. I aimed to recruit twenty participants as mentees, and four to eight as mentors. It was hoped that this sample size would allow evaluation of the integrity of the intervention protocol, and investigation of the study objectives, and it was considered appropriate for this exploratory study (215).

7.3.4.1 Inclusion criteria

Participants were included if they were:

- 1) over 18 years old, and
- 2) working as an aged care support worker.

There were two specific inclusion criteria for mentors, relating to their skills and expertise in caregiving (rationale for these criteria is provided in Chapter 6: Defining the intervention). Mentors had to have:

- 1) at least five years of experience in aged care, and
- 2) at least Healthcare Assistant Level 4 NZQA qualification, or equivalent.

7.3.4.2 Exclusion criteria

There were two exclusion criteria:

- 1) no access to internet, and
- 2) unable to use computers/mobile devices.

7.3.5 Procedure

The feasibility study involved a three-month recruitment period and a six-month intervention. Immediately prior to the intervention, all participants underwent training which was tailored to their role. Following this, participants completed baseline measures and were matched into mentoring pairs. They completed the outcome measures again three and six months later. Immediately after completing the intervention, a purposively selected sample of participants took part in semi-structured face-to-face interviews exploring their experience of taking part in the proposed e-mentoring programme in more detail. Figure 6 presents the study timeline.

Figure 6. Timeline of Study 3: Feasibility testing.

2019/2020	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Recruitment										
Training										
Intervention										
Outcome measures										
Qualitative interviews										

7.3.5.1 *Recruitment strategy*

My aim was to recruit 20 mentees and 4-8 mentors (or as many as were needed for the 20 mentees, depending on mentors' indicated availability) within three months. Initially, my focus was on using two recruitment methods: poster and in-person presentation. These two methods were used at facilities owned by aged care providers whom I was able to engage in supporting this study prior to starting the recruitment. These providers, to which I will refer to as 'partner providers', included three large providers, each with multiple sites around NZ, and one large, privately owned provider in Auckland. Importantly, a number of other group providers whom I approached about supporting this study were (as one of the providers put it) 'not in a position to take part at this time'. Some of them were undergoing 'large restructuring', other 'did not have the resources to support the study'. One, who initially agreed to support the project, withdrew after realising that support workers who work for other providers may be matched with support workers who worked for this provider.

If recruitment via those two methods was not effective, I planned to also request assistance from one of the largest staff unions for support workers, and invite the potential participants via their email distribution. This is a recruitment strategy I had previously found effective (6).

Recruitment was conducted for both mentees and mentors simultaneously. No attempts were made to recruit mentees or mentors exclusively.

Recruitment via poster

I prepared recruitment posters (Appendix 23) using one of the no-fee online design platforms. Posters were printed at a local print store and displayed in staff areas (e.g. lunchroom and nurse station) at partner providers' facilities. Potential participants were asked to contact me via phone or email if interested in hearing more about this study.

Recruitment via in-person presentation

All partner providers invited me to visit their Auckland, Hamilton and Whangarei facilities (relevant ethical and locality approval were obtained) to present at one of their staff meetings (e.g. handover or in-service training). During these presentations, I provided a brief overview of the study (using presentation slides), handed out study pamphlets (a palm-sized version of the recruitment poster), answered questions, and invited support workers to contact me if they wanted to hear more about the e-mentoring programme.

Recruitment via staff union

I planned to involve one of the largest staff unions for support workers to help reach the recruitment target. After about two months of recruitment, reaching the target sample size using only presentations and posters appeared unlikely within the originally planned recruitment period. Therefore, three weeks before the end of recruitment period, I asked the staff union to send out an email to those members who identified as support workers (n=1620 members identified as support workers), inviting them to contact the study researcher if they were interested in taking part. A Participant Information Sheet was attached with the email. Only one invitation email round was organised, i.e. no reminders were sent.

7.3.5.2 Screening

Potential participants were screened via telephone by me. Once I established that the two primary inclusion criteria were satisfied, I asked about the role people were interested in (e.g. mentor or mentee). If they wanted to take part as mentors: 1) I checked that they also met the two mentor-specific inclusion criteria; and 2) I also asked them to provide a character referee who could confirm that they were employed as a support worker and their suitability for the mentor role. Once their eligibility was

confirmed (and an appropriate character reference received for mentors), informed consent was obtained.

Following consent, participants were asked a set of demographic questions (Appendix 16). They were also asked to complete the Ten-Item Personality Inventory (Appendix 19 (193) and a Mentor/Mentee preference form (Appendix 17, Appendix 18). Mentors were also asked about the maximum number of mentees they were willing to mentor. Following consultation with the advisory group, it was decided that no mentor should be matched with more than five mentees as it would lead to too much additional workload for mentors.

7.3.5.3 Mentoring training

The training consisted of two parts: reading the programme manual and attending one online training session (led by me). Participants were emailed the WeCare Mentoring Programme manual (Appendix 14, Appendix 15). They were initially given two weeks to read the manual and told I would contact them after that time to ask if they needed more time. Once they were ready, they attended a one-on-one online video training session, which was planned to last between 30 and 60 minutes. The purpose of this session was to provide answers to any questions they had, ensure they were comfortable using the videoconferencing software, and confirm they understood their role and the programme structure.

7.3.5.4 Intervention

Mentors were responsible for arranging their first meeting as soon as possible following being matched with their mentee. Participants were asked to meet online at least once a month, for 30-60 minutes, over the following six months.

The focus of the first meeting was on introductions and building rapport between the mentor and mentee. Once participants were ready, they moved on to setting a direction for their mentoring relationship, i.e. identifying goals and setting a plan for achieving

them. This was followed by a progression phase, where the focus was on sustaining commitment and increasing mentee's responsibility for managing the relationship. The last phase included the final evaluation and winding down of the mentoring relationship. After each meeting, all participants were asked to complete an online meeting report (see Appendix 14, pages 35-36).

All participants who completed the programme received a certificate of completion (Appendix 24).

7.3.5.5 Outcome assessment

Outcome measures were completed by all participants (mentees and mentors) via an online survey at baseline, three and six months, using the REDCap database (216). Up to three reminders were sent out every four to five days. Participants were expected to complete the assessment within two weeks following the first email. Full details of outcomes assessed are included in section 7.3.6.

7.3.5.6 Post-intervention semi-structured interview

A subsample of participants took part in semi-structured face-to-face interviews. I planned to interview 5-7 mentees and 4-5 mentors, which would represent approximately half of participants who completed the programme. I sought diversity of ethnicity, age and work experience.

7.3.6 Data collection

To address the four study objectives, I collected a range of qualitative and quantitative data. In the following sections I explain what data were collected and their source.

Table 14 presents how these data relate to the study objectives.

Table 14. Data sources for addressing study objectives.

Objective	Data source
1. To investigate the feasibility and acceptability of recruitment protocols.	Recruitment data; Semi-structured interview
2. To investigate the feasibility and acceptability of data collection procedures and outcome measures.	Demographic data; Outcome measures data; Semi-structured interview
3. To investigate the feasibility and acceptability of the intervention.	Intervention participation, fidelity and protocol violations/deviations data; Adverse events data; Semi-structured interview
4. To investigate participants' preliminary responses to the intervention.	Outcome measures data; Semi-structured interview

7.3.6.1 Demographic data

Demographic data, such as age, gender, and ethnicity, was collected directly from the study participants using a demographics form (Appendix 16).

I also obtained deidentified demographic data (including age, gender, ethnicity, length of service, employment type, immigration status, NZ qualification level) from all participating facilities (i.e. the facilities where I did the recruitment presentations and advertised using posters), which I used to describe the wider workforce and compare it with the study sample.

7.3.6.2 Recruitment data

I recorded the number of people who contacted me, and the number of consenting participants. To calculate response and consenting rates, I attempted to record the number of support workers who responded to the initial invitation (via poster, presentation, or email), and the total number of support workers recruited via each recruitment method.

I recorded participation source ('how did you find out about the study?'), and reasons for ineligibility, refusal and withdrawal.

7.3.6.3 Outcome measures

Outcomes data were collected using an online form via REDCap.

Four priority outcomes were identified based on Phase 1 findings and past research on mentoring (55, 164, 167, 177, 185): life and job satisfaction, perceived stress levels and self-efficacy. Data on these outcomes was collected at baseline, three months and intervention completion, using the Satisfaction with Life Scale (SWLS) (217), the Generic Job Satisfaction Scale (JSS) (218), the Perceived Stress Scale (PSS) (219) and the General Self-Efficacy Scale (GSES) (220).

SWLS (217) is a five-item scale designed to measure judgments of one's life satisfaction (e.g. 'In most ways my life is close to my ideal'), and uses a seven-point rating scale ranging from 1 (strongly disagree) to 7 (strongly agree). Scores are added up to produce a total score, ranging between five and 35. Higher scores indicate higher satisfaction with life.

JSS (218) is a ten-item scale designed to measure job satisfaction in a wide range of occupational groups (e.g. 'I feel good about my job'). It uses a five-point rating scale ranging from 1 (strongly disagree) to 5 (strongly agree). Scores are added up to produce a total score, ranging between ten and 50. Higher scores indicate higher job satisfaction.

PSS (219) is a ten-item scale measuring the degree to which situations in one's life are appraised as stressful (e.g. 'In the last month, how often have you been upset because of something that happened unexpectedly?'). It uses a five-point rating scale ranging from 0 (never) to 4 (very often). Four items are scored reversely (i.e., the scale goes in the opposite direction for these items). Scores are added up to produce a total score, ranging between zero and 40. Higher scores indicate higher levels of perceived stress.

GSES (220) is a ten-item scale to measure judgements of one's self-efficacy (e.g. 'I can always manage to solve difficult problems if I try hard enough'). It uses a four-point rating scale ranging from 1 (not at all true) to 4 (exactly true). Scores are added up to produce a total score, ranging from ten to 40. Higher scores indicate higher general self-efficacy.

All four scales have shown to be valid and reliable for use in research with the general population and also a range of occupational groups, including support workers (217-219, 221). However, no psychometric evaluations reporting delivery of these measures using an online survey format were identified. Thus, validity (convergent and discriminant) and reliability (internal consistency) aspects of these scales will be evaluated.

7.3.6.4 Intervention participation, fidelity and protocol violations/deviations

I recorded the number of people who completed the six-month intervention and the frequency of mentoring sessions.

Three parameters relating to intervention fidelity were selected: duration of mentoring sessions, goal setting and reviewing, and post-session reporting. As explained in Chapter 6, they were considered to be the key active ingredients of the proposed intervention. The duration of each mentoring session was recorded by the participants. In the event of discrepancy between a mentee and their mentor report, the shorter duration was used for analysis. I also recorded whether mentee's goals were identified or reviewed at each session; and whether post-session reports were completed. I was not concerned about the content of mentee's goals.

I recorded the number of times each participant contacted me to report or discuss issues pertaining to the mentoring intervention.

Any violations/deviations to the intervention protocol were recorded.

7.3.6.5 Adverse events

Adverse events were defined as any untoward situation, sign, symptom, or disease potentially associated with participation in this study (222). Hospitalisation for any reason, severe self-harm, sexual exploitation, suicidal behavior and death are considered to be serious adverse events.

I planned to record any adverse events in terms of severity, relationship to the intervention, action/response requirements and outcome; and to report any other adverse events which could plausibly result from, but not limited to:

- a participant becoming upset with their mentee/mentor;
- a participant pursuing an in-person meeting against their mentee/mentor's will;
- a participant receiving and following advice which leads to harmful consequences (e.g. losing their employment).

7.3.6.6 Participants' experience of taking part in the programme

After completion of the six-month mentoring programme, semi-structured interviews were conducted. I used interview guides (Appendix 25, Appendix 26) and explored participants' perspectives of perceived benefit, barriers and facilitators to engaging in a mentoring relationship, mentor-mentee matching fit, training, data collection procedures and other aspects pertaining to the feasibility of the proposed intervention.

The interviews were conducted in person or online (depending on participants geographical location and preference) immediately following the completion of the programme. They were audio-recorded, and transcribed by myself.

7.3.7 Data analysis

Demographic data was analysed descriptively (frequency, central tendency, and variation).

All post-intervention qualitative interviews were transcribed and coded using Directed Content Analysis (163), similar to the approach described in Study 1B and Study 2. Coding focused on the four study objectives, i.e.: feasibility and acceptability of recruitment protocols (e.g. participants' perspectives on the recruitment methods), feasibility and acceptability of data collection procedures (e.g. perspectives on the format and wording of outcome measures), feasibility and acceptability of the proposed programme (e.g. perspectives on relevance of the programme), and preliminary responses to taking part (e.g. perspectives on how taking part affected the participants). Pseudonyms are used when reporting qualitative data.

In the following sections I report data analysis methods for each of the study objectives.

7.3.7.1 Objective 1: To investigate the feasibility and acceptability of recruitment protocols.

I calculated response and consenting rates, for both mentors and mentees. Response rate is expressed as the number of people who enquired about the study with the study researcher divided by the total number of people who should have received the study invitation. Consenting rate is expressed as the total number of eligible people who consent to participation in the study divided by the total number of eligible people who enquired about the study. I also calculated the average time required to recruit a mentor and a mentee, i.e. time from the invitation to consenting (in days). I categorised and descriptively reported reasons for ineligibility, refusal and withdrawal, and recruitment source ('how did you find out about the study?').

I used data from the post-intervention qualitative interviews to explore participants' perspectives on any aspects relating to the recruitment process.

7.3.7.2 Objective 2: To investigate the feasibility and acceptability of data collection procedures and outcome measures.

I calculated outcome measure completeness rates for all submitted outcome measures surveys. I also report the number of unsubmitted surveys.

Follow-up rate was calculated and expressed as the number of completed outcome measures surveys at each time point (baseline, three and six months) divided by the total number of active study participants at that time.

I evaluated internal consistencies and report Cronbach's alpha coefficients for each of the four outcome measures at each assessment point. I also calculated Pearson's R correlations between the outcome measures at each assessment point to assess their convergent and discriminant validity. Drawing on findings from Phase 1, Phase 2 and other studies (220, 223), I expected the satisfaction and self-efficacy measures to correlate with one another, and the stress measure to show low or no correlation with other measures.

I used data from the post-intervention qualitative interviews to explore participants' experience of completing the outcome measures, including any technical difficulties, formatting of the survey, wording of the questionnaire items and response options, and any other aspects relating to the data collection procedures and outcome measures.

7.3.7.3 Objective 3: To investigate the feasibility and acceptability of the intervention.

I calculated session completion and fidelity rates, and frequency of the mentoring sessions. Session completion rate was expressed as the number of completed mentoring sessions divided by the total number (n=6) of planned sessions. Fidelity data considered the average time of the mentoring session, and whether mentee's worked on their goals and completed their post-session reports. Fidelity rate was expressed as the number of sessions that met the intervention fidelity recommendations by the total number of completed sessions. Frequency of mentoring sessions was expressed as

the average number of sessions conducted by a mentee, divided by the time between the first and last session (in days).

I also categorised and descriptively reported any adverse events and protocol violations/deviations.

I used data from the post-intervention qualitative interviews to explore participants' views on the intervention's perceived benefits, barriers and facilitators to engaging in a mentoring relationship, mentor-mentee matching fit, training, and any other aspects relating to the intervention acceptability and suitability.

7.3.7.4 Objective 4: To investigate participants' preliminary responses to the intervention.

A linear mixed model fitted all outcomes as a four-dimensional repeated measure with a similar unstructured covariance between outcomes at each assessment and a participant-specific random effect against an interaction of the outcome type and assessment time point. The main fitted contrast was the difference in each score between 6 months and baseline. The difference was tested using outcome-specific observed significance of the difference and represented as an effect size, defined as the fitted difference divided by the standard deviation of the outcome at baseline, and its 95% confidence interval on a forest plot. This work was carried out using SAS/STAT® software version 9.4.

I used data from the post-intervention qualitative interviews to explore participants' views on the intervention's perceived benefit, dosage and any other aspects relating to the intervention's influence on participants.

7.3.7.5 Triangulation of quantitative and qualitative findings

I used a process of triangulation (224) to integrate qualitative and quantitative findings in this Mixed Research study. Triangulation enhances understanding of Mixed Research results and gives a more complete picture of the phenomenon under

investigation (62). For the purpose of triangulation, qualitative data was defined as all non-numerical data collected through semi-structured interviews; quantitative data was all other data collected in this study.

The process of triangulation involved tabulating key qualitative and quantitative findings for each study objective to see how they converge and complement each other, and where they appear to diverge. Next, a narrative summary was composed to highlight the key learnings and recommendations for a future trial of the proposed intervention. This process helped to inform final interpretations of whether the proposed intervention and study procedures were feasible and safe for use in the NZ aged care context.

7.4 Findings

In the following sections I report demographic characteristics of the participants who completed the six-month mentoring programme, and those who took part in the qualitative interviews. Next, I move to report the findings relating to the feasibility and acceptability of the proposed intervention by study objective drawing on both quantitative and qualitative data as appropriate (7.3.1). For each objective, I included a triangulation section to describe how findings converge and complement each other, and how they appear to diverge. Lastly, I present other findings broadly related to the overall aim of this study.

7.4.1 Participants

Thirty-eight support workers from around NZ enrolled in the study and they are referred to as the enrolled participants or enrollees. Twenty-two of them completed the mentoring programme. This group of 22 people is referred to as the study participants. The 16 people who consented but did not take part in the programme are referred to as consenting non-participating enrollees. Table 15 presents a comparison of demographic characteristics between the study participants and non-participating enrollees. Recruitment- and participation-related data (including reasons for withdrawal

and retention rates) are presented in the following sections, under the relevant objectives.

The majority of participants were female and NZ citizens/residents. Half of the sample lived in the Upper North Island region of NZ. There were no participants living in the Lower North Island region. Just over 36 percent of participants identified as Asian. NZ European were the second most common ethnicity, followed by Pacific People and Māori. Two participants identified as one of MELAA ethnicities (Middle Eastern/Latin American/African).

Table 15. Demographic characteristic of study participants and non-participating enrollees.

Demographic characteristic	Summary description	Participants	Non-participating enrollees
Age	Mean (Min; Max; SD)	47.3 (29; 64; 12.7)	49.6 (24; 71; 11.80)
Year(s) of experience in aged care		10.0 (1; 30; 7.1)	9.62 (1; 30; 7.24)
Working hours per week		34.8 (20; 40; 5.8)	36.89 (15; 50; 6.74)
Employment type: Full time (at least 37.5 h/week) Part time/Casual (less than 37.5 h/week)	Number of participants (%)	11 (50.0) 11 (50.0)	11 (68.7) 5 (31.3)
Gender: Female Male		20 (90.9) 2 (9.1)	16 (100.0) 0 (0.0)
NZ Immigration status: Citizen/Resident Work Visa		16 (72.7) 6 (27.3)	14 (87.5) 2 (12.5)
Participant type: Mentor Mentee		9 (40.9) 13 (59.1)	8 (50.0) 8 (50.0)

Demographic characteristic	Summary description	Participants	Non-participating enrollees
Region:			
Upper North Island		11 (50.0)	12 (75.0)
Central North Island		4 (18.2)	0 (0.0)
Lower North Island		0 (0.0)	1 (6.2)
Upper South Island		5 (22.7)	2 (12.5)
Lower South Island		2 (9.1)	1 (6.2)
Ethnicity ⁶ :			
NZ European		5 (22.7)	4 (25.0)
Māori		3 (13.6)	2 (12.5)
Pacific Peoples		4 (18.2)	5 (31.2)
Asian		8 (36.4)	2 (12.5)
MELAA		2 (9.1)	2 (12.5)
Other		0 (0.0)	1 (6.2)

7.4.1.1 Qualitative interviews participants

Thirteen study participants who completed the mentoring programme were invited to take part in a face-to-face interview. Two participants declined to take part and one declined after initially agreeing; all three of them explained they were too busy to take part. The final sample included ten participants and they were interviewed in December 2019 and January 2020. All qualitative findings reported in the following sections refer to these ten participants.

Table 16 presents their key demographic characteristics. The sample included four mentors and six mentees, with a broad range of work experience, age, ethnicity, and immigration status.

Table 16. Demographic characteristics of study participants who took part in qualitative interviews.

Pseudonym	Role	Years of experience	Age	Ethnicity	Immigration status
Jenny	Mentee	1	33	Asian	Work Visa

⁶ As per NZ stats Level 1 ethnicity reporting

Pseudonym	Role	Years of experience	Age	Ethnicity	Immigration status
Nicola	Mentor	30	60	MELAA	Citizen/Resident
Melinda	Mentee	11	59	Asian	Work Visa
Judy	Mentor	16	62	Māori/NZ Euro	Citizen/Resident
Eliza	Mentor	9	37	Asian	Citizen/Resident
Stacey	Mentee	1	34	Pacific Peoples	Citizen/Resident
Mike	Mentee	4	33	Asian	Work Visa
Eva	Mentee	2	31	Asian	Work Visa
Silvia	Mentee	10	59	Pacific Peoples	Citizen/Resident
Paula	Mentor	7	42	Asian	Citizen/Resident

7.4.2 Objective 1: Feasibility and acceptability of recruitment protocols.

In this section, I report qualitative and quantitative data relating to the feasibility and acceptability of recruitment protocols. I focus on recruitment methods, response rates, time required to recruit, screening, consent rates, and demographic characteristics of the workforce. Finally, I also report participants' reasons for joining the study and the meanings they ascribed to mentoring.

7.4.2.1 Recruitment method and response rates

Recruitment commenced on the 1st of April 2019 and lasted for three months. No new participation requests were accepted after 30 June 2019.

Participant recruitment was conducted using three methods: poster, in-person presentation, and email (sent by the staff union). Overall, I conducted 25 recruitment presentations and displayed invitation posters at 16 facilities. The invitation email was sent out to 1620 staff union members who identified as 'caregivers'.

Participants reported that the recruitment process they went through worked well for them. The majority of participants found out about the study through an email sent by one of the staff unions (Table 17 – Estimated response rates). Nicola mentioned that the email caught her attention and "she liked the wording" (see Appendix 27), but she

did not explain specifically what it was about the wording that drew her attention. Many participants reported that seeing this study being advertised and supported by their staff union made the mentoring programme more appealing and “more neutral”. It made them think they would be able to talk freely about the things they found important. They did not want their employers to know about their concerns and thought this format would allow them to safely share their views. Jenny suggested:

“It would be OK if they said the employer is taking part in this project, rather than them [employer] doing it really (...) it's much better if there's somebody doing the programme and they come on as a partner.” (Jenny, mentee)

Paula, who found out about the study from a poster, said she would have preferred to attend the recruitment presentation. When she briefly saw the poster, she was not sure if the study was recruiting mentees or mentors, or both. However, after reading the details on the poster and finding she was eligible to join as a mentor, she signed up.

Melinda argued that the recruitment method did not matter to her, as she knew what mentoring was and was very interested in taking part. However, she mentioned that many of her workmates were not aware of this programme at all; “they had no idea”.

Overall, out of an estimated pool of 2384 participation invitation recipients, 84 people contacted me wanting to discuss their potential participation in response to one of the three recruitment methods, resulting in an estimated response rate of four percent.

Some participants might have been exposed to more than one method. For example, one of the participants who signed up following the invitation email from the staff union, recalled seeing the study recruitment poster prior to receiving the email; those who attended recruitment presentations, were likely to have seen the recruitment poster at their facilities.

Table 17 presents estimated response rates for each recruitment method and in total. The reported rates are estimates because: 1) one of the facilities did not provide the total number of employed support workers; 2) for some recruitment presentations the

exact number of attendees was not recorded, rather a range; 3) the number of people contacted via union email is equal to the number of email addresses on the union's mailing list who identify as support workers; however, some people who responded to the email were nurses or activities coordinators.

Table 17. Estimated response rates in Phase 3 recruitment.

Type	Number of people who responded	Estimated total number of recipients	Estimated response rate
Via poster	5	557	1%
Via presentations	15	207	7%
Via email	64	1620	4%
Combined	84	2384	4%

7.4.2.2 *Reasons for joining the study*

One of the areas that was explored during qualitative interviews were the key drivers for responding to recruitment materials and why participants thought mentoring would be worth taking up.

When asked about the specific reasons for signing up, the participants provided a range of responses. Some participants mentioned wanting to simply become better caregivers. Melinda argued this programme should become part of all new support workers induction training. Stacey, who was new to caregiving, did not think the two-week induction training she received at her workplace was enough for her. She regarded the mentoring programme as an opportunity to improve as a caregiver and increase her self-confidence.

“You came to my work and you were telling us about that study. By then I was needing for this whole thing. You know, how I don't have too much experience, all I've learned about this job was through orientation. So I was so excited to try this, because this was an opportunity for me to get help from the mentor and improve as a caregiver. I liked the job, but it's a lot and it's sometimes overwhelming, and I needed some help.” (Stacey, mentee)

Other participants mentioned the social aspect of the programme – meeting caregivers from other facilities from around NZ. Eliza argued that being matched with someone from a different facility provided an opportunity to gain new perspectives on the same problems all caregivers experienced, and also to validate her own emotions.

“It would really help broaden their knowledge on... their perspective on what's happening every day. To know that there is a person in this country that is dealing with the same thing emotionally. Because sometimes they were telling me 'Oh I feel so down'. Because they couldn't talk to their husband or their partner about it at home. So having someone to talk to really helps.” (Eliza, mentor)

Adding to that, Eva revealed that she would not want to talk about her issues with anyone from her facility.

“I don't even feel comfortable talking to my coworkers about the stuff that's happening. Because it's within the facility.” (Eva, mentee)

Another aspect of the programme that seemed appealing to participants was that it was not only about their work, but also about their lives in general. Jenny argued that she probably would not be as interested if there was an obligation to focus only on work-related goals.

“It is much more Ok if you have personal and work goals as well.” (Jenny, mentee)

This approach seemed to appeal particularly to the participants who were not born in NZ. The mentoring programme appeared to be a way of increasing their understanding of NZ healthcare context, and also life in this country. Mike, who was a recent migrant, reflected:

“For someone like me, who was just a beginner in New Zealand, it made me able to grasp the concept of health care assistant from those people who are experienced, like my mentor. Our topics were focusing not just on health care, but a very holistic approach, which was great help for a newbie like myself”. (Mike, mentee)

Some participants, for example Melinda, had well-defined expectations for this programme. At the time of signing up, Melinda was about to enrol into a caregiving-

related course and wanted someone to guide her through the process. This was one of the reasons why she signed up.

“My goal was to get level 4, so I will need somebody who can really go through with me to answer the questions and finish the course.” (Melinda, mentee)

The most common reason to sign up reported by those who took part as mentors was their desire to share their knowledge and help others. Paula explained:

“I was a Level 4 caregiver and I had the required experience, so I knew that I was able to be mentoring someone, which I did in my previous job. I used to do orientation especially for those who were new to the job. I orientated them for a week or two. So I wanted to share my knowledge with everyone, so it was a good opportunity.” (Paula, mentor)

Participants were also asked about their willingness to participate in a future randomised controlled trial. In general, they expressed interest in taking part. However, being in the control group appeared “challenging” to Judy, and Nicola wanted to know “what’s in it for me?”.

“For the intervention group there is the chance to be mentored and to learn from that. For the control group it’s just a regular survey.” (Nicola, mentor).

7.4.2.3 Time required to recruit participants

Recruitment for mentees and mentors was conducted concurrently and from the same pool of workers; I did not attempt to specifically recruit mentors or mentees.

Recruitment via presentations and posters over three months resulted in 11 participants enrolling to take part. On the 14th of June, with only 16 days left in the recruitment period, the staff union sent out an invitation email to its members. This resulted in 27 participants enrolling to take part in the study. The recruitment target of 20 mentees and 10 mentors was reached on the last day of recruitment. Mean \pm SD time between participants’ first response and their consent decision was 8.5 ± 4.89 days. Importantly, recruitment via poster and presentation required organisation approval.

Recruitment via poster

The study poster template was created by the researcher using one of the no-fee online design platforms. The poster was printed at a local print store. Developing and picking up the printed posters took approximately four hours.

The poster had to be delivered and hung up in two to three staff areas at each of the 16 facilities. On average, this process took approximately 1.5 hours for each facility.

In estimating the time required for work related to recruitment via poster I did not account for the time spent establishing relationships with the facilities and negotiating factors like placement of posters.

In total, the estimated time spent on recruitment via poster was: 4 hours + (1.5 hours * 16 sites) = 28 hours.

Recruitment via presentation

The preparation for the short recruitment presentation included development of slides and presentation practice. I estimated this process took approximately 2 hours.

Recruitment presentations were conducted on up to 5 occasions at 16 participating sites. Twenty-five presentations were conducted in total over a period of three months. Following the presentation, attendees were invited to ask questions. On most occasions the presentation sessions were completed in under 15 minutes. The estimated time required to conduct one presentation assumes that one hour had to be spent on a round trip to the facility, and another half an hour was spent at the facility (presenting, answering questions, recording details of potential participants).

In estimating the time required for work related to recruitment via presentation I did not account for the time spent establishing relationships with the facilities and negotiating factors like suitable presentation dates.

The estimated total time spent on recruitment via presentation was: 2 hours + (25 presentations * 1.5 hours) = 39.5 hours.

Recruitment via staff union email

A staff union was approached to facilitate recruitment of participants to this study. The union's representative sent out an email to those members who identified as support workers, inviting them to contact the study researcher if they were interested in taking part. The Participant Information Sheet was attached to the email.

Negotiating this process with the staff union involved correspondence via email and one 15-minute phone call.

The estimated total time spent on recruitment via staff union email was 1 hour.

Table 18 presents the estimated time required to recruit one participant. Recruitment via email sent out by the staff union was by far the fastest method of recruitment (just over a minute per response).

Table 18. Time required to receive a response.

Method	Responses (n)	Estimated total time required (hours)	Estimated recruitment time (hours) per response
Via poster	5	28	5.60
Via presentations	15	39.5	2.56
Via email	64	1	0.02
Combined	84	68.5	0.81

7.4.2.4 Screening and consent rates

Thirty-eight people who responded to the study invitation were excluded from the study. Table 19 presents reasons for participation exclusions. The main reason for exclusion was 'uncontactable' (n=24), i.e. people not responding to any contact attempts following the initial contact. This was followed by 'not working in aged care' (n=5) and 'not working as a support worker' (n=3). Another eight people declined to

take part. Six people explained they were ‘too busy’ to take part, and the remaining two did not provide a reason. Four people who were interested in taking part as mentors but were not eligible, were offered to participate as mentees. Only one person agreed and they completed the six-month programme. The other three people were not interested.

Table 19. Reasons for exclusion.

Reason	n
Uncontactable	24
Not aged care	5
Not a support worker	3
Not enough experience*	2
Not level 4*	2
Responded too late	2

*Only applicable to mentors

Following the initial screening and provision of information requested by the potential participants, 38 people consented to take part in the study (see Table 20 for a breakdown of mentee and mentor recruitment). The overall consent rate was 54.3 %.

Table 20. Recruitment summary for mentees (number of people).

Role	Responders	Refusals	Excluded (definitive exclusions ⁷)	Consented	Consent rate
Mentee	48	3	24 (7)	21	51.2%
Mentor	36	5	14 (7)	17	58.6%
Total	84	8	38 (14)	38	54.3%

Table 21 presents a breakdown of consent rates by recruitment method. The consent rates for different methods were similar and ranged between 52.9 and 60 percent.

⁷ Definitive exclusions – the number of people with a definitive exclusion reason; does not include ‘uncontactable’.

However, the relative differences in consent rates between different recruitment methods were smaller than the differences in response rates (Table 17).

Table 21. Consent rates for each recruitment method for all participants (mentees and mentors).

Recruitment method	Eligible responders ⁸ (n)	Consents (n)	Consent rate
Via poster	5	3	60.0%
Via presentations	14	8	57.1%
Via email	51	27	52.9%
Total	70	38	54.3%

7.4.2.5 Demographic characteristics of the enrolled participants

Table 22 presents demographic characteristics of all 38 participants who enrolled in the study. Most participants were female (94.7%), worked at least 37.5 hours a week (55.3%), and were a NZ citizen or resident. A majority of them (60.3%) were from the Upper North Island region. Ethnically, Asians, NZ European and Pacific Peoples each represented about a quarter of the whole sample. Māori represented 13.2%, 10.5% were MELAA, and one person identified as 'Other' ethnicity (Slovakian).

Table 22. Demographic characteristics of consenting participants who enrolled in the Phase 3 study.

Demographic characteristic	Summary description	Number of enrollees (%)
Age	Mean (Min; Max; SD)	48.2 (24; 71; 11.79)
Year(s) of experience in aged care		9.8 (1; 30; 7.24)
Working hours per week		35.7 (15; 50; 6.74)
Employment type: Full time (at least 37.5 h/week) Part time/Casual (less than 37.5 h/week)	Number of participants (%)	21 (55.3)
		17 (44.7)
Gender: Female Male		36 (94.7) 2 (5.3)

⁸ Does not include the 'definitive exclusions'.

Demographic characteristic	Summary description	Number of enrollees (%)
NZ Immigration status:		
Citizen/Resident		30 (78.9)
Work Visa		8 (21.1)
Participant type:		
Mentor		17 (44.7)
Mentee		21 (55.3)
Region:		
Upper North Island		23 (60.6)
Central North Island		4 (10.5)
Lower North Island		1 (2.6)
Upper South Island		7 (18.4)
Lower South Island		3 (7.9)
Ethnicity ⁹ :		
NZ European		9 (23.7)
Māori		5 (13.2)
Pacific peoples		9 (23.7)
Asian		10 (26.3)
MELAA (Middle Eastern/Latin American/African)		4 (10.5)
Other		1 (2.6)

7.4.2.6 Demographic characteristics of the target workforce group

Table 23 presents demographic characteristics of support workers employed by the participating sites. Data was available for 14 of the 16 sites located in Auckland, Hamilton and Whangarei areas. Just over a half of the workers were employed on a part time basis. Almost a quarter of all workers had completed the NZQA Level 4 Health Care qualification. The workforce consisted mostly of people who identified as Asian (35.6%) or Pacific peoples (35.6%). Just under a fifth of the workforce identified as NZ European. There were only 9 people who identified as Māori (out of 315 people from seven participating sites).

⁹ Reports as per NZ stats Level 1 ethnicity reporting

Table 23. Demographic characteristic of the target workforce group.

Demographic characteristic (number of people with data available)	Summary description	Number of workers (%)
Age (n=549)	Mean (Min; Max; SD)	43.6 (16; 76; 13.5)
Length of service (n=526)		5.9 (0; 37; 7.0)
Employment type (n=553): Full time Part time Casual	Number of participants (%)	199 (36.0) 290 (52.4) 64 (11.6)
Gender (n=551): Female Male		494 (89.7) 57 (10.3)
NZ Immigration status (n=315): Citizen/Resident Work Visa		243 (77.1) 72 (22.9)
NZQA level (n=540): 0 1 2 3 4		154 (28.5) 2 (0.4) 84 (15.6) 172 (31.9) 128 (23.7)
Ethnicity ¹⁰ (n=315): NZ European Māori Pacific Peoples Asian MELAA (Middle Eastern/Latin American/African) Other		61 (19.4) 9 (2.9) 112 (35.6) 112 (35.6) 11 (3.5) 7 (2.2)

The staff union, who supported the recruitment, emailed 1620 support workers who had a current email address on the union's mailing list. Of those, n=173 individuals identified as Māori (10.7%). No other demographic information was provided by the union.

¹⁰ Reports as per NZ stats Level 1 ethnicity reporting

7.4.2.7 Objective 1 findings triangulation

Table 24 reports a summary of key quantitative and qualitative findings relating to Objective 1.

Table 24. Objective 1 triangulation matrix.

Objective 1	Key Quantitative findings	Key qualitative findings
Recruitment approach	<p>Recruiting via email was the most efficient method: least time required, widest reach, most participants recruited via this method (27 in approx. two weeks vs 11 in three months using the other two methods)</p> <p>Negotiating and organising recruitment via poster and presentation was very time-consuming</p> <p>At 4%, the overall response rate was lower than expected</p> <p>38 out of 84 respondents were excluded from taking part</p> <p>24 out of 84 respondents were excluded as 'uncontactable' following the initial contact</p>	<p>All three methods were reported to work well for participants; however, this feedback was from people that translated into participants.</p> <p>Staff unions involvement made recruitment feel safer for participants</p> <p>Preference for employers to be partners in the programme, rather than coordinators</p> <p>Some participants' colleagues were not aware of the study</p>
Reasons for taking part	Not applicable	<p>To become better support workers</p> <p>To supplement induction/orientation training for new workers</p> <p>To meet other support workers</p> <p>To gain new perspectives on work/life</p> <p>To share knowledge with others</p> <p>To get help in completing professional courses</p>
Available population	<p>Enrolled participants demographics were generally reflective of the workforce population</p> <p>Some of the key differences included a lower than expected number of workers who identify as Māori (2.9%) and high part-</p>	Not applicable

Objective 1	Key Quantitative findings	Key qualitative findings
	time employment rates (52%) in the workforce Average length of service is over 5 years 1 in 4 workers completed NZQA level 4	
Willingness to be randomised	Not applicable	Participants reported willingness to join a potential controlled trial, but also wanting to benefit from the intervention

The recruitment target was reached within the originally proposed recruitment period. While it occurred on the last day of the three-month period, it was only about two weeks after sending out the email invitation to the staff union members. Furthermore, participants noted that seeing that the invitation was sent out by their staff union made them think it was safe to respond. Some participants voiced concerns around the programme being run by their employers, as they thought they would not be able to freely share their opinions or that the programme would not focus on their personal needs. Adding to that, recruitment via email was also the most efficient method, and it appears that this was the most appropriate way to recruit aged care support workers into a study of this nature.

However, even though approximately 2,000 workers could be assumed to have been exposed to the study invitation via one of the recruitment methods, only 84 (4%) people responded. Moreover, participants reported that some of their colleagues, including their fellow union members, did not know about this study. Given that the poster (1% response rate) and email (4%) recruitment responses, were much lower than the presentation-related recruits (7%), it seems that the overall response rate could be improved by finding ways ensuring the study invitation reaches its intended recipients.

Some of the key reasons to join the programme included wanting to: have a support person, become a better support worker, meet other workers and gain new

perspectives, and achieve work- and life-related goals. Additionally, participants reflected on the importance of the programme being run independently from their employers and appreciated that their participation was confidential. These aspects could be emphasised in any future attempts to recruit this group to take part in the proposed programme.

The demographic characteristics of the enrolled sample and the catchment population sample were generally similar. The proportion of Māori support workers in the target workforce was substantially lower than the proportion of Maori in the general population (19.1% in 2018 (225)). However, ethnicity data was available for only seven of the 16 recruitment sites. The proportion of enrolled participants who identified as Māori was more reflective of the general population, at 13.2 percent. Notably, the proportion of part-time/casual workers (as distinct from full-time workers) was different in the target population and amongst the study enrollees (44.7 versus 64.0, risk ratio). The reasons for this difference remain unclear.

Another unexpected finding was the high number of people (n=24) who, following their initial response to the invitation, did not respond to any further emails or calls. They were excluded from the study on the basis of being 'uncontactable'. It is possible that rather than being excluded as ineligible, they were passively declining to take part. However, as will be reported in more detail in the following sections, some participants experienced temporary communication difficulties (i.e. not responding to emails or calls) with their mentoring matches due to them having to work overtime or taking on shifts at short notice.

Lastly, some participants were asked about their willingness to take part in a hypothetical randomised controlled trial. Even though they all expressed interest in partaking, it appeared they would be disappointed if they were not allocated to the intervention group. A future control trial of the proposed programme would likely have

to include a waitlist control group or an alternative intervention, rather than no intervention at all.

Overall, the qualitative and quantitative findings converged and complemented each other. The analysis provided a better understanding of the effectiveness of the recruitment methods and the key drawcards of the proposed programme. Future recruitment efforts would need to account for these factors, and also consider factors such as: recruitment reach, following up those who may require more time to respond, relevance of the programme to part-time and casual workers, and including a waitlist control group in the trial design.

7.4.3 Objective 2: Feasibility and acceptability of data collection procedures and outcome measures.

Data collection included completing online meeting reports (one after each meeting), and an online survey (outcome measures) at baseline, three and six months later.

Overall, participants reported the process and instructions to be straightforward and clear. Participants did not report any difficulties with completing the outcome measures. However, Silvia and Judy experienced some initial issues with submitting their meeting reports. They both were certain that they completed and submitted their reports, but these were not saved in the database. After I sent them an email explaining the submission process, those issues were resolved.

“Once I found out how to use them, they were fine.” (Judy, mentor)

7.4.3.1 Outcome data collection follow-up ratios and completeness

Outcome data collection follow-up ratios were high at all assessment points (Table 25). Only one submitted survey was not returned (at six months). Additionally, one survey (at baseline) was returned outside the two-week baseline data collection period. None of the returned surveys had any missing data (100% completeness).

Table 25. Data collection follow-up rates and completeness.

Assessment	Follow-up ratio
Baseline	25/25
3 months	22/22
6 months	21/22

7.4.3.2 Outcome measures suitability

During the interviews, participants were asked what they thought about the outcome measures the programme used. Most of the participants found the measures to be relevant to the programme. Sylvia suggested a measure of caregiving-related skills could also be included. Nonetheless, participants argued they felt completing the selected measures gave them an opportunity to reflect on their own situation in a more explicit way. Paula reflected:

“It was very good, the satisfaction, especially the job satisfaction. All good, and it also helped me reflect on how my life was at that moment. Which was very nice. And if there was something that was a little bit difficult then you were like ‘Oh yeah, I can still do this’.” (Paula, mentor)

Some participants argued that sometimes the survey responses were affected by how they felt on the day of completing the survey. Eliza reported:

“Sometimes when you answer the survey you didn't base your answer on the whole idea of it, you just answered based on how you felt on that particular day.” (Eliza, mentor)

Eva reflected similarly:

“There were things that changed in my life, when I was doing the last survey. I was thinking ‘Oh, I thought I was going to improve, but no’.” (Eva, mentee)

7.4.3.3 Internal consistency of the outcome measures

All outcome measures showed high internal consistency (Cronbach's Alpha of 0.8 or more) at all timepoints (Table 26), suggesting high scale reliability of these measures.

Table 26. Internal consistency of the outcome measures (Cronbach's Alpha).

Outcome Measure	Baseline	3 months	6 months
GSES (General Self-efficacy Scale)	0.85	0.89	0.92
JSS (Job Satisfaction Scale)	0.93	0.91	0.91
SWLS (Satisfaction with Life Scale)	0.87	0.83	0.89
PSS (Perceives Stress Scale)	0.84	0.80	0.94

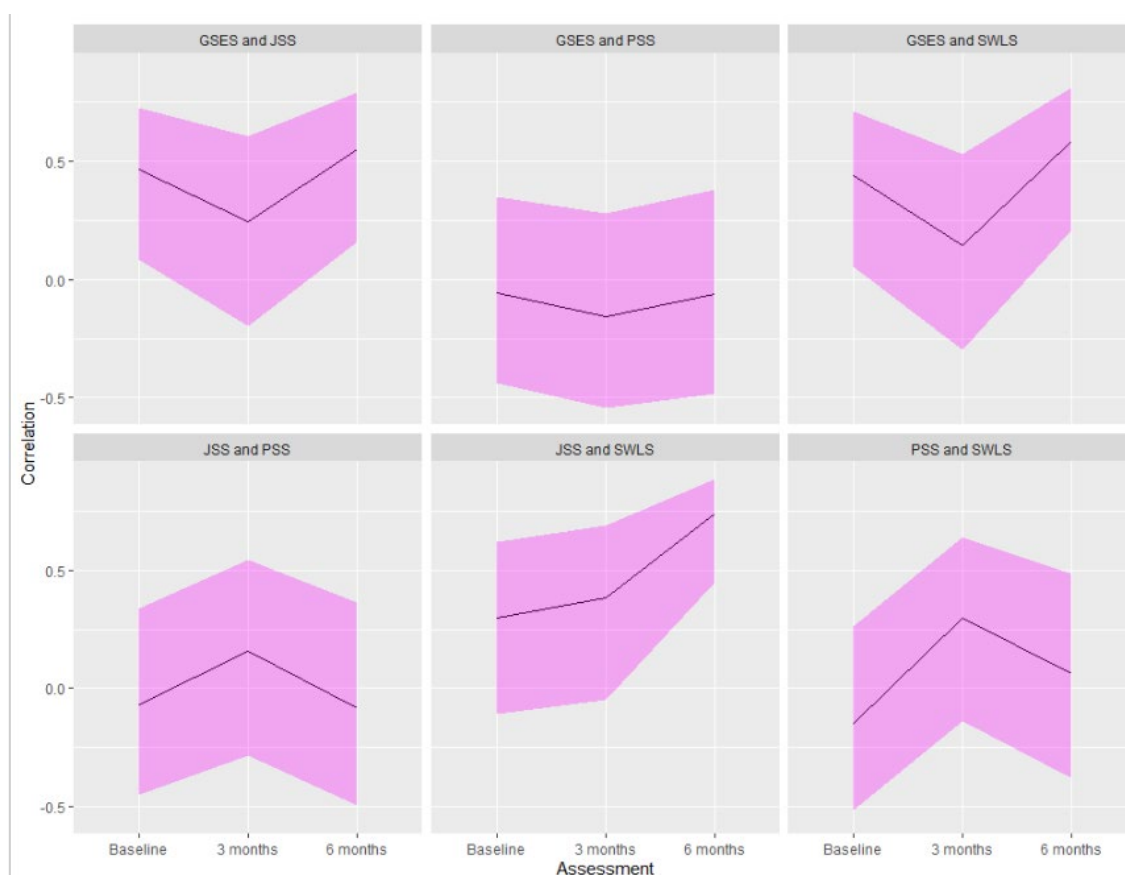
7.4.3.4 Convergent and discriminant validity between measures

I expected the satisfaction and self-efficacy measures to correlate with one another, and the stress measure to show low or no correlation with other measures. One estimated correlation was high¹¹ (JSS and SWLS at six months; 0.74), with another two considered moderate (JSS and GSES at six months, 0.55; and SWLS with GSES at six months, 0.587); all other correlations were either low or negligible (Appendix 28). No measure was significantly correlated with PSS, and all estimated correlations with PSS were low. Aside from PSS, the strongest correlations were evinced at baseline and six-month assessments, where estimated correlations between the other three measurements pairwise were both positive and statistically significant. Aside from PSS, no correlation was significantly different from zero at the three-month assessment, and all three-month assessment correlations were smaller in magnitude than at baseline and six-month assessments. Figure 7 presents pairwise correlations between outcome measures.

¹¹ High – .70 to .90; Moderate – .50 to .70; Low – .30 to .50

226. Mukaka MM. A guide to appropriate use of correlation coefficient in medical research. Malawi Medical Journal. 2012;24(3):69-71.

Figure 7. Pairwise correlations between outcome measures with 95% confidence bands.



7.4.3.5 Objective 2 findings triangulation

Table 27 reports a summary of key quantitative and qualitative findings relating to Objective 2.

Table 27. Objective 2 triangulation matrix.

Objective 2	Key Quantitative findings	Key qualitative findings
Completing the outcome measures	<p>All submitted assessments were fully completed</p> <p>Only one survey returned outside of the two-week data collection period</p>	<p>Initial issues for some, but email instructions clarified those</p> <p>Overall clear and straightforward to complete;</p>
Outcome measures' suitability	Not applicable	<p>Participants found all outcome measures relevant</p> <p>Participants recommended adding a measure of caregiving competency</p>

Objective 2	Key Quantitative findings	Key qualitative findings
		Participants reported measure completion helped them reflect on their own situation Sometimes changes in outcome measures may be only transient
Reliability and validity	All measures showed high scale reliability None of the measures were significantly correlated with PSS SWLS and JSS were the only pairwise comparison showing a strong correlation JSS, SWLS and GSES showed moderately positive and statistically significant correlations	Not applicable

Participants found the selected outcomes measures relevant and helpful in reflecting on their progress, the instructions clear, and the data collection process prompt and straightforward. This was reflected in nearly perfect data follow-up ratios (only one out of 69 surveys was not returned) and no missing data in the returned surveys. The two-week data collection period appeared sufficient with only one survey returned late.

There are two key findings relating to Objective 2. First, as suggested by one participant, there may be value in adding a measure of caregiving competency or skills. No specific measures were suggested by qualitative interviews participants. However, given one of the main reported reasons for joining the programme, i.e. becoming a better support worker, adding such measure is warranted and will help in evaluating the impacts of taking part in the proposed programme.

Second, one of the two satisfaction-related measures (JSS and SWLS) appears potentially redundant based on its theoretical foundations and strong correlation evinced in the convergent validity analysis findings. Given that an addition of caregiving competency/skill outcome measure will be considered, it seems that the less work-

focused SWLS could be a better candidate to keep as one of the outcome measures. However, this decision would need to be informed by further literature review and consideration of the potential measure's responsiveness, prior to commencing any future trials of the programme.

The triangulation of the qualitative and quantitative findings confirmed the selected outcome measures were generally appropriate for the proposed programme. The data collection process was perceived as trouble-free by participants. Two key recommendations relating to Objective 2 are to remove one of the satisfaction-related measures from the outcomes set, and to add a measure of caregiving competency/skills before commencing any future trials of this mentoring programme.

7.4.4 Objective 3: Feasibility and acceptability of the intervention.

Out of the 38 enrolled participants, 10 withdrew prior to being matched with their mentoring partner (Table 28). Additionally, three mentor candidates were not selected by any mentees and stopped their participation prior to the beginning of the programme. All three agreed to be called in at a later stage if more mentors were required. They did not complete any outcome measures.

Table 28. Reasons for withdrawing from the study.

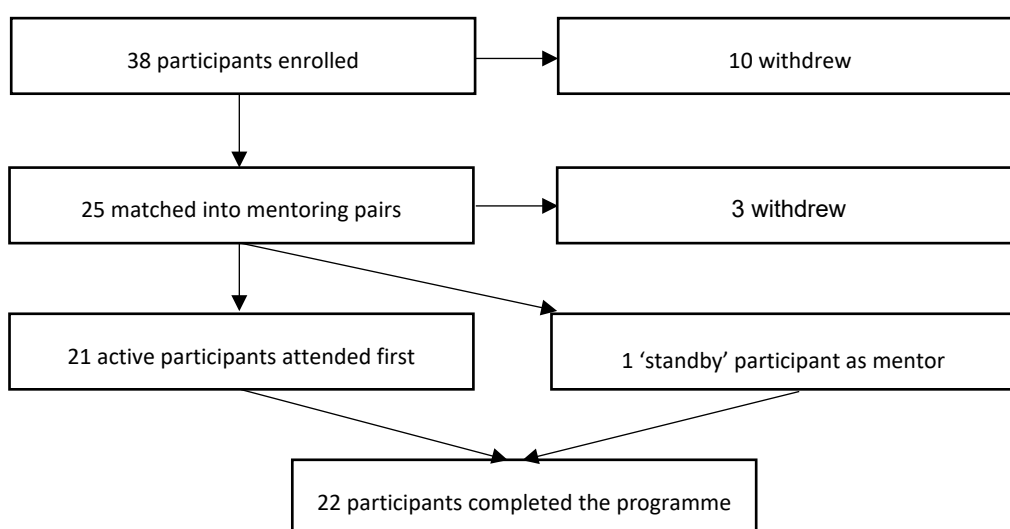
Reason	Mentors (n)	Mentees (n)
Too busy	3	5
Stopped contact following consent	1	3
Unable to use Skype	1	-

Following the initial training, ten mentors and 15 mentees were matched into mentoring pairs. At this point three more participants (one mentor and two mentees) withdrew, all stating they were "too busy to take part".

Another participant, who completed the training and whose mentees withdrew from the study prior to their first session, agreed to take part as a 'standby' mentor and completed all outcome measures.

The final sample included 21 active participants and the 'standby' mentor. This group of 22 participants forms the sample of participants who completed the programme (Figure 8).

Figure 8. Participation flow diagram



7.4.4.1 Structure and format of the programme

Two key characteristics that seemed to make this programme acceptable and suitable to the participants were the privacy it offered and its flexible one-on-one format.

Participants reported feeling enabled to talk about any topics they found important.

They felt they could be honest and talk openly with their mentor. Eva mentioned during her interview that she enjoyed working with her mentor as she did not feel judged for her actions or opinions.

“They will not judge me because they are not my co-worker. Just someone who works in the same industry. And we were able to tell each other what happened and give feedback, say maybe this is something you should do or something like that. But if you do this with your co-worker it will start gossip. This is what happened... But with mentoring you are receiving feedback that is going to be useful. It's not going to be taken against you.” (Eva, mentee)

The online delivery of the programme appeared to increase the level of privacy participants experienced. Nicola reported that one of her mentees did not want other people to know that they were taking part in the programme. They thought it could have negatively affected how they were perceived by her colleagues. For Eva, the online format allowed matching her with someone from a different workplace which helped her be more open with the mentor. This appeared to have contributed to an even greater sense of privacy.

However, participants also reported some downsides to the online format of this programme. Sylvia experienced internet connectivity issues which meant she could not take part in her mentoring session. Judy was initially quite sceptical about meeting someone via video. She was worried she would miss out on the non-verbal communication, but she learnt this was not an issue during her mentoring sessions.

“The other thing I was thinking, was how I was going to know if they were telling me the truth or not. 'Cause we were on Skype. But it does not matter. Because you get face to face, and you can see body language. I thought it might not be possible. So that got rid of that doubt in my mind.”

Interviewer: So, were you a little bit sceptical at the beginning?

“Hell yeah. If they are going to tell me stories, 'cause a lot of people do. How am I gonna know? You can't really read their body language... But you actually can. I found that out.” (Judy, mentor)

Participants were encouraged to always use videoconferencing tools to conduct their mentoring sessions. Eva suggested that in some situations it could work to allow using just sound and no video, for example when she was trying to meet her mentor while going for a walk at the same time.

“It's just sometimes you don't want to be giving someone a headache with the camera moving all the time.” (Eva, mentee)

Some of the participants reported that while the online format of the programme worked well for them, they were also hoping to meet in person after the programme. For Melinda, meeting in-person seemed to be a more appropriate way of delivering this

kind of a programme, and she was wondering whether it should be delivered via internet at all.

“I don't know if it's effective to do it online. I feel that mentoring would be more effective if there is physical presence. And not limited just to the schedule and Skype. Just doing a conversation during the meeting. If somebody is already doing the level 4 and that person had a question, it would be more helpful if that somebody was near, and was able to ask ‘can you give me some tips? I am struggling with this question.’” (Melinda, mentee)

Programme materials

All participants received the programme manual before being matched, and meeting plans (monthly). The programme manual's purpose was to introduce them to the key mentoring principles and guide them through the programme. Participants' reports suggested they found the manual helpful during their training and later in the programme. They found its language clear and simple, and thought the volume was appropriate. Some used a printed copy, while others used a digital version.

“It's quite straightforward. When you read it, you understand it. No issues with the language. It was quite helpful, all the basic stuff is there, step by step.” (Eliza, mentor)

As Jenny explained, the manual prepared participants for the programme and gave them an idea about the things they had to do.

“It helps, because it gives me an idea of the things I have to do. And the information, because it's the first time for me, and it gives me the overview, what is the picture of the program. What are the tasks to do. The manual also helped me write up my report, it was very useful.” (Jenny, mentee)

Participants seemed to appreciate that all the required materials were provided and that they did not have to prepare for their mentoring sessions much. Stacey reflected:

“So for the meeting you would just come in. You know the booklet that you gave us. You would just answer the questions. What the goal for this meeting was. And how you are going to go about the meeting. Basically, you just answer the questions. And a mentor already done the same thing. So you just talk about it. The meeting was then just flowing.” (Stacey, mentee)

The meeting plans were sent to all participants monthly, before their mentoring sessions. These plans were provided to help focus the conversation on mentee's

goals. Eliza argued they helped to keep the meetings relaxed, while also learning new things. She described the role these plans played for her and her mentees:

“We had the meeting plans there. So, it was much easier for us instead of browsing through the manual to just use the plan. You were sending out the meeting plan so we thought we might as well just do the meeting plan. Instead of looking at the programme manual. Because we were talking about our day to day stuff, the meeting plan was just much easier, so we were just getting on with the plan.” (Eliza, mentor)

7.4.4.2 Initial training

All mentors and mentees had to complete brief training before commencing their mentoring relationships. The training consisted of two parts: reading the programme manual and attending one online training session with the programme coordinator.

The online training sessions were planned to last between 30 and 60 minutes. However, the actual duration was not recorded. None of the participants required follow-up training sessions. Mean \pm SD time between consenting to participation and completing the training was 18.0 ± 5.9 days.

Participants' reports suggest that the training prepared them well for their roles in the programme. They also appeared to feel in control of the process and not rushed. As Eva reflected, they were given enough time to study the programme manual. The availability of the programme coordinator to help with any potential issues was another factor that made it a good experience for participants.

“It was good to talk to you via Skype, you talked me through it, all the questions I had, you talk me through it along the way. And another thing is that I could talk to you straight away if I had a problem. It was very good to be able to talk to you straight away. To have you there. To know that you will be there.” (Nicola, mentor)

7.4.4.3 Mentor-mentee matching satisfaction

Following the initial training, participants were matched into pairs. Some mentors were matched with more than one mentee. Mentees appeared to really enjoy working with their mentors, and most were able to connect right away. Many, like Jenny, reflected on how happy they were with their mentors.

"I was really happy that I had her. Because she is a very jolly person and she is so bubbly. We had a lot of interactions together. To give and take information, how was your day, she was concerned about her health, and other things. During our sessions there were no dull moments. I was very happy with her."
(Jenny, mentee)

Many participants who took part as mentees talked about wanting mentors who were experienced caregivers, were able to use real-life examples, and were happy to share their expertise. Like many others, Mike really valued his mentors' wealth of caregiving experience and how much in common they had:

"What I liked about him is that he is very experienced. And health care, plus also he lived here where I live, so we have common grounds. Came from the same country, and a very similar experience to our lives in New Zealand. Dealing with immigration. I don't have any dislikes for him. It was a very good relationship." (Mike, mentee)

Some participants mentioned that they sometimes would speak in their first language with their mentor, for example in Māori or Tagalog. Mike explained that he used Tagalog to discuss some topics but would not use it all the time. Judy mentioned that she and her mentee would use some Māori words during their meetings, but only occasionally. She argued that being able to speak the same language was not as important as having similar beliefs.

"I don't have a problem with people, it does not matter about the ethnicities. I feel that I am able to talk to... apart from the language of course, because a lot of my beliefs, Filipino, Indian, we go like 'Hey that's what we believe in too!' So I can relate." (Judy, mentor)

Mentees also valued that their mentors were always appearing prepared and communicated regularly with them.

"I like her because she was always coming prepared. She was friendly, would always give me some extra advice, because we were doing the same job. She would tell me about her facility, how things worked there, and maybe if I could implement those things at my facility." (Stacey, mentee)

Those who took part as mentors also reported feeling their mentees were well-matched.

"Yes, we were very happy with each other. We are happy we were linked, I mean matched. it was really good. I don't know how you did that, but it was really good!" (Paula, mentor)

Nicola, who mentored five mentees, discussed her experience of managing such workload. In her view, having five mentees “was fine”. Nonetheless, she noticed that one of her mentees was more challenging to work with than others. She found it difficult to have an open conversation with one of her mentees. She later found out that this particular mentee was concerned about her privacy and “did not want her name come up somewhere unnecessarily”.

“I was like: ‘yeah let’s talk about this’. And she was like: ‘Oh no I can’t talk about this, and not about that’. And I was like: ‘OK what do you want to talk about?’ So, I actually had to work around it. She was very interesting, when she opened. But it was quite hard sometimes.” (Nicola, mentor)

Melinda argued that the programme did not fully deliver for her with regards to helping her reach one of her goals. Melinda’s expectation was for her mentor to offer more practical help than they did, and she felt her mentor did not have the ability to help her in achieving her goal. Melinda suggested that mentees should be given more background information on potential mentors to support their selection. Additionally, she wondered if mentees could meet the potential mentors via Skype, before making the final decision.

“I had no idea what the other candidates for mentors are. If they are more effective to guide me on my goal. I don’t know if it would be better to get to know those candidates, before choosing them. Maybe having a Skype interview before the selection?” (Melinda, mentee)

7.4.4.4 Mentoring sessions

Once they were matched, it was primarily the participants’ responsibility to schedule their mentoring sessions. These sessions occurred in their private time, not during work hours. Many participants worked full time and had a range of other competing demands including family commitments and study. However, as Mike explained, they just had to make it all work for themselves.

Interviewer: Is there anything that we could do to make the scheduling a little bit easier for you?

"I don't think there is. It's kind of irrelevant, there's nothing we can do really. Because my mentor has his own schedule, me as well, we just need to make it work for us." (Mike, mentee)

Some participants planned all their sessions ahead when they first met. Judy argued that planning the sessions in advance helped them avoid any problems later on.

"Yeah when we did ours, we agreed on the time. We didn't just, let's just do it now, we didn't do that. We agreed on the timing in advance. Because my mentee and I talked and we decided together, OK let us do that time. So there wasn't a problem." (Judy, mentor)

Some mentoring pairs had to reschedule their sessions almost every month. Stacey explained that often people would ask her to swap shifts, or her manager would ask her to do an extra shift. She thought that it could work better if she was allowed to take part during her work hours.

"That will be much better. We have like our communication course, at work, like we were given 2 hours every Monday. It's for us to study and it is sponsored. And it's very helpful." (Stacey, mentee)

All participants received an email reminder a few days before their planned session.

While many reported these reminders to be helpful, some participants still struggled to keep to their originally planned times. Those who had missed their sessions reported that it was then difficult to reschedule.

"So I'm free at 4:00 PM. And on that particular day, what they tend to do: 'Oh I've got to do this, I got caught up'. So if something changes then we need to change everything else. Sometimes instead of us meeting just once a month, we just need to do it for the next week, so we just do get caught up a lot." (Eliza, mentor)

This meant that mentors had to be flexible with their personal schedules to accommodate their mentees' late notice cancellations or 'no-shows'. During the interview, Nicola talked about how being flexible helped her manage working night shifts and her mentees having to reschedule their sessions.

"One of the girls couldn't make it in the afternoon but could make it in the morning. So I had to not go to sleep after work, so you have to be very flexible. I did not mind, I enjoyed it, because I was talking to somebody. But you have to be flexible." (Nicola, mentor)

7.4.4.5 *Intervention fidelity*

In this subsection, I report findings relating to the intervention fidelity. First, I report findings relating to the three prespecified key parameters: duration of mentoring sessions, goal setting and reviewing, and post-session reporting. This is followed by other findings relating to intervention fidelity: frequency of mentoring sessions and programme duration.

Prespecified intervention fidelity parameters

Regarding the session duration, participants were advised to keep their meetings to between 30 and 60 minutes. Overall, they reported this advice to be appropriate. Mean \pm SD session duration was 34.17 \pm 10.87 minutes. The longest session lasted 60 minutes, and the shortest was 14.5 minutes. The proportion of sessions lasting between 30 and 60 minutes (as per the programme guidelines) was 70.6%. Another fifteen meetings (20.0%) lasted between 25 and 30 minutes.

Following each mentoring session, participants were asked to complete an online meeting report. Overall, most participants found these reports easy to complete. The idea behind asking participants to complete the reports was to encourage reflection and facilitate learning new strategies or habits. Both mentor and mentee participants reported that this was exactly what happened for them. Eva explained:

“Somehow the reports helped me reflect on what happened, because it was like... every time we had a meeting, I would think of what my mentor said. And I was thinking, how would I apply this at work? Is it applicable? Or not? It was really good for reflection.” (Eva, mentee)

Reviewing the meeting reports revealed that mentees' goals were set or reviewed during nearly every session (99%), and the reports were completed by both mentees and mentors after every session (100%). Table 29 presents the intervention fidelity rates relating to the three key parameters.

Table 29. Intervention fidelity rates.

Number of mentoring sessions	Session duration fidelity rates (%)	Goals fidelity rates (%)	Meeting reports fidelity rates (%)
75	70.6	99	100

Frequency of meetings

All mentoring pairs were advised to meet once a month. The first mentoring session was conducted on the 14th of July 2019. The last session in the programme took place on the 20th of December 2019. On average, participants were meeting every 26 days (range: 22-38 days).

In total, out of the 78 planned mentoring sessions, 75 (96%) were completed by 21 active participants. Mean \pm SD number of completed mentoring sessions was 5.7 ± 2.9 . Eleven mentoring pairs completed all of their planned sessions. One pair missed two meetings, and another pair missed one of their meetings. See Table 30 and Table 31 for more information.

Table 30. Average number of completed mentoring sessions.

	Mean (SD)	Range
Mentees	5.8 (2.9)	4-6
Mentors	5.6 (2.9)	3-6
Total	5.7 (2.9)	3-6

Table 31. Mentoring sessions completion.

	1st	2nd	3rd	4th	5th	6th	Total
Planned	13	13	13	13	13	13	78
Completed	13	13	11	13	12	13	75
Completion ratio	100%	100%	85%	100%	92%	100%	96%

Most participants found the frequency of once a month to be appropriate. Participants argued that it is dependent on each mentee and their goals. Judy thought that meeting

more frequently would have been too much for her. On the other hand, Jenny believed that there was too much happening in one month, and she thought more frequent meetings would have been more appropriate. Nicola, who mentored five mentees, also reported that her preference would have been for more frequent meetings. For those who had more tangible goals, for example getting a qualification, twice or more a month seemed right. Melinda explained:

“My objective was to have a mentor, so I could do the level 4 in a short span of time. If someone was like me, aiming to finish it in the quickest possible time, they would be mentored every month, I mean every week.” (Melinda, mentee)

Programme duration

The reports regarding the overall programme duration were mixed. For Sylvia, six months seemed to be too long. She felt that after three months everything she wanted to talk about had been already covered. Eva thought that six months was right for her, and she “might get too attached to her mentor, if it was going for longer”.

Many others reported feeling surprised when they received an email telling them they were about to finish the programme. Jenny thought it was too short, as she recalled:

“I was really surprised! When you emailed that this was our final meeting, I was surprised, I didn't even realise. Already the end!” (Jenny, mentee)

It was similarly surprising for Eliza:

“Six months went quite fast. We didn't even know it was already 6 months.” (Eliza, mentor)

Some participants argued that 12 months would be a more appropriate duration.

Especially, as argued by Mike and Melinda, for those who were working towards a qualification. Some participants who were mentors also agreed with this view. As Paula explained, it could help mentees solidify the gains they had made.

“Because my mentee has done very well but 12 months would keep her going. Just to keep her more confident and let her stabilise, to be more stable, and not to fluctuate. Maybe until you get to the point where you know that she can fly on her own? I think a year is the maximum, more than a year it could be boring. But yeah maybe just a little bit longer maybe a year, but more than a year probably would be too much.” (Paula, mentor)

Some mentioned that to make the programme even more useful for mentees, being able to choose a new mentor after a few months could be valuable. Sylvia wondered if there could be some progression for mentees, for example, for mentees to be able to become mentors.

Protocol violations/deviations and adverse events

Two protocol deviations and no protocol violations were observed during the programme. As explained above, three of the 78 (3.8%) planned sessions were cancelled. One mentoring pair had to cancel two sessions (in the third and fifth month). The session at 3 months was cancelled as the mentee was “too busy with work”. The session at 5 months was cancelled by the mentor who was dealing with “some family matters” meaning they had to leave NZ for some time. For the same reason, they were also not able to attend their final session of the programme. The programme coordinator discussed this with the mentee and suggested to organise the final session with another mentor. The mentee was presented with profiles of the available mentors, and selected Nicola. Nicola was briefed by the coordinator and then introduced to the mentee. They were able to conduct the final meeting during which mentees were supposed to review and summarise their experience in the programme. Both Nicola and this mentee reported being satisfied with the outcome of their meeting.

One other mentoring pair had to cancel one of their sessions (3rd month) as the mentee was occupied with their university course and exams.

The other protocol violation, which was mentioned in the ‘Outcome data collection follow-up rates and completeness’ section, was that one of the participants did not return their baseline survey within the two-week data collection period. The survey was returned a week late. The participant did not provide any specific reason for the delay.

There were no adverse events reported as part of this study.

7.4.4.6 Programme focus and contents

The programme was intended to focus on both professional and personal aspects of mentees lives, and let mentees decide what the actual goals and discussion topics were. Participants reported finding the programme relevant and helpful.

“It really gave me a chance to talk. The interaction, there was a lot of possibility for that. It was not just about work, it was also mingling with new people. It's also being open, and being sort of helped. So we had a goal, but when we talked to each other, we asked what happened today, how were you feeling about that. It was nice to talk to someone you did not really know. Because at the end of the day sometimes, if you are really sad, if you just want to voice out, or just say something, it felt OK to say it. To someone not really close to you, but you are just confident that he or she listens to you.” (Jenny, mentee)

When asked about her favourite thing about the programme, Stacey explained it was the ability to talk about any challenges she was going through at the time and work out strategies to address them.

“The favourite thing was, when you do the planning for the meeting, you put down your problem. And then when you talk with your mentor you can ask him or her the questions on how to improve it, how to solve the problem.” (Stacey, mentee)

Some of the participating mentees were very experienced caregivers. They too found the programme useful. Sylvia explained that over the ten years she had been working as a support worker, she did not come across any programmes where she could talk openly about her ideas and challenges.

“I've been a caregiver for how many years now? Almost 10 years. And all the programs that I have had, you know there is nothing... like we do training at work, but there is nothing like this. You can talk openly to your mentor. And share ideas. And being honest, and what you go through, and what you face at work. The training is there, but you can't share what you think. I feel really good with this and I have applied a lot of this at my workplace.” (Sylvia, mentee)

Participants talked about getting practical tips from their mentors, for example, how to work more efficiently and safely. They argued the programme filled a gap in supports offered to caregivers, and especially those who were new to the job, or new immigrants.

“Because in the Philippines we don't have aged care. We do not have rest homes. We don't have the knowledge about elderly care, so talking with other people helps a lot. So it's not just like... You are acquiring information and also sharing it with others. Important and relevant information about your work.”
(Jenny, mentee)

One of the key aspects of the proposed programme was setting goals. All mentees had to identify one or more goals for the programme. Participants talked about the importance of having goals in this kind of programme, and how it helped them track their progress and use them as a point of reference. Mike reflected:

“I think, with the goals you have a baseline every month or even week. And they are very important, the goals. So you can evaluate how you are doing with your career and your life.” (Mike, mentee)

Some participants' goals changed during the programme. For Judy's mentee, it happened because of a change in her job situation. At that time, her previous goal of completing an educational course became less relevant, and her focus shifted towards her own well-being. For Nicola's mentee, becoming a mum meant work stopped being her priority. However, both mentors were able to adjust and continue providing mentorship to their mentees.

“My mentee had a new-born baby. Of course, I have done that... Been there, done that. But it was so long ago. She was working, and then she stopped because she had a baby. So we were talking mostly about the baby. But we tried talking about her level 4, and she was really trying to get it sorted.” (Nicola, mentor)

As an additional form of support, participants were offered to use a programme hotline in case they had any programme-related questions or concerns. However, none of them used it.

7.4.4.7 Mentoring relationship and being a mentor

Mentors and mentees were matched with the same people for six months. For most participants, this appeared to be a two-way relationship, where both sides were able to learn from each other. Eliza explained:

“Because I can also learn from my mentees. And also about their experiences like: ‘Oh I didn't know it's happening!’. So I have learned from them around how

they approached things from their perspective. So it was great that they were also sharing what they were dealing with and their own examples.” (Eliza, mentor)

As mentioned in the previous section, Nicola felt that one of her mentees was initially not willing to open up. However, as the trust between them built up, the relationship improved. Another one of Nicola’s mentees talked about the connection she had with her:

“Without this it's just work, work, work. But with this program you have somebody... you can ask this person your questions. It is like helping each other. About your work. That's how I felt with Nicola. When I had some questions to ask she was very eager to give me information, helpful information. For my health, for my personal life, anything. The connection was very good there.” (Jenny, mentee)

Some pairs reported staying in touch between the meetings. Mike and his mentor emailed each other regularly. Paula sent her mentee text messages to motivate and keep her mentee engaged in the programme.

“I tried to text her every once in a while, to ask how she was doing (...), I was trying to make it more interesting, to keep it going (...), asking her about the things I told her to try.” (Paula, mentor)

For some participants, their mentoring relationships appeared to have developed into a form of camaraderie or friendship. Nicola reflected on the bond she had developed with her mentees, and how she felt she was going to miss meeting them regularly:

“I really had very good people with me, all my mentees. I'm going to miss them very much. Once a month talking to them. You know, whinging about everything. So it was good, it was really good, but now I will have that gap. How are they going to do those things? How are they going to finish?” (Nicola, mentor)

Stacey was hoping to stay in touch with her mentor after the programme. She asked her mentor if they could “keep in contact” once the programme was completed. Her mentor also reported wanting to stay in touch with Stacey.

Both mentees and mentors talked about what makes a good mentor. One of the most often mentioned skill was being a good listener. Participants argued that, for some

mentees, all they needed was someone to talk to. Nicola argued that being able to put herself in their place made her a good mentor.

“Just to be able to listen to your mentees. And don't make any judgments. And help them, if they have a problem, help them. Put yourself in their shoes, because I've been there done that. And have a laugh, if someone is finding it too difficult, just try to have a laugh.” (Nicola, mentor)

Mentees also seemed to appreciate their mentors' friendliness and approachable manner. Participants also suggested that mentors need to be responsive to their mentees needs and be able to keep things relevant. As mentioned in the previous section, Nicola worked with mentees whose goals changed during the programme. Because of Nicola's professional and life experience, she was able to relate to and engage in conversations on many topics. A similar situation happened to Judy; she explained:

“I like working with people. And I base a lot of my stuff on my experiences. So when my mentee told me about her issues at work, straight out I went to the situation when I had similar issues, because I understood this. And all the knowledge that I picked up from my job. And I've learned a lot through the years, and this has just rekindled a lot of the things that i had not used.” (Judy, mentor)

Participants' opinions on mentors' level of experience and their availability were mixed. Some participants appeared to view their mentors as advisors. Mike called his mentor a “very good director”, and he valued the guidance he received from his experienced mentor. Melinda argued that mentors' guidance should be available to mentees at all times. Other participants argued that mentors do not need to be more experienced than mentees. These expectations appeared to depend on each individual's preferences and needs.

When listening to mentors' reflections on their experience in this programme, it appeared they cared about their mentees very much. They wanted their mentees to achieve their goals, be well, and help them develop “love for the job” (Nicola). Some suggested, that sometimes being a mentor was “hard”. Nicola reported feeling helpless

when she learnt that her mentee was declined funding to complete her qualification.

Judy also recalled a moment when she found it hard to be a mentor:

“I did feel for her when I found out, when she told me about her job issues. That I found hard. It just reminds you of what you have been through. And how much support you supposed to have got from this group, but nah... It's usually all the other Caregivers that come around you and support you. That counselling thing that they offer you is ridiculous.” (Judy, mentor)

7.4.4.8 Objective 3 findings triangulation

Table 32 reports a summary of key quantitative and qualitative findings relating to Objective 3.

Table 32. Objective 3 triangulation matrix.

Objective 3	Key Quantitative findings	Key qualitative findings
Structure and format	Not applicable	<p>Privacy and flexibility offered in this programme seen as very important</p> <p>Online delivery was appropriate for all but one person in this group</p> <p>Participants found the programme materials very helpful</p>
Initial training	<p>Participants needed on average approx. 2.5 weeks to read the manual and attend the training session</p> <p>No follow-up training sessions were required</p>	<p>Participants felt it prepared them well for the programme</p> <p>Training sessions lasted between 30 and 60 minutes</p> <p>Participants appreciated having the programme coordinator support available</p>
Mentor-mentee matching	<p>Mentors were matched with up to five mentees</p> <p>No mentees requested to be matched with a new mentor following their original selection</p>	<p>Nearly all participants reported being satisfied with their match</p> <p>Mentees wanted experienced mentors who were willing to share their knowledge</p> <p>Having more background information about mentors, may help mentees selecting most appropriate candidates</p>
Mentoring sessions	Not applicable	<p>Programme-related workload was manageable for all participants, but required planning and flexibility</p>

Objective 3	Key Quantitative findings	Key qualitative findings
		<p>It would be easier for some to be able to participate during work hours</p> <p>Rescheduling sessions was challenging due to busy work schedules</p>
Intervention fidelity	<p>Nearly perfect fidelity rates for two indicators (discussing goals and completing meeting reports), with slightly lower fidelity rates for meeting duration</p> <p>96% of planned sessions were completed</p> <p>Two protocol deviations reported</p> <p>No adverse events reported</p>	<p>Completing meeting reports encouraged reflection and facilitated learning</p> <p>Frequency of sessions (monthly) was found to be appropriate</p> <p>More concrete goals/objectives may require more frequent sessions</p> <p>Six-month duration appeared to work for most participants</p>
Focus and contents	Programme's hotline was not used by any of the participants	<p>Participants found it relevant and appreciated being able to focus on all aspects of life</p> <p>Participants found this programme filled a gap in supports they needed</p> <p>Participants enjoyed working on goals they set themselves</p>
Mentoring relationship	Not applicable	<p>Building trust was key to quality of the relationships</p> <p>Professional camaraderie can develop</p> <p>Mentor needs to be a good listener and be able to keep things relevant</p> <p>Being a mentor can sometimes be psychologically challenging</p>

Participants found the proposed intervention acceptable and relevant, and this was reflected in high fidelity rates. Importantly, there were no adverse events reported in this study. The triangulation of findings highlighted three key findings relating to Objective 3: the importance of the online format, the satisfaction with mentor-mentee matching, and the need to revise the mentoring session duration guidelines.

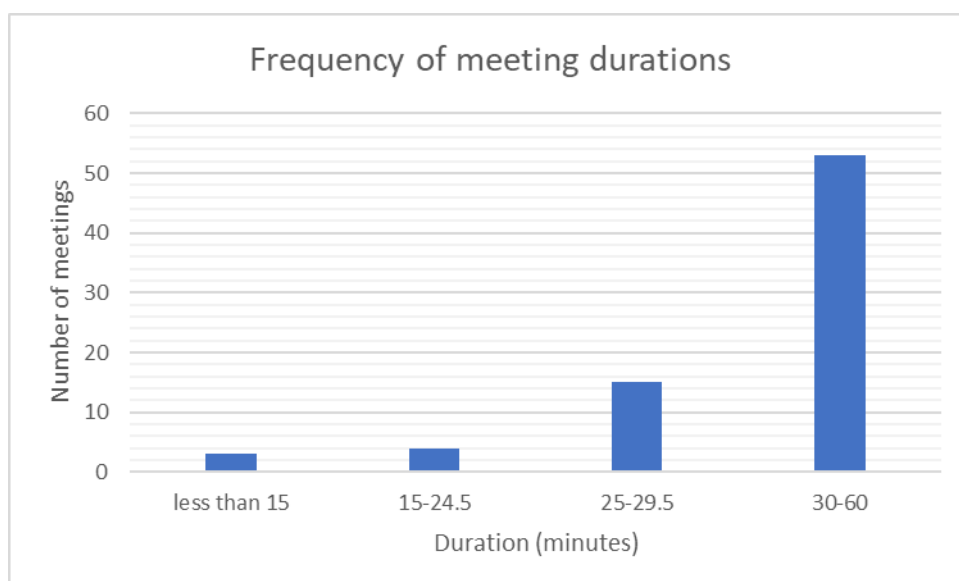
The online format of this programme not only made it easier for mentees and mentors to fit the programme into their busy schedules, but it created a private and safe setting for participants to openly share their views. They were able to meet with people whom they did not know and were unlikely to meet in person. As some of the participants argued, it helped them talk openly about their personal challenges. Another finding relating to the online format was that being able to see each other on the screen made both verbal and non-verbal communication possible. While meeting via internet, rather than in-person, may not be everyone's preference, the participants' reports suggest that it is an acceptable and feasible way of delivering a mentoring programme for this group. Furthermore, the online format makes it easier to match mentors and mentees across different organisations (and geographical regions), which may in turn enhance the mentee's freedom of expression.

Second, prior to commencing this study the mentor-mentee matching satisfaction was identified as one of the key factors in making this programme acceptable to its users. The matching process was developed for the purpose of this study and was not previously tested. Nevertheless, the findings suggest that participants were satisfied with their original selection, and that the matching method helped identifying appropriate mentors for each mentee. However, whether high matching satisfaction translates into a better outcome is still to be determined. Additionally, given that some mentees were very specific about their goals, it may be beneficial to offer even more background information on each mentor during the selection process.

Third, two of the three prespecified intervention fidelity requirements (discussing goals and completing meeting reports) were satisfied at nearly all (74 out of 75) conducted mentoring sessions. Fidelity rate for the recommended meeting duration was lower (70.6%). However, another 20.0% of sessions were one to five minutes shorter than the recommended duration. Figure 9 displays the distribution of mentoring sessions length in minutes. All qualitative interview participants argued that the duration of their

mentoring sessions was appropriate. Thus, it appears that the currently recommended duration of 30 to 60 minutes needs to be revised, or may be not warranted at all.

Figure 9. Mentoring session durations.



The triangulation of the qualitative and quantitative findings suggests that the proposed intervention was acceptable and suitable to the participants. They felt the duration and frequency of mentoring sessions was appropriate, and the online format acceptable. Participants claimed it addressed a range of issues affecting them in their daily lives as support workers, but also as partners, parents or immigrants. They also appreciated the privacy and confidentiality the programme's format enabled. Three key recommendations relating to Objective 3 are to provide more mentor background information to mentees during matching, to evaluate the impact of satisfaction with matching on participants outcomes, and to revise current guidelines on the mentoring session duration. Additionally, aged care organisations' willingness to allow programme participation during work hours appears worthy of further investigation.

7.4.5 Objective 4: Responses to the intervention.

Participants talked about a range of benefits and indicated that they would recommend this programme to their colleagues. Many mentees, but also mentors, reported becoming more confident at work and as a person in general. Judy found that she

became more engaged in team meetings and it was easier to express her views. She also noted that taking part in this programme and acquiring new skills was good for the mentees and also for their colleagues. Sylvia argued that having completed the programme and learning new caregiving-related skills, she did not have any difficulties working with her residents anymore. Jenny and Stacey both claimed that they had become more confident support workers. Stacey, who became very emotional during the interview, talked about her colleagues noticing her improvements. She recalled:

“It really helped me with my job. Like I said, I went to become a caregiver with no experience, and I was struggling. But after this I'm so much more confident at my job. I am able to have a break and have my lunch. After this, I thought I can do this, I can do anything!” (Stacey, mentee)

Sylvia, who previously had struggled caring for some of her patients, reported learning practical skills through conversations with her mentor. Her particular difficulty was dealing with residents' challenging behaviours. She learnt some strategies and was able to apply them at work.

“Some of the patients are very difficult. And I am applying it, they are so difficult, they would chase you out. But now I don't have any problems with them at night. That was very helpful for me personally. We have problems especially with men, at night they can be a bit agitated. But as soon as you go there, the way you approach them, they seem to calm down. I really enjoyed that, I am doing something here, I have learned something, and I'm applying to them.” (Sylvia, mentee)

Other participants talked about learning how to be “more positive”, how to cope better with stress, or how to be more patient. Mentors also reported feeling that they had learned new things. For example, Nicola talked about learning about the work environment at other workplaces. It made her appreciate her workplace even more. For Judy, taking part as a mentor “pulled her up”.

“I guess it's pulled me up. I think I have been procrastinating, just sitting back, just letting things go, but it's made me stand up again. Cause I'm thinking: ‘OK I am getting close to my retirement, it doesn't matter anymore’. But it still matters, it does matter. I think that's what it's done to me. It's brought out what was there. The things that I just haven't really used much. Even as a delegate actually. I've gotten lazy, I've been a delegate for 14 years. But now I want this job.” (Judy, mentor)

Participants also talked about how taking part in the programme made them more motivated and inspired. Some participants were able to complete tasks they had had waiting for months or years, for example completing their caregiving-related qualifications, passing a language exam, or starting a new project. Some were nominated for the caregiver of the year award and some negotiated a pay rise. Mike wanted to get his overseas nursing qualification recognised in NZ and he used the programme to help him achieve this goal. He explained:

“The programme was absolutely life changing when it comes to creating your goals and someone helping you. And assisting you with your life. Especially foreigners, migrants coming from other countries. It's a really great help for them as well. Because there is a mentor who will be able to guide them with their lives in New Zealand, and setting goals and a career.” (Mike, mentee)

Some participants did not manage to achieve all their goals within the six-month timeframe. Some of the goals required more time while others were contingent on funding or approvals outside of the mentor or mentees control. Melinda appeared to feel some dissatisfaction with the mentoring programme. This appeared largely to do with her not reaching her goal.

“Like after the meeting when I had my appraisal, I was like ‘Oh I have not reached my goal’. So I was asking my manager: ‘Oh I'm in this program but I still haven't reached my goals. I have not improved.’” (Melinda, mentee)

Another benefit of the programme discussed by participants was that it simply gave the mentees a support person who understood their personal circumstances. Many argued that the aged care sector does not have this kind of support available, and yet it is needed. As mentioned previously, mentees valued having someone who listened and understood them. Eva explained:

“Mentees get someone to talk to. Cause there are things and some issues that are really hard to talk to at your workplace, to your co-workers and sometimes you might be scared it will go out. But if you're talking to a person that's in the same industry but from a different place, or a different facility, it will be easier. We do talk at work, but it is different than in this program.” (Eva, mentee)

Eliza argued that talking to someone and being listened to can help ease the burden some support workers experience.

“Sometimes all they need is a different kind of perspective (...), the mentees didn't really need my perspective they just needed someone to talk to. They really don't need the things that I wanted them to do, they just needed someone to talk to, just to ease the burden.”

Participants were also asked what the overall experience of taking part was like for them. Both mentees and mentors talked about how much they enjoyed participating in this programme. Sylvia argued “there was nothing like this” available to support workers in NZ. She valued the privacy and confidentiality this programme offered. Jenny also enjoyed being able to interact with another caregiver in the 1:1 format. She summarised:

“Overall, it was very good. It was so much fun! It was a fun experience, and a knowledgeable experience.” (Jenny, mentee)

Mentors talked about how much they liked acting in this role. They enjoyed sharing their knowledge and looked forward to meeting their mentees each month. Paula reported:

“I totally generally enjoyed it. I always looked forward to the day we were going to Skype and was wondering what she was going to tell me.” (Paula, mentor)

Nicola, who was very passionate about caregiving, argued this programme was going to contribute to improving quality of care for the residents. She was thankful for giving her the opportunity to meet like-minded support workers from around NZ who were trying to do the best job they could.

“I totally enjoyed it! I enjoyed meeting different people, from different places, and we're all trying to do the best job we can.” (Nicola, mentor)

Eva revealed that she felt sad the programme was over, as she had gotten used to being able to talk to her mentor at least once a month. Other mentees, like Stacey and Jenny, also reported they were going to miss having this kind of support available to them. Paula, who acted as a mentor, regretted that she was not able to mentor more people and she hoped to have another opportunity like this one soon.

All participants declared they would strongly recommend this programme to other support workers. Some of them already had. Melinda had started discussing

implementation of a programme like this one with her management, who “were very keen on doing this”. Participants argued this programme can help with being more satisfied with the job and life in general, and gives a new perspective on life. Mike revealed that taking part was “life changing” for him. Stacey reported that thanks to the programme, she stopped struggling at work. She would encourage other support workers to take part:

“I would just like to encourage other people to do this programme. If it can help me, it can also help them. And I am very thankful for all the help from my mentor. And when I talk about this, I become very emotional.” (Stacey, mentee)

Judy believed that it could build people up.

“It builds you up. I know it did that for me. It helped me, mind you, find the skills that I had and brought them all back out again. It gives you the confidence to speak up and be yourself. And if they want to be mentees, if they hadn't worked with people, it will give them those skills. It's good for them and for the workers around them.” (Judy, mentor)

Paula, whose mentee was relatively new to caregiving, argued this programme was particularly well suited for those new to the role.

“It will help people become more confident. More happy, meet new friends, and as a mentor it's good to share instead of just keeping it to myself. So for someone who has just started you can give them more confidence at their day job, and what they're doing, and help them love the job, be passionate about the job. And if you are passionate about the job it will show in how you are dealing with your residents.” (Paula, mentor)

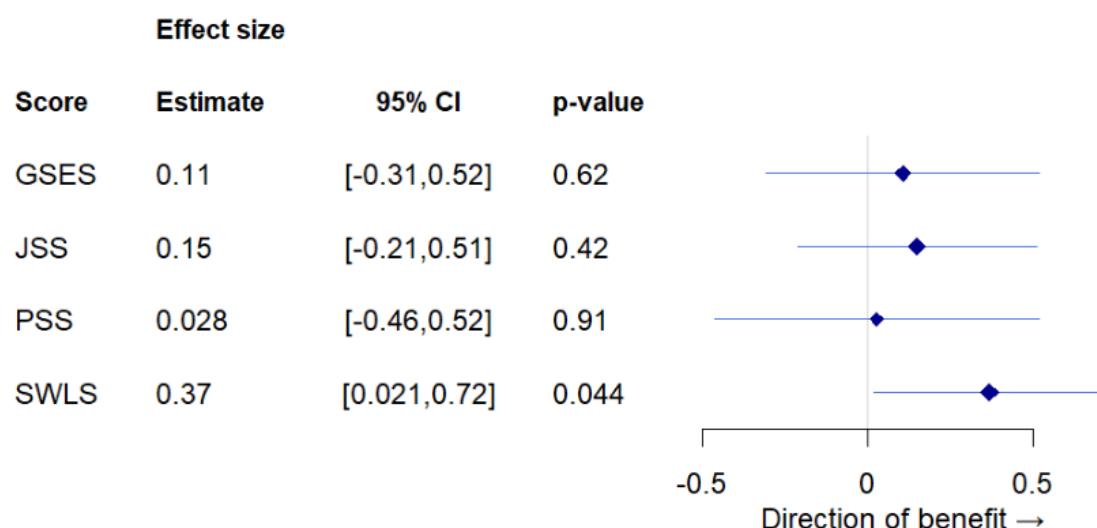
7.4.5.1 Changes in outcome measures

Analysis results showed participants scores on all outcome measures trended in the expected direction (increases in GSES, JSS, SWLS; decrease in PSS; Table 33). Effect sizes were very small to medium (139), ranging from 0.028 to 0.37 (Figure 10). The change in SWLS was statistically significant at the 5% level and was the only one to reach that threshold. Notably, the three remaining measures remained stable with some strong correlations with SWLS, indicating that change in SWLS is unlikely to be attributable to regression to the mean.

Table 33. Changes in outcome measures (n – number of completed assessments; score range provided in brackets).

	Time 1 (n=25)		Time 2 (n=22)		Time3 (n=21)	
	Mean	SD	Mean	SD	Mean	SD
GSES (10-40)	32.3	4.0	32.2	4.3	32.9	4.4
JSS (10-50)	39.2	8.4	37.8	8.5	39.5	7.4
PSS (0-40)	21.2	3.8	21.0	3.7	21.4	2.5
SWLS (5-35)	24.5	7.4	25.6	6.0	27.4	6.1
GSES – General Self-Efficacy Scale; JSS – Job Satisfaction Scale; PSS – Perceived Stress Scale; SWLS – Satisfaction with Life Scale						

Figure 10. Effect size estimates between baseline and six-month assessments and observed significances (GSES – General Self-Efficacy Scale; JSS – Job Satisfaction Scale; PSS – Perceived Stress Scale; SWLS – Satisfaction with Life Scale).



7.4.5.2 Objective 4 findings triangulation

Table 34 reports a summary of key quantitative and qualitative findings relating to Objective 4.

Table 34. Objective 4 triangulation matrix.

Objective 4	Key Quantitative findings	Key qualitative findings
Individual outcomes	All outcome measures trended in the expected direction Effect sizes were small to moderate	Participants reported: - becoming more confident - becoming better at caregiving

Objective 4	Key Quantitative findings	Key qualitative findings
	SWLS effect size was the strongest (0.4) None were statistically significant	- becoming more motivated/empowered - improved coping skills - achieving a range of personal and professional goals Not achieving a goal caused dissatisfaction
Overall experience	Not applicable	Participants enjoyed taking part and looked forward to their meetings each month Mentees reported needing this kind of support available to them Mentors enjoyed sharing knowledge All would strongly recommend the programme to their colleagues Taking part was “life changing”

Participants’ responses to taking part in the programme were very positive. They reported improvements in a range of areas relating to both professional and personal aspects of their lives. Outcome measure data supported their reports, albeit the results were not statistically significant. Furthermore, participants would strongly recommend, or already had recommended, this programme to other support workers. Two key findings warrant further consideration: participants’ apparent consensus on becoming a better caregiver as a result of taking part and the negative consequences of not achieving one’s goals.

Nearly all mentees and some mentors talked about the influence of taking part in this programme on them becoming better at caregiving. This referred to both technical aspects of the job but also their personal skills and attitudes. This is an important finding because it provides initial evidence that the holistic focus of the programme (i.e. being able to set goals relating to any aspect of one’s life) can help participants become better workers. This can lead to improvements in quality of care for aged care

recipients, and a range of other organisation-level gains (for example lower staff turnover, lower absenteeism). Furthermore, this finding complements the findings relating to Objective 2, namely that an instrument measuring caregiving-related skills or competency should be included in any future trials of this programme. This finding will be discussed further in the next chapter.

Second, perhaps not surprisingly, one of the participants talked about feelings of dissatisfaction due to not achieving one of their programme goals. Goal setting was used as a method to provide structure to the programme and to motivate participants to reflect on their work and life experiences. Through this mechanism, they were going to increase their personal and professional skills, resulting in increased satisfaction with life and work, self-efficacy, and lower level of perceived stress. Even though participants were instructed to use goal setting in this way and informed that they were not accountable for achieving their goals, it may be necessary to improve the way these messages are communicated with them. Perhaps, more emphasis needs to be put on the programme being a way of supporting them in their endeavours and not something they can pass or fail.

The triangulation of the qualitative and quantitative findings suggests that the programme was highly regarded by the participants, and that it helped them to improve their skills and attitudes in a range of areas. Participants proposed some areas which could improve their experience further but were overwhelmingly in support of the programme. Two key recommendations relating to Objective 4 are to further investigate how taking part in this programme affects the quality of aged care and organisation-level indicators, and clarifying the purpose of using goal setting to programme participants.

7.4.6 Other findings related to the study aim

In this section, I report findings which were relevant to the overall aim of this study, but were not distinctly related to any of the prespecified feasibility areas.

First, some participants discussed the supports that were readily available to them, namely staff unions and the Employee Assistance Programme (EAP). Participants valued support from staff unions but identified support needs not currently addressed by the unions, such as psychological support. The EAP is usually offered to those support workers experiencing some work-related challenges. However, when Eva sought support through the EAP, she found it difficult to arrange. She wanted to have someone to talk to about her situation but was told that she had to be assessed by an EAP worker before being able to receive the support. Participants argued the mentoring programme helped to fill the gap in supports offered to them.

Second, Nicola and Judy suggested that this programme would be a worthwhile way of showing appreciation to and rewarding support workers. Nicola noted that paying the workers more was not always possible, but she thought that offering this programme was showing the workers they were valued. She and some other participants argued that the aged care sector really needs a programme like this one. Judy reflected on her own experience of dealing with challenging work situations and the absence of sufficient support:

“I think we really need something like this in the aged care sector. They say we are valued, but we are not. We are undervalued. Same sort of thing that my mentee went through, I've seen other people go through. Even myself. And nothing much happens. It's just a lot of struggle, but it still has its toll on you. Even though you know you are right, that you didn't do anything wrong, it just takes so long for them to go through the process. It's like everything inside it is just turning inside out.” (Judy, mentor)

Third, participants noted that in this programme, they were able to address some difficult and sometimes missed or avoided topics. One of those topics was bullying at work, which Eva discussed in depth with her mentor.

“We had this issue about bullying, and she told me that it could be hard for my supervisor to just listen to me because we were the same race. And she might be accused of being biased towards me. I never thought of that. I was always like she should have listened to me. I always felt bad. But she opened my eyes.” (Eva, mentee)

Finally, during her interview, Sylvia expressed an interest in becoming a mentor. The idea of progressing from a mentee to a mentor was then presented to some of the other participants. They agreed this could work well as a progression step for mentees in the programme.

7.5 Discussion

The aim of this study was to investigate the feasibility and acceptability of the proposed intervention, and to provide data required to plan a future randomised controlled trial. The study found that WeCare Mentoring Programme was a feasible and acceptable intervention. The recruitment target was reached within the originally proposed three-month timeframe. Data collection procedures were practical and convenient, with no missing data for any of the outcome measures. Participants reported taking part in this programme was a very good experience. They found the programme appealing and relevant. They felt the duration and frequency of mentoring sessions was appropriate, and the online format acceptable. Participants claimed it addressed a range of issues affecting them in their daily lives as support workers, but also as partners, parents and/or immigrants. They appreciated the privacy and confidentiality the programme’s format enabled. All participants reported noticing a range of improvements in their well-being, and also caregiving-related skills. Participants proposed some areas which could improve the experience further but were overwhelmingly in support of the programme. They would recommend, or already had recommended, this programme to other support workers.

Most of the Study 3 findings could be translated directly into recommendations for the future trial. However, three areas were somewhat more nuanced and are discussed in

the following sections. They related to study recruitment, outcome measurement, and intervention fidelity.

7.5.1 Recruitment efficiency

Although the recruitment target was reached within the proposed timeframe, the process did not go as expected. Recruitment via poster and presentation, on which I focused initially, was much less efficient than recruitment via email. Indeed, researchers (227, 228) have reported that mass recruitment methods (e.g., using mailing lists) are superior to other methods. Other authors (229) have argued that using offline recruitment methods even in online-based intervention studies (e.g. face-to-face, poster) could be effective. However, Bajardi et al. (229) postulated participants recruited using offline recruitment methods show higher attrition rates. Thus, recruitment via email (or alternatively mail) should be the primary recruitment method in the future trial. This approach will likely lead to a shorter and more cost-effective recruitment.

Despite meeting the recruitment target, the overall response rate appeared low (4%). This is perhaps unsurprising given that participant recruitment has been identified as the most difficult aspect of intervention trials (230), and particularly so in underrepresented populations (231). Furthermore, unlike most intervention studies for support workers, current participants were asked to take part in their own time. Participants in the current study expressed preference for being able to conduct their mentoring sessions during work hours and reported concerns around the confidentiality of their participation. Convenience of participation and trust have been identified as important factors influencing recruitment (231). To increase the convenience of participation, it would be worth negotiating with the aged organisations to allow their workers use their study time to take part in the programme, if that was their preference. As reported by current participants, some employers offer one to two hours of paid time per week during which workers can study for their qualifications. To increase trust, it

would be important to advertise the study through trusted channels, e.g. staff unions, other support workers, enrolled participants. Several current participants reported telling their colleagues about the WeCare Mentoring Programme and that they also wanted to take part. Importantly, in the current study, the email invitation was sent out by the union on only one occasion. There were not any repeated invitations, nor any other advertising done by the union. Adding these recruitment strategies, and involving other unions and organisations, is likely to further improve the response rate. Further consideration of these and other methods to facilitate future trial recruitment is recommended.

7.5.2 Measuring 'becoming a better support worker'

Most participants who were interviewed post-intervention noted feeling that they had become better support workers. Thus, including an outcome measure that could evaluate this change specifically may be worthwhile both for the sake of providing feedback to participants and for the purpose of assessing the effectiveness of the intervention. Previous research on measuring training and competencies in a closely related field of nursing proposed that measurement should focus on such factors as clinical skills and knowledge, but also interpersonal and problem-solving skills, moral sensibility, commitment, and compassion (232). Closely related to these factors is self-efficacy which is underpinned by a worker's professional identity and competence (233) and is an important predictor of performance, job satisfaction and well-being (233, 234). While a measure of self-efficacy was included in the current study, it measured general self-efficacy, rather than one specific to support workers. Prior research has found that task-specific self-efficacy may be more sensitive to change than generalised self-efficacy (235, 236). The future trial of the proposed WeCare Mentoring Programme should include an instrument with an ability to measure self-efficacy as it relates to the specific reality of being a support worker. As no such tool has been proposed to date, an adaptation of one of the existing instruments used in the nursing research may be

the best possible option, for example, the Nursing Profession Self-Efficacy Scale (233) or the Self-Efficacy Clinical Performance Scale (234). Adapting these instrument would require a review of their content and acceptability, and an evaluation of validity and reliability for use with support workers in NZ.

7.5.3 Mentoring session duration as a fidelity issue

Monitoring fidelity is an important aspect of developing and implementing new interventions (237). However, when developing complex interventions that are designed to be adapted to a local context, the level of variation in the intervention protocol needs to be balanced against the potential loss of acceptability (9). In the current study, there were three prespecified fidelity criteria: duration of mentoring sessions, goal setting and reviewing, and post-session reporting. The duration of mentoring sessions criterion was based solely on Study 1B and 2 participants' preferences, and not on any other research reports; 70 percent of the sessions met this requirement. On the other hand, the latter two criteria were identified based on past research as the key active ingredients for the proposed intervention; nearly all sessions met these two fidelity requirements.

The finding that 30 percent of sessions did not meet the 'session duration' requirement was concerning at first. However, during the post-intervention interviews, most of the participants reported that they were satisfied with the duration of their sessions. It appears that strict adherence to this fidelity criterion may not be necessary or even appropriate. Moreover, a further review of other mentoring interventions (59, 177, 183) and mentoring models (55, 164, 185, 186) found that none of them recommended a specific meeting duration. As such, the importance of meeting duration in the proposed intervention and its relationship with the intended outcomes remain unclear. Thus, the future trial should record this parameter and evaluate the association between the length of mentoring meetings and intervention effectiveness.

7.5.4 Summary of recommendations for the future trial of WeCare Mentoring

The findings discussed in the previous sections and other findings reported in this chapter provided a foundation for recommendations for refinements to the proposed intervention protocol. These refinements should be included in the protocol before the WeCare Mentoring Programme is tested in a definitive effectiveness trial. The recommendations are presented in Table 35.

Table 35. Final refinements and additions to the proposed intervention protocol.

Aspect of the protocol	Description
Recruitment	<ol style="list-style-type: none"> 1) Recruit primarily via bulk messaging, e.g. via email 2) Partner with organisations that are trusted by support workers, e.g. staff unions 3) Facilitate snowball sampling 4) Incorporate the reasons for taking part reported by Study 3 participants as the key drawcards in recruitment advertisements 5) In all recruitment documents, clarify that part-time and casual workers are also invited
Outcome measures	<ol style="list-style-type: none"> 1) Replace the GSES with a self-efficacy measure specific to support workers (to be developed) 2) Remove one of the satisfaction measures; given a job context-specific measure of self-efficacy is recommended, retaining the SWLS appears more practical 3) Add a measure of participant satisfaction with mentee/mentor match 4) Consider measuring the effect of taking part in the programme on the quality of care
Training	<ol style="list-style-type: none"> 1) Consider developing video materials to accompany the programme manual
Mentee/mentor matching	<ol style="list-style-type: none"> 1) Provide more background about mentors, focusing specifically on their key areas of expertise 2) Provide information on participants' preferences regarding meeting frequency to allow more frequent meeting for mentees with more tangible goals
Mentoring relationship	<ol style="list-style-type: none"> 1) If available, negotiate with aged care providers to allow participation during staff's paid study time 2) Consider developing a one-stop online platform for the programme 3) Build in measures to further enhance adaptability of the programme to support workers' schedules, e.g. online meeting scheduling system, automated reminders, direct messaging

Aspect of the protocol	Description
	<ul style="list-style-type: none"> 4) Remove the 'session duration of 30 to 60 minutes' recommendation, but keep monitoring the length of sessions 5) Clarify the purpose of goal-setting to reflect its use as a means of providing focus and structure rather than as an outcome measure 6) Encourage mentors to message their mentees between mentoring sessions to facilitate engagement

7.5.5 Limitations

This study was not designed to determine the effectiveness of the proposed intervention. Even though one of the outcome scores (SWLS) changed in the expected direction and the participant reports suggest the programme was effective, further testing using an appropriate design is required to establish the effectiveness of this intervention.

I was both the developer of the intervention and the researcher responsible for carrying out all study procedures, including recruitment, training, data collection and ongoing communication with the participants. I had an in-depth understanding of all intervention and study protocols and was aware of what each intervention component aimed to achieve. As the study sample was relatively small, I was able to manage all these activities by myself and in a consistent manner. Therefore, interpretation of Study 3 findings needs to account for this. A future definitive trial would require a larger sample size and most likely more research personnel will be required to conduct it. This may introduce variation in mentoring training, efforts to maintain participants' engagement and the overall experience of taking part in the intervention. Developing a standardised training protocol to ensure a consistent research staff performance across all aspects of the intervention delivery may help minimise the potential variation.

Another limitation of the proposed approach is that the intervention was originally intended for use in urban settings, specifically in the Auckland region; nearly all of Study 1B and 2 participants were from Auckland. It is possible that inclusion of rural-based stakeholders would have resulted in a different approach being proposed. However, many of the Study 3 participants lived in communities smaller than Auckland, with a group of them living in remote rural areas. The future trial could further explore whether there is difference in outcomes for people living in urban versus in rural areas.

In regard to Objective 4, the single-arm, pre-post design does not enable us to draw strong conclusions from the mild observed significance of the SWLS. However, as mentioned earlier, regression to the mean is an unlikely explanation for the change in SWLS.

Notably, the proposed intervention requires its users to have access to internet and a basic level of digital literacy. As such, not everyone might be able or willing to use the intervention. Nonetheless, no one was excluded from taking part because of having no internet access and/or insufficient digital literacy level. On the contrary, participants reported that taking part in the programme was easy even for those who considered themselves to have very limited computer skills.

The mentoring relationship in this programme was structured around mentee's goal/s. Mentees were asked to identify their own goals, but these goals did not have to be of a specific nature. It was hypothesised that the function of the goal planning process (i.e. that it enabled a shared vision, and a purposeful focus for mentoring sessions) was more important than the goal itself. For that reason, data about the nature of their specific goals was not collected.

Finally, the in-person recruitment was conducted only at facilities that agreed for their staff to be approached about this study. Two group providers (both managing over 20 residential aged care facilities) declined to take part stating potential cost as the reason. Support workers employed by those very organisations may also be those who urgently need access to interventions like this study. Including all support workers, regardless of their employers funding ability, should be the key focus of the future definitive trial.

7.6 Summary

This was the final study carried out as part of this doctoral project. In this chapter, I presented results of Study 3 which evaluated the feasibility and acceptability of the

proposed WeCare Mentoring Programme. The intervention was met with overwhelming support from its participants, with many reporting improvements in their professional and personal lives. Based on the findings, a number of refinements were recommended to further improve the acceptability and feasibility of the programme. They should be incorporated into the intervention before it is tested in the definitive future trial. Importantly, Study 3 provided data required to design this future trial. The implications for future research resulting from this and previous phases of this doctoral project are discussed in the following and final Chapter 8: Integrated discussion and conclusion.

8 Chapter 8: Integrated discussion and conclusion.

8.1 Prologue

The main aim of this research was to develop a peer-mentoring intervention that could address the needs and preferences of aged care support workers in NZ and improve their health and well-being outcomes. The study was informed by my personal and professional experience as a support worker and caregiving researcher.

This Mixed Research project was guided by the MRC recommendations for developing complex interventions (Craig et al. 2008) and included three phases and four studies:

1. Developing conceptual and theoretical basis (Study 1A and 1B)
2. Defining the intervention (Study 2)
3. Feasibility testing of the intervention (Study 3)

In this chapter I will revisit the aims of this project, present its key contributions to research in this area, project limitations, and recommendations for future research.

8.2 Revisiting the aims of this project

The aim of Study 1 was to review the evidence on the effectiveness of strategies that could be incorporated into a peer-mentoring intervention improving psychosocial and turnover-related outcomes for support workers in aged care. The study found low certainty evidence for some of the previously proposed interventions. However, none of the proposed approaches stood out as particularly effective and none of them had been developed for the NZ context.

Study 1B was pivotal to the direction of this doctoral project. It aimed to explore NZ aged care stakeholder perspectives on interventions improving outcomes for support workers. The study found there were increasing demands to support this workforce in NZ, focus on their psychosocial outcomes (job and life satisfaction, stress, and others), and use flexible approaches that can be tailored to the individual needs and

preferences of support workers. However, the reported inability of the aged care organisations to invest further resources in support workers was identified as a major barrier to implementing any workplace-based intervention and necessitated a modification of the originally proposed mentoring approach. This resulted in proposing e-mentoring as a strategy to improve outcomes for support workers.

The aim of Study 2 was to provide insight into usability of the proposed e-mentoring intervention, its acceptability, and perceived barriers, facilitators and benefits.

Participants identified a few areas for refinement. Their stories highlighted the importance of the quality of the mentor-mentee match and a preference for like-minded people to be matched. These insights were used to inform final refinements of the WeCare Mentoring Programme before testing it in Study 3.

The final study in this project, Study 3, aimed to investigate the feasibility and acceptability of the proposed intervention, and to provide data required to plan a future randomised controlled trial. The study found that the proposed intervention was feasible and acceptable. Participants proposed some areas which could improve the experience further but were overwhelmingly in support of the programme. They would recommend, or already had recommended, this programme to other support workers.

Overall, this project developed a peer-mentoring intervention to address the needs and preferences of aged care support workers in NZ and improve their health and well-being outcomes. By doing so, it successfully achieved its overall aim.

8.3 Key contributions from this research

In the following sections I discuss the key contributions of this project: the importance of adapting evidence to the local context, the novel intervention for improving outcomes for support workers, and the data to guide the definitive trial design.

8.3.1 The importance of adapting evidence to the local context

This project aimed to review and synthesise previously published evidence to develop an intervention to be used within the unique NZ aged care context. The importance of using past research in this process cannot be overstated (9). However, as evidenced in this project, adapting the available research evidence to the local context is a critical step in developing acceptable and feasible interventions (238, 239).

Many of the interventions identified in the systematic review (Study 1A), including the Retention Specialist Programme (8), involved whole aged care facilities and organisations and used opt-out consent. In the early stages of this project, I was expecting this to be possible also in NZ. The funding proposal for this project was built on these assumptions. However, health care systems differ globally and have their own unique features which may act as barriers to implementation (239). Stakeholder interviews are one of the best methods for identifying such barriers (9). In the current project, these interviews were carried out as focus groups (Study 1B) and helped identify implementation barriers unique to NZ.

Finding out about the apparent funding barrier and that the originally proposed workplace-based mentoring programme was not feasible in the NZ context, came as a shock to me. Although it was disappointing, this realisation came at a crucial time of the intervention development and forced me to find a solution that would overcome the identified barrier. Supported by the project's advisory group, I was able to develop a strategy that was later found to be feasible and acceptable to its intended users and exhibited signs of its potential effectiveness.

8.3.2 The novel intervention for improving outcomes for support workers

The development of the WeCare Mentoring Programme is a key contribution to the field of aged care workforce research. The programme is an evidence-based, feasible and acceptable online mentoring intervention designed specifically for aged care

support workers in NZ. Underpinned by the MRC guidelines for developing complex interventions (9), it incorporates international evidence on strategies to support this workforce with perspectives from a range of local stakeholders. It has undergone structured usability and feasibility testing. Its key strengths include:

- a) Flexible and boundary-free format, allowing support workers from around NZ to take part at a time and location that suits them
- b) Holistic focus, allowing its users to concentrate on topics that are important and meaningful to them
- c) Free of cost to aged care organisations, addressing the local implementation barrier in NZ
- d) Built on an evidence-based concept of peer mentoring, that has been shown to improve a range of outcomes across different workforce groups

To my knowledge, the WeCare Mentoring Programme is the only online mentoring intervention for this workforce. Authors of a recently published systematic review on mentorship programmes for nursing home staff (240) called for implementation of such programmes to improve workforce capacity and improve quality of care for residents. They argued that future research should focus on establishing evidence as to how these programmes can be successfully implemented in the aged care context.

The challenges resulting from the increasing demands and shortages in the aged sector remain pertinent locally and globally. The recently published report on the impact of the 2017 Pay Equity Bill in NZ (149) found the workloads and duties of support workers increased further, and called for strategies that promote a culture of value and career development for these workers. Moreover, they also reported quality of care being negatively affected following the introduction of the Bill. I believe the WeCare Mentoring Programme is a potential solution to these issues. However, firstly its true effectiveness needs to be established.

8.3.3 The data to guide the definitive trial design

The proposed intervention protocol was found to be feasible and acceptable.

Conditional on incorporating the refinements proposed in Chapter 7, the WeCare Mentoring Programme should be tested in a definitive trial to determine its effectiveness in improving outcomes for support workers.

The intervention's effectiveness could be tested in a randomised controlled trial (RCT). It is recommended the trial includes a waitlist control group, as this was the preference expressed by Study 3 participants who argued that they would not want to miss out on having a mentor. Using the currently proposed recruitment methods, participants would be randomly allocated to either intervention or waitlist control group.

If satisfaction with life was selected as the primary outcome and was measured with the SWLS, the change scores obtained in the current study could be used to estimate the sample size for each group. Setting the type 1 error probability at $\alpha = 0.05$ against a 2-sided alternative, assuming equal group size and targeting $1 - \beta = 0.8$ power to detect a Cohen's effect size of $\delta = 0.4$ (close to the estimated effect size and representing an improvement of 3 points on the score), the study would need to recruit at least

$$\begin{aligned} n_g &= 2 \times \frac{(z_{\alpha/2} - z_{1-\beta})^2}{\delta^2} \\ &= 2 \times \frac{(1.96 + 0.84)^2}{0.4^2} = 98 \end{aligned}$$

for each group g = Control, Intervention, bringing the overall target recruitment to nearly 200 participants.

Given that the current study recruited 20 mentees over 3 months, the RCT recruitment may take up to 18 months. However, the most efficient recruitment strategy (via email) was employed in the last two weeks of recruitment and resulted in 27 consenting participants (mentors and mentees) versus 11 consenting participants recruited using

the other two methods. Thus, focusing primarily on recruitment via email is likely to result in significantly less time required to recruit the study sample.

An alternative approach would be to use a stepped-wedge cluster randomised trial design. It involves random and sequential crossover of clusters from control (no intervention) to intervention until all clusters are exposed (241). This study design is particularly applicable to studies involving relatively heterogeneous population (as is the case with the multicultural NZ support workers) and when there already exists some evidence in favour of the intervention. Another very important strength of this design is that it overcomes the resistance to the traditional controlled trials where only half of the participants receive the intervention; in the stepped wedge design every participant receives the intervention. Importantly, the key advantage of this design over the waitlist-controlled trial, is that cluster randomisation would also allow evaluation of cluster/facility-level and resident outcomes, for example quality of care or staff retention. However, this design would require recruitment of whole facilities and this may not be feasible in the current NZ aged care context (as identified in Study 1B). This barrier may be overcome if there was external funding provided to reimburse the facilities for making the mentoring programme available to their workers. If the definitive trial also includes a cost-effectiveness analysis, we may find that potential improvements in staff retention lead to financial savings for the facilities. If these savings outweigh the staff cost related to taking part in the programme, it may encourage NZ aged care providers to fund this approach in the future.

8.4 Future research

The proposed intervention's effectiveness should be tested in a definitive trial before it is implemented within the aged care sector. However, first an instrument to measure self-efficacy specific to support workers must be developed. A valid and reliable measure of self-efficacy specific to nursing or other similar setting could be adapted, using input from an expert panel. Alternatively, a new tool based on a range of existing

self-efficacy measures could be developed. The best candidate items could be selected through a focus group or using the Delphi method (242). These items could then be tested in a series of cognitive interviews (243) to ensure good face validity of the new tool. Subsequent testing of the tool with a sample of support workers from around NZ would enable carrying out factor analysis, and evaluating the proposed tool's reliability and responsiveness to change. The resulting instrument could then be used in the future definitive trial, where its psychometric properties could be explored further.

Second, the proposed online-based mentoring may benefit from increasing automation of the intervention-related procedures, such as mentoring session reminders or meeting plans. In the current study, all intervention procedures were taken care of by myself and depended on my own management systems. In a larger study with many more participants and more than one coordinating researcher, however, the current systems may not be sufficient. Developing a one-stop platform for this programme may enable automation of many of the procedures and further increase the usability of the intervention. However, the potential benefits of providing such a platform should be weighed against the potential cost and time required to develop it, and the loss of human input which may have been a critical component of my role as a coordinator of the programme.

Future research could also explore applying this programme to other workforce groups and other settings, for example aged care nurses, disability support workers or home support workers. The content and format of the proposed intervention can be tailored to the specific needs and preferences of each user, and as such it could be relatively easily adapted to other settings and populations.

8.5 Limitations

The limitations of each study in this project were discussed in the respective chapters.

In this section I present the overarching limitations of this doctoral research.

First, I have previously worked as a support worker myself and have a strong sense of connection with this workforce. I have also been involved in researching this workforce, focusing specifically on the challenges these workers experience. This perspective may have affected the nature of the questions I asked during the qualitative interviews and what I prioritised in data analysis. However, I discussed the emerging findings in each phase with my PhD supervisors, the project advisory group and my colleagues to increase my exposure to other interpretations of the data. I also report the findings for each study in a comprehensive way, supporting them with participants' quotes and allowing the reader to make their own interpretations.

Second, inspired by a study using peer mentoring to improve outcomes for support workers (8) and seeing how popular this approach had become across a range of settings, I set out to develop a peer-mentoring intervention for NZ aged care support workers. This idea also guided the development of this project's funding application. As such, I may have been inadvertently inclined to confirm that this idea could work, rather than focusing on finding an alternative solution. However, the people I was surrounded with throughout the study, including my PhD supervisors and advisors, helped me challenge my views. Moreover, throughout the study, I used data from a range of sources and critically analysed it, for example by evaluating the risk of bias in the systematic review (Study 1A). While I acknowledge other potentially effective strategies may exist, I believe that this project used a rigorous and structured approach to develop an evidence-based intervention that is feasible and acceptable to the NZ aged care support workers.

Third, the validity of using Mixed Research is still debated as some researchers believe that the underpinnings of the qualitative and quantitative paradigms are incompatible (80). Indeed, deciding which finding should take precedence in case of a conflict is not an easy task. Being transparent about making these decisions is important in Mixed Research (244). In this project, I explained the rationale for my approach and decisions, disclosed my potential biases and used visual aides to enhance the transparency of my decisions. In Study 3, I used triangulation tables to present qualitative and quantitative findings next to each other and found them very helpful in synthesising data from the different sources. Overall, using Mixed Research in this project enhanced my understanding of the proposed intervention and its users. I believe that using the combined strengths of the Mixed Research approach was crucial to achieving the overall aim of this project.

Finally, the proposed programme was not specifically developed for Māori, who are the indigenous people of NZ. Six Māori participants took part in Phase 1 and 3; however, they participated as support workers who identified as Māori, rather than as Māori who happened to be support workers. Moreover, the two Māori advisors who were involved in developing the conceptual and theoretical foundations for the proposed intervention, were engaged as consultants rather than equal partners. Although, their contributions were intended to help increase the cultural safety of the proposed programme, the final product is an intervention developed by a Pākehā (non-Māori New Zealander) researcher for workers employed in a sector (i.e. residential aged care) that is in conflict with te ao Māori (Māori worldview). In te ao Māori, kaumātua (older people) are the knowledge bearers and if they lose the ability to look after themselves, they will usually be cared for by their whānau (extended family/community). For some Māori, having their whānau admitted to a residential care institution can be likened to abandonment. Thus, it is perhaps unsurprising that Māori are underrepresented in the residential care sector, both as care providers (e.g. Table 23; Ethnicity) and care

recipients (245). Nonetheless, I believe that the flexible format of the proposed intervention can be tailored to the specific preferences of its users, authentically reflecting the needs of aged care support workers in NZ.

8.6 Conclusion

This thesis described a rigorous and structured approach to the development of an evidence-based e-mentoring intervention for NZ aged care support workers. The WeCare Mentoring Programme is an acceptable and safe intervention to improve health and well-being outcomes for this workforce. Its users reported improvements in a range of areas of their professional and personal lives. A range of refinements were proposed to further enhance the programme's feasibility. The next step is to test the intervention's effectiveness in a definitive randomised controlled trial. If effective, this programme will offer a much-needed support to people who have been historically undervalued and are experiencing increasingly difficult working conditions. Better support for these workers is likely to lead to better health outcomes for them and the people they care for.

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10 Appendices

Appendix 1. Systematic review search terms

Scopus

(TITLE-ABS-KEY ("support worker*" OR "nursing assistant*" OR "healthcare assistant*" OR "carer*" OR "caregiver*" OR "nurse* aid*" OR "nursing aid*" OR "nurse* aide*" OR "nursing aide*" OR "therapy aide*" OR "therapy aid*" OR "therapy assistant*" OR "direct care staff*" OR "personal care staff*" OR "personal care assistant*" OR cna* OR "certified nursing assistant*") AND TITLE-ABS-KEY (retention* OR turnover* OR "mental health" OR "wellbeing" OR "well-being" OR "well being" OR stress OR burnout OR "burn out" OR burden OR satisfaction OR "quality of life" OR qol OR "role ambiguity" OR "role conflict" OR "intention to leave" OR "self-esteem") AND TITLE-ABS-KEY ("aged care facilit*" OR "rest home*" OR "private hospital*" OR "retirement village*" OR "care home*" OR "home for the aged" OR "nursing home" OR "long term care" OR "longterm care" OR "long-term care" OR "residential aged care" OR "residential care" OR "residential facility" OR "residential home")) AND (LIMIT-TO (LANGUAGE , "English "))

EBSCO

AB "support worker*" OR AB "nursing assistant*" OR AB "healthcare assistant*" OR AB "carer*" OR AB "caregiver*" OR AB "nurs* aid*" OR AB "therapy aid*" OR AB "therapy assistant*" OR AB "direct care staff" or "personal care staff" or "personal care assistant*" OR AB cna* or "certified nurs* assistant"

AND

AB retention* OR AB turnover* OR AB "mental health" OR AB wellbeing* or "well-being" or "well being" OR AB stress* OR AB burnout or "burn-out" or "burn out" OR AB

burden OR AB satisfaction or "quality of life" or qol OR AB "role ambiguity" or "role conflict" or "intention to leave" or "self-esteem"

AND

AB "aged care facilit*" or "rest home*" or "private hospital*" OR AB "retirement village*" or "care home*" or "home for the aged" OR AB "nursing home" or "long term care" or "long-term care" or "longterm care" OR AB "residential aged care" or "residential care" or "residential facility" or "residential home"

Pubmed

"support worker*" [Title/Abstract] OR "nursing assistant*" [Title/Abstract] OR "healthcare assistant*" [Title/Abstract] OR "carer*" [Title/Abstract] OR "caregiver*" [Title/Abstract] OR "nurs* aid*" [Title/Abstract] OR "therapy aid*" [Title/Abstract] OR "therapy assistant*" [Title/Abstract] OR "direct care staff" [Title/Abstract] or "personal care staff" [Title/Abstract] or "personal care assistant*" [Title/Abstract] OR cna* [Title/Abstract] or "certified nurs* assistant*" [Title/Abstract]

AND

retention* [Title/Abstract] OR turnover* [Title/Abstract] OR "mental health" [Title/Abstract] OR wellbeing* [Title/Abstract] or "well-being" [Title/Abstract] or "well being" [Title/Abstract] OR stress* [Title/Abstract] OR burnout [Title/Abstract] or "burn-out" [Title/Abstract] or "burn out" [Title/Abstract] OR burden [Title/Abstract] OR satisfaction [Title/Abstract] or "quality of life" [Title/Abstract] or qol [Title/Abstract] OR "role ambiguity" [Title/Abstract] or "role conflict" [Title/Abstract] or "intention to leave" [Title/Abstract] or "self-esteem" [Title/Abstract]

AND

"aged care facilit*" [Title/Abstract] or "rest home*" [Title/Abstract] or "private hospital*" [Title/Abstract] OR "retirement village*" [Title/Abstract] or "care

home*"[Title/Abstract] or "home for the aged"[Title/Abstract] OR "nursing home"[Title/Abstract] or "long term care"[Title/Abstract] or "long-term care"[Title/Abstract] or "longterm care"[Title/Abstract] OR "residential aged care"[Title/Abstract] or "residential care"[Title/Abstract] or "residential facility"[Title/Abstract] or "residential home"[Title/Abstract]

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retention* OR turnover* OR "mental health" OR wellbeing* or "well-being" or "well being" OR stress* OR burnout or "burn-out" or "burn out" OR burden OR satisfaction or "quality of life" or qol OR "role ambiguity" or "role conflict" or "intention to leave" or "self-esteem"

Appendix 2. Main intervention components

Six main intervention components were identified:

1. Education sessions and materials – provision of information on a specific topic, e.g. teaching about dementia and its consequences, or person-centred care approach;
2. Interpersonal skills training – provision of interpersonal skills training, e.g. group session during which staff practiced a specific way of communicating with others.
3. Team meetings – provision of new meeting structures to facilitate staff's discussions and/or brainstorming, e.g. adding a 30-minute debriefing session following each handover meeting.
4. Rewards – provision of incentives serving as rewards in recognition of good service.
5. Relaxation and exercise – provision of structured exercise or meditations sessions/materials.
6. Mentoring – training a support worker to become a mentor/trainer; could include elements of any of the above.

Appendix 3. Knowledge-based interventions summary table.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
Almquist, E. et al. (1981); Risk of bias: Very high; Comment: No control group. The study was conducted on a group of n=29 NAs and n=52 LPNs who underwent the training separately, and the results were reported separately for each group. Life satisfaction was measured with the Life Satisfaction Scale (Adams, 1969).				
A before and after study design. Data was collected at baseline and six weeks later (immediately post-intervention).	The goal of this training was to provide NAs with knowledge about long term care and improve their attitudes toward elderly. The course was delivered over a period of six weeks. Training sessions of about 90 minutes were held twice a week. The education focused on anatomy, physiology of ageing, physical and psychosocial problems of the elderly, attitudes, and communication skills. It was not reported who delivered the training.	n=29 NAs in n=3 nursing homes in Florida, US.	Life satisfaction No significant differences were found.	Not applicable
Barbosa, A. et al. (2016); Risk of bias: Moderate; Comment: Concealment method not reported. Researchers were not blind to group allocation. Perceived stress was measured with the Portuguese version of the Perceived Stress Scale (Pais Ribeiro & Marques, 2009); burnout was measured with the Maslach Burnout Inventory Human Services Survey (Melo et al., 1999); job satisfaction was measured with the Minnesota Satisfaction Questionnaire (Ferreira et al., 2009).				
A cluster-randomised controlled trial with outcomes measurements collected at baseline, and at two weeks and six months post-intervention.	The control group received the Person Centred Care-Based Education program. The education component of the program provided NAs with: a) principles of integrating person centred care into practice, b) knowledge about dementia, c) a range of person centred care-based interaction strategies. The experimental group received the same program with an addition of a supportive component (The Person-Centred Care-Based Psychoeducational). The experimental group program aimed to provide NAs with coping strategies to manage work-related stress and prevent burnout. It included training in time management, assertiveness and problem solving. At the end of each session, relaxation techniques, stretching and strengthening exercises were practiced.	n=53 NAs in n=4 residential aged care facilities in Portugal; n=24 in the experimental group and n=29 in the control group.	Perceived stress Both groups reported significantly higher levels of stress at six-month follow-up than at baseline and two-week follow-up. No other significant changes were found. Burnout A significant time interaction effect on the personal accomplishment subscale was found. The scores for both groups declined immediately post-intervention. However, in the experimental group the scores had then improved at the last follow-up. In the control group, the scores declined further. No other significant changes were found. Job satisfaction	Not applicable

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	Both groups programs were coordinated by a gerontologist and a physical therapist and included eight weekly 90-minute sessions. Additionally, during the three days following the education sessions the two coordinators assisted the NAs during morning care and suggested ways of implementing a more person centred care approach.		No significant changes were found.	
Beck, I. et al. (2013); Risk of bias: High; Comment: Allocation was not random, and groups differed at baseline. General job satisfaction was measured with the Job Satisfaction Questionnaire (Ekvall, 2001); satisfaction with nursing care was measured with the Psychosocial Aspects of Job Satisfaction scale (Engstrom et al., 2006); strain was measured with Strain Dementia Care Scale (Edberg et al., 2013); stress of conscience was measured with the Stress of Conscience Questionnaire (Glasberg et al., 2006).				
A before and after study with a control group. Outcome data were collected immediately before and after the intervention, and at six months post-intervention.	Applying a palliative care approach in residential care. Consisted of seven two-hour circle sessions and three six-hour workshops. A circle leader participated in a three-day workshop with two follow-up days. The circle leaders ran the circle sessions and workshops were for nurse assistants (NA). The leader's role was to facilitate the circle sessions and workshops rather than act as experts. The sessions focused on discussing and reflecting on texts and practical tasks carried out prior to the meetings, e.g. reading about the topic or interviewing a resident. The circle session topics included palliative care philosophy, older people's experiences, autonomy, relatives' role and support, life before death, and being a staff and a fellow human. The workshops focused on discussing how to change the practice based on the circle sessions teachings.	NAs in residential aged care facilities in Sweden; n=88 NAs in the intervention group; n=137 NAs in the control group.	General job satisfaction A statistically significant change over time (worse) in the intervention group. No statistically significant changes were found in the control groups. Satisfaction with nursing care Statistically significant changes in internal motivation (worse) and criticism (better) over time in the intervention group. Statistically significant changes in cooperation, and internal and external motivation (better) over time in the control group. Strain A statistically significant change over time was found for the intervention group (an increase in mean values, followed by a decrease). Post-hoc analysis found a significant decrease in strain between post-intervention and six months. No statistically significant changes were found in the control groups. Stress of Conscience No Changes.	Not applicable
Bright-Long, L. E. (1990); Risk of bias: Very high;				

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
Comment: A single group design. Research design characteristics very general and lack some important information (e.g. total number of participants). Study results lack clarity. Paper only reports survey results and only to some of the items; no statistical tests were applied. Burden was measured with an adapted version of the Zarit Burden Interview, not previously validated.				
A before and after study design. Measures were taken at baseline, and four months later, after completing the intervention.	The intervention was designed to train NAs to understand the “who, what, where, why and how” of dementia. The program was delivered by the study researcher, an assistant professor of psychiatry. The program was delivered in weekly half-hour sessions. Each session was attended by a maximum of n=7 NAs.	NAs in a nursing home in New York, US; exact number of participants not reported.	Burden No statistical tests were applied. The scores appeared to have slightly improved following the intervention.	Not applicable.
Cheng, W. (2008); Risk of bias: Very high; Comment: Only n=6 participants were support workers (nurse aides (NA)). Job satisfaction was measured with the Minnesota Satisfaction Questionnaire (Weis et al., 1967); health perception with the SF-36 subscale General Health Perception (Ware & Sherbourne, 1992); quality of life with Chinese WHOQoL (Yao, 2002); all other measures were developed by the investigator for the current study. It appears that scoring on health perception scale is incorrect – reversed items are scored the same as non-reversed. Most of the mean scores at T0 and T1 scores do not add up to what authors report as the differences between those scores.				
An evaluation study using pre- and post-intervention measures at four timepoints: before intervention, within a week post-intervention, and one and three months post-intervention.	The Chinese version of Dementia Education Program. The focus was on behavioural and psychological symptoms of dementia (BPSD). Three teaching modules delivered over three weeks (one three-hour module a week). Delivered during work time. Each participant was given a certificate of completion. The modules were titled: Overview on Dementia; Related Issues on Dementia Care; and BPSD and Dementia Care. The program was delivered by the study investigator.	n=90 nursing staff from 55 nursing homes in Taiwan; the outcomes data is reported for n=45 direct nursing staff, only n=6 were NAs	Attitude No improvement within one week post-intervention. Improved (p<0.01) at 1 and 3 months post-intervention. Perceived Self-Efficacy Improved (p<0.001) at all timepoints. Caregiving Stress Improved (p<0.01) within one week post-intervention and improved (p<0.001) at one and three months post-intervention. Job Satisfaction No improvements observed. Health Perception No improvement within one week post-intervention and one month post-intervention. Improved (p<0.01) at 3 months post-intervention. Quality of life No improvements observed.	Not applicable

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
<p>Coogler, C. et al. (2006); Risk of bias: Very high; Comment: No control group. A pre/post evaluation of a state-wide training for support workers. Job satisfaction was measured with the Minnesota Satisfaction Questionnaire (Weiss et al., 1967); career commitment was measured with the Career Commitment Measure (Carson & Bedeian, 1994). Authors suggest that the time factor (9-12 months for post-test) needs to be considered and argue that the improvements in satisfaction can be reasonably attributed to the intervention. However, they believe that the decline in career commitment could potentially be a result of the passage of time.</p>				
A single group before and after study. Data was collected at baseline, and at 9-12 months later.	<p>This was a dementia care training program consisting of two phases.</p> <p>Phase one: focused on person-centred care training. The program curriculum to deliver this 12-hour training, included: a) information on dementia, b) care need of people with dementia, c) treatments for people with dementia, d) environmental issues, e) behavioural management, and f) successful caregiver interventions. This phase was delivered by a range of trainers, including nurses, social workers, occupational therapists, and other. These trainers were prepared during a course of six eight-hour sessions on training staff.</p> <p>Phase Two: utilised a train-the-trainer approach. NAs who had participated in the first phase were recruited to become trainers. They were then expected to teach their peers about care for people with dementia. The training focused on person-centred care and communication, behavioural management, and stress management. No information on duration of the second phase training was provided.</p>	n=53 nursing staff (>80% in long term care facilities) in Virginia, US; 73.8% were CNAs.	<p>Extrinsic job satisfaction A significant improvement in extrinsic job satisfaction subscale.</p> <p>Intrinsic and total job satisfaction No significant differences were found.</p>	<p>Career commitment A significant decline in total career commitment score, as well as in career identity subscale and career planning subscale.</p> <p>No significant changes were found for career resilience subscale.</p>
<p>Da Silva, L. et al. (2017); Risk of bias: Very high; Comment: No control group. Burden was measured with Zarit Burden Scale (Zarit et al., 1986); depression and anxiety were measured with the Beck Depression and Anxiety Inventory (Cunha, 2001); quality of life was measured with the Portuguese SF-36 (Ciconelli et al., 1999).</p>				
A single group before and after study design. Outcome data was collected at baseline, and 12	The Staff Training for Assisted Living Residences (STAR) aimed to reduce the behavioural and psychological symptoms of dementia and caregiver burden. It consisted of 12 modules which included lectures, discussions, games, video vignettes, and handouts. It features information on dementia,	n=25 nursing staff (caregivers and nurses) in n=2 long term care facilities for people with dementia in Brazil. Exact number of	<p>Burden No significant differences were found.</p> <p>Depression No significant differences were found.</p> <p>Anxiety No significant differences were found.</p>	Not applicable.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
weeks later (6 weeks post-intervention).	communication skills, and introduction of 'pleasant events'. It was delivered as a mixture of workshops (two x 2 hours each) and individual training sessions (four) over a six-week period. The program was led by the study researcher – an experienced occupational therapist specialised in gerontology and dementia care training.	caregivers and nurses not reported.	Quality of life No significant differences were found.	
Dichter, M., et al. (2017); Risk of bias: High; Comment: No randomisation. Groups were not similar. Job satisfaction was measured using Copenhagen Psychosocial Questionnaire (Kristensen et al., 2005); staff attitudes were measured using the Approaches to Dementia Questionnaire (Lintern et al., 2000); caregiver burden was measured using the Copenhagen Burnout Inventory (Borritz et Kristensen, 2001).				
A non-randomised controlled trial with three study arms. Data was collected at baseline, six and 18 months later. Group A was familiar with the intervention prior to implementation. Group B was new to intervention. Group C was a control group.	This program focused on implementing a Person-centred Care Approach (PCC) in dementia care with an aim to improve staff's attitudes towards dementia, job satisfaction and reduce burnout. The intervention period was 18 months. The program consisted of six phases: <ol style="list-style-type: none"> 1. Training of two caregivers per unit (three-day course) in PCC and observation and feedback skills. Preparation of the whole team. 2. Observations of care practices in the unit; by the two trained caregivers; 5-8 hours. 3. Data analysis and report writing by the trained caregivers. 4. Feedback of results to other staff. 5. Developing an action plan based on the gathered data and team's feedback. 6. Implementation of the action plan. Not reported who trained the staff.	n=290 care staff (nurses, social workers and nurse aids) in nine nursing homes in Germany; group A – n=81; group B – n=106; group C – n=103; exact number of nurse aids not reported.	Job satisfaction A significant decrease in scores over time (less satisfaction) in Group A. Scores increased in Group B and C; unclear if statistically significant. Burden A significant increase in scores over time (more burden) in Group A. Scores also increased in Group B and C; unclear if statistically significant. Staff attitudes A significant decrease in scores over time (worse attitudes) in all groups.	Not applicable
Dreher, M., et al. (2019); Risk of bias: Very high; Comments: Pre-post design. No control group. Well reported. Used validated measures. Compassion satisfaction, burnout and posttraumatic stress were measured with the Professional Quality of Life Scale (Stamm, 2010). No definition of 'retention' was provided. Retention appeared to improve, but no statistical tests were performed. Retention rates from before the study period were used to compare them with the rates from after the intervention. Four months retention rates were provided for before and after.				
A before and after study with no control group. Data was	The study tested a 90-minute interactive educational presentation, which included 12 short YouTube video	n=45 certified nursing assistants from a	Compassion satisfaction No significant changes were found. Burnout	Retention No statistically significant changes reported.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
collected at baseline and one and three months later.	clips embedded in the presentation. The presentation addressed compassion fatigue awareness and self-care skills. At the end of the presentation, participants were provided with a "Self-care Skills Toolbox", which included a journal, pen, pedometer, stress ball, herbal tea and some reading materials. A healthy nutrition bag with healthy food items was also distributed to each participant.	nursing home in Southeast, US.	Non-parametric statistically significant decrease over time. No other statistically significant changes reported. Stress Non-parametric statistically significant decrease over time. No other statistically significant changes reported.	
Finnema, E. et al. (2005); Risk of bias: Moderate; Comment: Outcome assessors were not "blind". Randomisation and concealment methods not reported. Perceived work-related stress was measured with the Organization and Stress Scale (Bergers et al., 1986); Stress was measured with the General Health Questionnaire (Goldberg and Hillier, 1979); work satisfaction was measured with the Dutch Work Satisfaction Scale (Boumans, 1990); absenteeism was measured as the number of days of absenteeism as reported by administration staff of the participating nursing homes.				
A randomised controlled trial. Measurements were taken at baseline, and three and seven months later (intervention still active).	<p>The integrated emotion-oriented care was a nine-month program delivered by nursing advisors.</p> <p>All NAs received a two-day basic training. This course focused on NAs' own experience, phases of ego-experience in demented residents, and application of empathic skills.</p> <p>An advanced course was offered to five NAs on each ward. This course consisted of seven days spread over a period of seven months, and focused on acknowledging the residents' experiences, making a life history, and being alert to how past may affect the present.</p> <p>One staff per ward was trained to become an 'adviser emotion-oriented care'. Motivated and enthusiastic staff with good interpersonal skills were selected to attend this last course. This course consisted of ten days, spread over nine months. This group was responsible for implementing the emotion-integrated care on their ward.</p> <p>No specific guidelines on how to implement the emotion-integrated care principles were given to advisers.</p>	n=99 NAs in n=14 nursing homes in the Netherlands; n=46 in the experimental group and n=53 in the control group.	<p>Perceived work-related stress No significant changes found.</p> <p>Stress Subgroup analysis: a significant improvement (less stress reactions) was found for NAs in the experimental group who applied more emotion-integrated care at seven months than at baseline compared to NAs in the control group who also felt they had improved regarding emotion-integrated care. No other significant changes found.</p> <p>Work satisfaction No significant changes found.</p>	Absenteeism No significant changes found.
Flannery, K. et al. (2012); Risk of bias: High;				

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
Comment: Very small sample size. The groups were significantly different at baseline (work ability, effort, reward). No randomisation. Job satisfaction was measured with the Nursing Home Administrator Job Satisfaction Questionnaire (Castle, 2006); job stress was measured with the short version of the Effort, Reward and Imbalance Questionnaire (Leineweber et al., 2010); work ability and demands were measured with the Work Ability Index (Tuomi et al., 2003).				
A before and after study design with a control group. Data was collected at baseline, and three and six months later (immediately post- and three months post-intervention).	<p>This study evaluated a worksite health promotion program based on the theory of self-efficacy and the socioecological model. The aim of the intervention was to improve NAs job satisfaction, job stress, and work ability.</p> <p>The program was delivered by a Master's-prepared nurse, over a period of 3 months. It consisted of three main components: environmental assessment, initial education, and ongoing motivation.</p> <p>Environmental assessment was a two-hour assessment of work factors affecting NAs health. Recommendations based on the assessment were made to the facility management.</p> <p>Initial education was a 30-minute lecture on cardiovascular health, exercise and diet.</p> <p>The third component, the ongoing motivation, was focused on motivating NAs to exercise, and reduce fat and salt intake. The program leader spent 40h/week focusing on this component in the first month, 16 h/week in the second and 8h/week in the third month of the project. Their role was to provide ongoing motivation and additional education to NAs.</p>	n=39 NAs in n=2 long term care facilities in Maryland, US; n=24 NAs in the experimental group and n=15 in the control (education only) group.	<p>Job satisfaction No significant differences were found.</p> <p>Job stress No significant differences were found.</p> <p>Work ability and demands A significant treatment effect favouring the experimental group.</p>	Not applicable.
Fragala, G. (2012); Risk of bias: High; Comment: This was a pilot study with a control group. Unclear and very limited information on most study design characteristics, study sample or study results. Outcomes were measured using a not validated survey. Staff attitude survey concerned staff's morale and their perceptions on management's commitment to providing a safe work environment.				
A before and after study design with a control group; outcome measures taken at baseline and three months	The program is a continuous initiative and focuses on addressing safe patient handling, preventing accidents, controlling losses, improving the quality of work life for staff, and quality of care for residents. The program can be delivered by a patient handling trainer. Staff who undergo the training, become expert users and serve as	Nursing staff in a long term care facility in Massachusetts, US; n=24 nursing staff (including registered nurses, licences	<p>Staff attitude Attitude scores were higher after at three months post-implementation than at baseline in the experimental group. No statistical test results were reported.</p>	Not applicable.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
later (Intervention still active).	a resource to other staff. The program has a five-step framework: <ol style="list-style-type: none"> 1. Risk identification. 2. Identification of areas requiring change. 3. Formulating recommendations to eliminate hazards. 4. Implementation (including education, buy-in, and training). 5. Measuring effectiveness and encouraging ongoing improvement. 	practical nurses, nurse aides, and other staff).		
Fukuda, K., et al. (2018); Risk of bias: Moderate; Comments: Quasi-randomised. Groups had an important difference – residents in the intervention group were more independent. However, all other aspects look good, so the risk of bias is acceptable. Numbers of care staff groups not reported. Stress/burnout was measured with the Maslach Burnout Inventory (Maslach & Jackson, 1981).				
A cluster quasi-randomised controlled trial. Data were collected at baseline and one-month after baseline.	The study used an intervention which was an educational program administered at baseline using printed educational material for the care staff called The Guidelines. The program was divided into two sections: Section 1 was composed of a 30-min educational lecture providing an overview and covering the basic principles of BPSD. Section 2 consisted of a thorough, 90-min explanation of the proper way to use The Guidelines when BPSD occurs at a care facility. These two sections were intended to thoroughly introduce the method of using The Guidelines to the care staff.	n=400 care staff members (including care workers, nurses, OTs and psychologists) from 22 care facilities in Japan; n=214 staff in the intervention group and n=186 in the control group. Exact care workers numbers not reported.	Stress/burnout No significant changes were found.	Not applicable
Harman, B. (1998); Risk of bias: High; Comment: Very small sample size. No randomisation. Job turnover rates were collected from the administrative staff at the facilities.				
A multisite, repeated measures, quasi-experimental group study. Outcome data was collected at baseline, and three and eight weeks later (one and six	The paraprofessional preceptor program focused on delivering a one-to-one interactive training in which a preceptor and preceptee are involved in communication and goal setting during preceptee's orientation in their new facility. The preceptor had to undergo a six-hour educational program focusing on issues related to caring for a resident with dementia and providing a learning	n=11 CNAs in n=6 dementia special care units in Missouri and Indiana, US; n= 6 in the experimental group and n=5 in the control group.	Not applicable	Job turnover No significant changes found.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
weeks post-intervention).	environment for preceptees. The program was delivered by the study investigator and was based on their experience working in dementia care. Main topics included: myths and realities of dementia, communication techniques, behaviour management techniques. After completion of the program, the preceptors were paired up with preceptees for a two-week period of orientation.			
Hsieh, H. et al. (2009); Risk of bias: High; Comment: No randomisation. There were significant differences between study groups at baseline. 12 participants were not included in the analysis as they completed less than 6 out of 8 education sessions. Caregivers stress was measured with the Work Stressors Inventory Chinese Version (WSI) (Lin, 2000). Even though the study reports significant improvements in caregivers' knowledge of gerontology and decline in caregivers' elder abusive behaviours, no significant changes in caregivers stress were reported.				
A case control before and after study design. Measurements were taken at baseline and 10 weeks later (on week post-intervention).	The intervention consisted of eight weekly 90-minutes sessions led by a trained graduate nurse. Each session was attended by 10-12 caregivers. The sessions focused on education and mutual support. The program covered issues related to ageing, managing residents' health problems, elder abuse, relaxation, stress management, and obtaining personal resources. The first 30 minutes of the session was delivered as a lecture, the next 40 minutes focused on sharing experiences and mutual support, and the last 20 minutes were dedicated to a group discussion.	n=112 caregivers (nurses and NAs) in n=4 nursing homes in Taiwan; n=2 experimental facilities and n=2 control facilities.	Caregiver stress No significant changes were reported.	Not applicable
Isaia, G. et al. (2011); Risk of bias: Very high; Comment: No control group. This was a hypothesis-generating study. Stress was measured with the Staff Stress Measure Dementia Care Scale (Gruetzner, 2001); only individual item improvements were reported; no total or subtotal scores comparisons.				
A single group before and after study. Data was collected at baseline, and at 4 months post-intervention.	The program aimed to increase NAs knowledge about aged care, and to improve their work-stress coping skills. It lasted eight months. The program consisted of two hours of training per week; total of 32 hours of theoretical lessons and 32 hours of role playing and discussions.	n=50 professional caregivers (NAs and registered nurses) in n=2 nursing homes in Italy. Exact number of NAs in the sample not reported.	Stress Statistically significant improvements on nine out of 20 items were reported. A significant decline on one out of 20 items was reported. No other significant changes were found.	Not applicable

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	<p>The main topics of the lessons were dementia, behavioural management, nutritional issues in dementia, pain in dementia, communication skills, impact of dementia on residents' lives.</p> <p>The training was led by a senior physician, by a nurse experienced in dementia care, by a psychologist experienced in group training, by a nutritionist, and by a pain specialist. The senior physician and the nurse were available to participants for an additional one hour a week to discuss any issues and provide general support.</p>			
<p>Kuske, B. et al. (2009); Risk of bias: Low; Comment: High quality study. No obvious risk of bias identified. The findings were reported for the total sample (not for NAs only). Burnout was measured with the German version of the Maslach Burnout Inventory (Bussing et al., 2003); level of health complaints was measured with the Health Complaints List (Zerssen, 1976). Authors conclude that education is only the first step in improving everyday practice and argue the importance of focus on implementation of new knowledge. They also suggest more recognition of staff's potential is necessary to allow staff to implement the new knowledge.</p>				
A cluster-randomised controlled trial. Data was collected at baseline, and three and six months later (immediately post and three months post-intervention).	<p>The training aimed to improve nursing staff's interactions with residents through improving staff's knowledge on dementia, communication, and care skills.</p> <p>The training was delivered over a period of 13 weeks (three months) in one-hour weekly sessions.</p> <p>The training was delivered by a health and nursing scientist with applied experience in nursing.</p> <p>The relaxation group received 13 weekly one-hour relaxation sessions. The sessions were delivered by a clinical psychologist.</p>	n=96 nursing staff (nurses, NAs, occupational therapists, and other) in n=6 nursing homes in Germany; n= 38 staff in the experimental group (at least 15 NAs), n=30 staff in the relaxation group (at least 14 NAs) and n=28 staff in the control group (at least 7 NAs).	<p>Burnout No significant changes were found.</p> <p>Health complaints A significant decrease in health complaints for relaxation group.</p> <p>No other significant differences were found.</p>	Not applicable
<p>Li-Yu, W. et al. (2005); Risk of bias: High; Comment: Non-randomised controlled trial. The control group was made up of people who were not allowed (by their managers) to participate in the training. Small sample size. The groups were not similar at baseline. Work stressors was measured with the Work Stressor Inventory (Lin et al., 2002);</p>				
A before and after study design with a control group.	The purpose of this weekly empowering in-service training was to promote a sense of control and increase awareness of autonomy in foreign NAs. The series	n=35 foreign NAs in n=10 long term care facilities in Taiwan;	<p>Work stressors A significant difference in "workload/scheduling" after the intervention – the work stress of</p>	Not applicable.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
Outcome data was collected at baseline and three months later (at completion of the intervention).	consisted of 10 one-hour meetings and was delivered by the study researchers. The series started with a needs assessment process – this was an attempt to establish a trusting relationship between the NAs and researchers. The content of the following meetings included: physical assessment of resident, common diseases, emergency techniques, wound care, rehabilitative exercise, nutrition, stress management, communicable diseases protection for facilities, occupational risk protection, and physical exercise.	n=16 in the experimental group and n=19 in the control group.	"workload/scheduling" increased in the experimental group. No other significant changes found.	
MacDonald, C. (2007); Risk of bias: Very high; Comment: No control group. Data on turnover came from the facilities administrator and included historical comparison data. Authors report a 36% decrease in turnover in one of the participating facilities, and an average 17% decrease in the study sample.				
A single group before and after study design. Outcome data was collected at baseline, and at 3, 6, 9 and 12 months later.	The intervention was an online e-learning solution for long term care workers to improve the quality of care and quality of life of residents. The program consisted of eight modules related to healthcare issues in long term care facilities. They were delivered online and available 24/7. The topics included: abuse and neglect, elopement attempts, corporate compliance, infection control, nutrition and hydration, pressure ulcers, provision of basic care, restraints.	n=753 healthcare workers in long term care facilities in Illinois, US; n=312 CNAs (41%)	Not applicable	Turnover rates A downward trend was indicated but no statistical tests were performed.
Mackenzie, C. et al. (2003); Risk of bias: High; Comment: No randomisation. No clearly stated research question/hypothesis. Groups were not similar before the intervention (shifts worked: greater proportion on night shifts in the experimental group; additionally, self-efficacy appeared significantly different at baseline). Self-efficacy was measured with a measure developed for this study, not previously validated; burnout was measured with the Maslach Burnout Inventory (Maslach et al., 1996); satisfaction with teamwork and relationships with other caregivers was measured using the Interaction subscale from the Organisational Job Satisfaction Scale (Sauter et al., 1997).				
A before and after study design with a control group. Data was collected at baseline, and immediately post- an	This program aimed to decrease nursing staff's stress and burnout through enhancing their self-efficacy in managing challenging work situations. The programs consisted of four modules: teamwork module, challenging resident behaviour module, family module, and a review module. Each module was two	n=41 nursing staff from n=2 units in a long term care facility in Toronto, Canada; n=28 staff in the experimental group (n=20 NAs) and n= 13	Self-efficacy A significant difference at three-month follow-up favouring the experimental group was found. Burnout	Not applicable.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
at three months post intervention.	hours long, delivered once a week for a month. The modules started from a one hour didactic session, followed with one hour of experiential role-playing. The knowledge and skills were reinforced with a training manual and placement of posters highlighting key strategies. Total cost of the course was \$4,396 USD. It was not reported who delivered the intervention.	staff in the control group (n=10 NAs).	A significant treatment effect for personal accomplishment was found at post-intervention assessment, but not at three- month follow-up. No other significant changes were found (emotional exhaustion and depersonalisation subscales). Satisfaction with teamwork/relationships with co-workers No significant differences were found.	
Noel, M. et al. (2000); Risk of bias: High; Comment: No randomisation. Difference between control and treatment groups. Study used data from before the study period. Turnover and absenteeism data was provided by the facilities. Turnover was expressed as the total number of terminations divided by the total number of budgeted FTEs (full time equivalents) in the last year. Absenteeism was expressed as the total number of absences divided by the total number of budgeted FTEs.				
A before and after study design with a control group. Data was collected at 12 months and compared with historic data.	An in-house education program based on the North Carolina State curriculum for CNAs was developed and evaluated. It focused on improving the orientation for new staff, adding a mentorship component and formal instruction by a nurse educator. The nurse educator was employed to work 20 hours a week in each facility for the full 12 months. The program included structured incentives for good performance and encouragement of licensed staff to include CNAs in the facilities' interdisciplinary teams. The program also attempted to stabilise staff to resident ratios.	n=3 long term care facilities in North Carolina, US.	Not applicable	Turnover A significant drop in turnover rates in one experimental facility, and a non-significant drop in the other experimental facility. The rates in the control group remained stable. Absenteeism No significant differences were found.
O'Brien, W., et al. (2019); Risk of bias: High; Comments: Randomisation method not explained. Authors do not report the study's aim; objectives unclear. The outcome measures were likely not used the way they were intended to. A lot of study aspects not explained. Authors report $p=0.11$ as "marginally significant". Absenteeism was measured by self-reported days missed due to injury. Stress (mental well-being) was measured with a screening tool for minor psychiatric disorders called the General Health Questionnaire (Goldberg, 1978).				
A randomised waitlist control trial. Baseline and one	The study tested the Acceptance and Commitment Therapy (Flaxman et al., 2013) as an intervention for nurses and nurse aides. The intervention was delivered by faculty and trained graduate students.	n=71 care staff (including nurses and nurse aides) from nursing homes and	Stress A significant reduction in mental health symptoms in the intervention group. No statistically significant between-group changes found.	Absenteeism A significant decrease in days missed due to an injury was reported in the between-groups

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
month after intervention.	The intervention consisted of two 2.5 hour group sessions a week apart. The intervention focuses on acceptance and mindfulness and altering one's stress appraisal processes; on values identification and their embedment in one's work; and on committing to making changes in aspect of work that are in conflict with one's values.	assisted living facilities in Ohio, US. n=37 in the intervention and n=34 in the waitlist control.		comparisons, favouring the treatment group. Control group reported a significant increase in days missed due to an injury. No other statistically significant changes reported.
Resnick, B. et al. (2004); Risk of bias: Very high; Comment: No control group. This was a pilot study; the final intervention was evaluated in the Resnick et al. (2009) study. Job satisfaction was measured with the Job Attitude Scale (Helmer et al., 1995).				
A single group before and after study. Data was collected at baseline, and at four and 12 months later (intervention was still active).	The Res-care intervention was a self-efficacy-based motivational intervention. It focused on teaching the nursing assistants (NA) the Res-Care philosophy and skills (tier 1) and motivated the NA and helped them motivate and engage the residents in functional and physical activities. Tier 1 included six weekly 30-minute sessions led by two advanced practice nurse. Tier 2 focused on ongoing motivational support from a 'champion' Res-care nurse coordinator, over a 12-month study period. The Res-care 'champion' was providing ongoing supervision and motivational support, helped the NA prepare plans for the residents, and served as an interface between the NA and all other involved stakeholders. They also provided education session with respect to integrating Res-care into practice.	n=13 NAs from a nursing home in Maryland, US.	Job satisfaction No significant changes were found.	Not applicable
Resnick, B. et al. (2009); Risk of bias: Moderate; Comment: Randomisation method, concealment method and "blinding" not reported. Evaluated a range of outcomes unrelated to this review (e.g. intervention's feasibility and uptake). Job satisfaction was measured with the Job Attitude Scale (Helmer et al., 1995).				
A cluster-randomised controlled trial. Measurements were taken at baseline, and four and 12	The Res-care intervention was a self-efficacy-based motivational intervention. It focused on teaching the nursing assistants (NA) the Res-Care philosophy and skills (tier 1) and motivating the NA and helping them motivate and engage the residents in functional and physical activities. Tier 1 included six weekly 30-minute	NAs in nursing homes in Maryland, US; n=283 in n=6 experimental sites, n=273 in control sites	Job satisfaction Experimental group improved in job satisfaction from baseline to 12 months, whereas control group remained stable. No other significant changes reported.	Not applicable

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
months later (intervention still active).	sessions led by advanced practice nurses. Tier 2 focused on ongoing motivational support from a 'champion' Res-care nurse coordinator, for 20hr a week over a 12-month study period. The Res-care 'champion' was providing ongoing supervision and motivational support, helped the NA prepare plans for the residents, and served as an interface between the NA and all other involved stakeholders. They also provided education session with respect to integrating Res-care into practice.			
Tannazzo, T. et al. (2008); Risk of bias: Very high; Comment: A single group design. General job satisfaction was measured with the General Job Satisfaction scale (Hackman & Oldham, 1974); intrinsic and extrinsic job satisfaction was measured with the Grau Satisfaction Scale (Grau et al., 1991).				
A before and after study design. Measures were taken at baseline, and at three (immediately post-intervention) and seven weeks later.	<p>The treatment focused on training CNAs to manage difficult behaviours in patients with dementia. The training includes three 7.5-hour days over three weeks. The training curriculum includes six modules:</p> <ol style="list-style-type: none"> 1. Putting the person first (recognising patient needs). 2. The environment (risk factors, wandering and decreasing wandering occurrence). 3. Enhancing the bathing experience. 4. Assisting with activities of daily living. 5. Mealtimes and the person with dementia. 6. Meeting the challenges of catastrophic reactions (dealing with patient's anxiety, paranoia, hallucinations). <p>It was not reported who delivered the training.</p>	n=301 CNAs in n=3 nursing homes in New York City area, US;	General job satisfaction No significant changes. Intrinsic job satisfaction A significant increase in intrinsic satisfaction between immediately post-intervention and four weeks later. No other significant changes reported.	Not applicable
Tynan, C. et al. (1984); Risk of bias: Very high; Comment: No control group. Turnover was reported as the total number of staff who left the facility between January and September.				
A single-group before and after study design. Outcome	The program aimed to prepare new staff better through an orientation program. The program focused on providing educational and psychological preparation and	One long term aged care facility in Arizona, US. Total number of NAs not reported.	Not applicable	Turnover No statistical tests were performed.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
measurement were collected at baseline and one year later.	<p>was based on principles of human relations and behavioural theories.</p> <p>The first of the three parts of the program was a half a day presentation about the facility's philosophy, structure, policies, facility layout, etc. This part was delivered by the administrative director and assistant director of the facility.</p> <p>Part two was called 'Sensoriperceptual Experience'. This part a 1.75-hour workshop delivered by a staff development instructor. During the workshop, the employees had to complete selected tasks of daily living while wearing a range of props to simulate having a disability. This was followed by a group discussion on the abovementioned tasks, on ageing, and on communication with elders.</p> <p>Part three was a two-day workshop on basic nursing skills, delivered by a staff development instructor. This workshop covered a range of skills essential in the NA's job.</p> <p>Some educational resources were made available to all staff, including guidelines, lists of medications and their actions and side effects, and other.</p> <p>Following completion of the three parts, the NAs were assigned to a clinical unit and buddied up for two days with a 'reliable employee' whose job was similar to theirs.</p>			Downward trend was reported with the total number of terminations dropping from 47 to 28. Total number of NAs on the payroll was not reported.
<p>Wells, D. et al. (2000); Risk of bias: High;</p> <p>Comment: Intervention and control groups were significantly different at baseline (educational attainment, and employment status). Concealment method not reported. Not all trainers and outcome assessors were "blind". Only n=1 active cluster vs n=3 control clusters. Caregiver's level of stress was measured with the Hassles Subscale of the Nurses Hassles and Uplifts Scale (Craig, 1995).</p>				
A cluster-randomised trial with data collected at baseline, and at three and six	Caregivers in the experimental unit were educated to provide the abilities-focused program of care. The program consisted of five 20-30-minutes sessions. The program focused on: a) effects of dementia on the social abilities and on the self-care abilities. Strategies	n=44 caregivers in n=4 nursing homes in Canada; n=16 caregivers in the experimental unit and	<p>Caregiver's level of stress</p> <p>No significant changes were found.</p>	Not applicable.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
months post-intervention.	addressing issues within those abilities were taught to the caregivers. For example, how to use reflexes to facilitate bathing or dressing. Each session was repeated until all caregivers in the unit received all five sessions. Reinforcement sessions were provided every second week for three months, and then monthly until completion of the study. In these sessions caregivers were sharing their experiences in implementing the new skills. The training was delivered by the study researchers.	n=28 caregivers in the control units.		
Zimmerman, S. et al. (2010); Risk of bias: Moderate; Comment: Randomisation, concealment and 'blinding' methods not reported. Work stress was measured with the Work Stress Inventory (Shaefer & Moos, 1993); job satisfaction was measured with the Staff Experience of Working with Demented Residents Questionnaire (Astrom et al., 1991); role recognition was measured with the Benjamin Rose Relationship with Supervisor Scale (Kiefer et al., 2009).				
A nested cohort group-randomised trial. Data was collected at baseline, and immediately post- and three months post-intervention.	<p>This was a dementia care training program. The training for NAs differed slightly from the supervisors training. The NAs training consisted of three modules delivered in four sessions over a period of six weeks.</p> <p>First module, Learning to lead – Building a vision, was a one session module.</p> <p>About dementia – Improving communication, was the second one-session module, and focused on communication challenges and strategies to improve communication.</p> <p>The third module, Reducing pain, was a two-session module. It focused on sources and expressions of pain, and strategies to report, prevent and respond to pain. It was not reported who delivered the intervention.</p>	n=662 nursing staff (NAs, nurses, medication assistants, LPNs) from 16 long term care facilities in US; n=291 staff in the training group (n=165 NAs) and n=371 in the control group (n=208 NAs)	<p>Work stress A significant increase in work stress score for NAs at three-month follow-up in the training group. No other significant changes found.</p> <p>Job satisfaction Secondary analyses: A significant difference was found between facilities with low intervention fidelity compared with facilities with high intervention fidelity, favouring the high intervention fidelity. No other significant changes were found.</p> <p>Role recognition No significant changes were found.</p>	Not applicable

Appendix 4. Interpersonal skills-based interventions summary table.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
Boersma, P., et al. (2017); Risk of bias: High; Comments: No randomisation. Groups were not similar. Less than a half of participants were included in the final analysis. Job satisfaction was measured with the Leiden Quality of Work Questionnaire (Van der Doef and Maes, 1999).				
A before and after study with a control group. Data was collected at baseline and nine months later.	This program used the Veder Contact Method (VCM), which combines methods such as reminiscence, validation, emotion-oriented care, and neuro-linguistic programming. VCM seeks to improve contact between patient and caregiver. It follows a fixed procedure of: (1) greeting the resident, (2) appealing to long-term memory, (3) communication about the present time, and (4) saying goodbye. The training includes: <ol style="list-style-type: none"> Five 3-hour group sessions on knowledge transfer and skills training. Three 3-hour on-the-job coaching sessions focusing on behavioural observation and direct feedback. The training was delivered by VCM experts over a period of nine months.	n=111 nursing staff from n=4 nursing homes in the Netherlands. n=75 staff in the experimental group (n=27 NAs and nursing hostesses); n=36 staff in the control group (n=5 NAs and nursing hostesses).	Job satisfaction No significant changes were found.	Not applicable
Broughton, M. et al. (2011); Risk of bias: High; Comment: Participants in the intervention group had significantly more years of experience in their current role. Treatment allocation was not random. Not all subjects analysed in the groups they were initially allocated to. Satisfaction was measured with the Positive Aspects of Caregiving (Tarlow et al., 2004). Authors reported that the qualified nurses' and NAs satisfaction scores were significantly higher than activities staff's scores. However, only the nurses scores improved significantly as a result of the intervention.				
A before and after study design with a control group. Data was collected at baseline and at 3 months post-intervention.	The experimental group received training in supporting memory and communication in people with dementia. The training provides the NAs with two evidence-based strategies. The training is delivered in one 90-minute session. The main component of it is a 50-minute DVD exemplifying the two strategies. The DVD screening is followed by an expert commentary from a psychologist and speech	n=52 nursing staff (NAs, nurses, activities staff) in n=4 nursing homes in Queensland, Australia; n=37 in the experimental group (n=22 NAs) and n=15 in	Satisfaction No significant differences were found for NAs.	Not applicable.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	pathologist. Participants were given a booklet summarising the DVD material and a lanyard card listing the strategies. Also, posters listing the strategies were placed around the facility.	the control group (n=11 NAs).		
Covert, B. (2007); Risk of bias: Very high; Comment: No randomisation. No control group. Turnover rates were based on the data collected from the participating facilities administrators and expressed as the number of terminations within preceding 28 days divided by the number of NAs on payroll in the same period. Sick day utilisation was also based on the data collected from the administrators and expressed as the sum of sick days taken in the preceding 28 days divided by total days worked in the same period.				
A before and after study design. Outcome measurements were collected at baseline, and at 4 weeks post-intervention.	<p>The Customer Service Training program aimed to lower the turnover and sick leave utilisation through teaching communication and interpersonal skills. It was delivered by an expert in designing and instructing customer service training.</p> <p>The training was delivered in a single day and took approximately twelve hours. It consisted of three main modules: 1) attitude training (improving team work and empathising with the residents), 2) action training (communication skills), and 3) accountability training (to encourage and increase good behaviour in NAs).</p>	n=97 NAs in n=2 nursing homes in Ohio, US.	Not applicable	Turnover rates No significant changes found. Sick leave utilisation No significant changes found.
Franzmann, J. et al. (2016); Risk of bias: High; Comment: No randomisation. A lot of the study design characteristics not reported. Study groups were not similar. The experimental group was made up mostly of registered nurses (62%). Mental stressors at work were measured with the SALSA (Rimann & Udriss, 1997); the occupational mental stress was measured with the Short Version BHD (Hacker & Reinhold, 1999).				
A before and after study design with a control group. Data was collected at baseline, and at four weeks and six months post intervention.	<p>The program uses a train-the-trainer approach and views the trainers as moderators rather than teachers.</p> <p>The main aim of the program is to improve NAs communication skills with people with dementia.</p> <p>The trainers were called multipliers and were trained over a period of six months, for 120 minutes every two weeks. The training qualified the multipliers to design, deliver and evaluate training sessions for their colleagues. During these sessions, the multipliers were passing on their knowledge on communication skills.</p>	n=116 geriatric caregivers (CNAs, NAs, registered nurses) in n=14 nursing homes in Germany; n=31 caregivers in the experimental group (n=13 NAs and CNAs) and n=81 caregivers in the control group (n=47 CNAs and NAs).	Mental stressors at work A significant decrease in the experimental group when compared to control group at six-month follow-up. No other significant changes reported. Occupational mental stress A significant decrease in the experimental group when compared to control group at six-month follow-up. No other significant changes reported.	Not applicable

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	It was not reported who trained the multipliers. However, a training manual is available. It was not reported how many sessions a month were the multipliers organising for their colleagues.			
Haberstroh, J. et al. (2011); Risk of bias: High; Comment: No randomisation. Not clear how many nurses vs NAs in the sample. Four comparison groups (control, only first training session, only second training sessions, both training sessions); not reported how many people in each group. Job stress was measured with the Occupational Stress Screening for Human Service Providers (Hacker & Reinhold, 1999).				
A before and after study design with a control group. Data was collected at baseline, and seven weeks later (post-intervention).	This was a communication training program for professional caregivers in dementia care. The program consisted of two training sessions, eight-hour long each. They were held with an interval of two weeks. First session focused on communication with residents with dementia. Second session focused on communication with colleagues. Not reported who delivered the sessions.	n=53 geriatric caregivers from n=6 nursing homes in Germany. n=4 comparison groups (group sizes not reported).	Job stress A significant treatment effect favouring the experimental group was reported.	Not applicable.
McCallion, P. et al. (1999); Risk of bias: Moderate; Comment: Randomisation and concealment methods not reported. Only two clusters. Turnover was measured as the number of people leaving the facility in the last calendar quarter. The authors discussed the importance of booster sessions to ensure continued implementation of the program (communication skills). The participating facilities were able to continue the program using existing staff and resources.				
A study using a cluster (care units) randomised controlled trial design. The data was collected at baseline (immediately post-intervention), and at three, six and nine months post-intervention.	The Nursing Assistant Communication Skills Program consisted of five 45-minute group sessions and four 30-minute individual sessions. The individual sessions served as a way to personalise the training, practice and provide feedback about skills taught in the group sessions. Also, they served as make-up sessions for NAs who were unable to attend the group sessions. The program was delivered by a master's level social worker with experience in working with residents with dementia. The social worker was required to do some background reading and then attend a training. Their training focused on: a) stages of dementia, b) verbal and nonverbal communication strategies in dementia, c) developing and using memory aids, d) approaches to	NAs in n=2 nursing homes in New York area, US; n=39 NAs in experimental group and n=49 NAs in control group.	Not applicable	Turnover A significant decline in turnover rates from baseline to six months in the experimental group when compared to the control group. No other significant changes.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	training NAs, agendas for group and individual sessions, and how to provide feedback. During the group and individual sessions, the social worker followed the agenda and taught the NAs about the abovementioned topics.			
Passalacqua, S. et al. (2012); Risk of bias: Very high; Comment: No control group. Outcome measures were delivered in English. However, some of the participants found the measures difficult to understand at pre-intervention test (42% were not native English speakers). The authors decided to truncate the measures and used them at post-intervention assessments, without previously validating them. Happiness was measured with two items from the Shortened Depression-Happiness Scale (Joseph et al., 2004); burnout was measured with the Emotional Exhaustion Subscale of the Maslach Burnout Inventory (Maslach & Jackson, 1981).				
A single group before and after study. Data was collected at baseline; and at approximately 14 weeks later (10 weeks post-intervention).	<p>The program aimed to teach NAs appropriate communication skills to foster person-centred care. It was delivered by two researchers with expertise in gerontology and patient-provider communication. The program was offered in four one-hour sessions over a period of four weeks.</p> <p>Each workshop focused on specific topics related to communication. Week 1 focused on “valuing people; week 2 on “individualised care”; week 3 on “personal perspectives”; and week 4 on “Social environment”.</p>	n=26 paraprofessional caregivers in a long term care facility for people with dementia in Southwest, US.	Happiness No significant changes were found. Burnout No significant changes were found.	Not applicable
Pillemer, K. et al. (2003); Risk of bias: Moderate; Comment: Randomisation method, concealment method and “blinding” not reported. Evaluated some outcomes related to the interventions feasibility and uptake. Relatively high drop out in the experimental group (40 vs 27%). Depressive symptomatology was measured with CES-D (Radloff, 1977); burnout was measured with the Maslach Burnout Inventory for nursing staff (Pillemer & Moore, 1989); intention to quit was measured by a single item asking about likelihood of quitting job in the next 12 months (not validated).				
A randomised controlled trial with measurements at baseline, and at two and six months post-intervention.	<p>The main aim of the program was to increase cooperation and effective communication between staff and family members of residents. The program consisted of two parallel workshop series: one for CNAs, and one of family members of residents; and a combined two-hour session for staff and families at the end of the workshop.</p> <p>The CNA workshop consisted of 9 sessions and took approximately seven hours on one day. The sessions were built around three main concepts:</p> <ol style="list-style-type: none"> 1. Active listening. 	Nursing staff in n=20 nursing homes in Central New York region, US; n= 256 in experimental group (68% CNAs) and n=399 in control group (66% CNAs).	Depressive symptomatology No significant changes reported. Burnout No significant changes observed.	Intention to quit A significant difference between experimental group (decline in intention to quit) and control group (increase in intention to quit).

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	2. Giving feedback. 3. "I-messages". The program was delivered by trainers with extensive leadership experience.			
Robison, S. et al. (2007); Risk of bias: Moderate; Comment: This program was a specialised dementia unit adaptation of the Pillemer et al. (2003) study. Randomisation, concealment and blinding methods not reported. Participants who did not complete follow-up assessments were excluded from the outcomes analysis (not intention-to-treat approach). Depression was measured with the Center for Epidemiologic Studies – Depression (Ross & Mirowsky, 1989); burnout was measured with the Depersonalisation Subscale of the modified Maslach Burnout Inventory (Pillemer & Moore, 1989); job satisfaction was measured with the Generic Job Satisfaction Scale (MacDonald & MacIntyre, 1997); intention to quit was measured with a not previously validated single item; job stress was measured with a not previously validated single item.				
A randomised controlled trial. Data was collected at baseline, and at two and six months post-intervention.	This program was a specialised dementia unit adaptation of the Partners in Caregiving Program (Pillemer et al., 2003). Modifications included a new module on understanding dementia and behavioural symptoms of dementia, as well as a number of case studies illustrating specifics of working with people with dementia. The program consisted of two parallel workshop series: one for nursing staff, and one of family members of residents; and a combined two-hour session for staff and families at the end of the workshop. The workshop consisted of 9 sessions and took approximately seven hours on one day. The sessions were built around three main concepts: 1. Active listening. 2. Giving feedback. 3. "I-messages". The program was delivered by trainers with extensive leadership experience.	n=384 nursing staff (CNAs, LPNs, registered nurses) in n=20 nursing homes in Connecticut, US; n=184 in the experimental group staff (n=134 CNAs) and n=200 staff in the control group (n=146 CNAs).	Depression No significant changes were found. Burnout No significant changes were found. Job satisfaction No significant changes were reported. Job stress No significant changes were reported.	Intention to quit No significant changes were reported.
Schrijnemaekers, V. et al. (2003); Risk of bias: High; Comment: No clear research question/hypothesis. Randomisation and concealment methods not reported. The outcome assessors were not 'blind'. There were differences between groups at baseline. Job satisfaction was measured with the Maastricht Work Satisfaction Scale for Healthcare (MWS) and the Short Maastricht Work Satisfaction Scale for Healthcare (short MWS) (Landeweerd et al., 1996) and with three other not validated items; burnout was measured with Maslach Burnout Inventory (Schaufeli et al., 1993); sick leave utilisation in last three/six months was reported by the participants as days off sick in that time period; work situation was measured with a single not validated item.				

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
A randomised controlled trial study. Outcome data was collected at baseline, and at three, six and 12 months post-intervention.	<p>The emotion-oriented care training aimed to reduce burnout and sick leave and improve job satisfaction in professional caregivers. It consisted of three parts. Firstly, all employees at the facility attended two clinical lessons which informed the participants about the general ideas of emotion-oriented care.</p> <p>The second component of the program was delivered by 'a highly experienced and motivated teacher' over a period of six days. The first four days were given at intervals of two weeks, and the last two days were given at an interval of four weeks. The sessions were attended by eight caregivers from each facility. They had to be 'key figures' in the daily care for residents and be able to implement the emotion-oriented care approach in their facility. The participants were taught about dementia, communication skills, and understanding the residents' perception of the environment.</p> <p>The third component of the program were three supervisions meeting (half-a-day each). They were held over a period of four months, after completion of the second component. They served as a platform to discuss goals, agreements and evaluations of the program.</p>	n=300 professional caregivers in n=16 homes for elderly in the Netherlands; n=155 caregivers in the experimental units and n=145 in the control units.	<p>Job satisfaction Linear trend analysis (average change per month): a significant difference in 'opportunities for self-actualisation' subscale, in the short MWS, and in 'satisfaction with contact with residents' in favour of the experimental group. These differences appeared mainly after 12 months of follow-up.</p> <p>Some other significant changes (satisfaction with 'head of the ward', 'quality of care', 'contact with colleagues', and 'opportunities for self-actualisation') in favour of the experimental group at 12 months were reported, but no data was shown.</p> <p>Burnout Linear trend analysis (average change per month): a significant difference in 'personal accomplishment' in favour of the experimental group. This difference appeared after 12 months of follow-up. No other significant changes reported.</p> <p>Work situation No significant differences were found.</p>	Sick leave utilisation No significant differences were found.
<p>Sprangers, S. et al. (2015); Risk of bias: High; Comment: Very small sample size. No randomisation. Intervention was delivered by the researchers. Job satisfaction was measured with Utrecht Work Engagement Scale (Schaufeli & Bakker, 2004); caregiver distress was measured with the Dutch version of the Neuropsychiatric Inventory Questionnaire (Kaufer et al., 2000).</p>				
A before and after study with a control group. Outcome data were collected at baseline (pre-intervention) and eight weeks later (post-intervention).	<p>The intervention focused on teaching the NAs communication skills suitable for different types of dementia. The number of sessions for each nursing aide (NA) depended on their communication skills checklist score – either one (better scores) or two (worse scores) sessions.</p> <p>The training session were delivered by the researchers. NAs were observed during their interactions with</p>	NAs in a nursing home in the Netherlands. n= 24 NAs. Number of people in control and intervention groups not reported.	<p>Job satisfaction No significant changes.</p> <p>Caregiver distress A significant improvement over time in the intervention group when compared to control group.</p>	Not applicable.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	residents. After these observations, NAs received feedback on their communication. They were encouraged to keep using the effective strategies that they had used, and to start using new skills they had not used. The use and purpose of new skills were explained. If they used negative strategies, it was explained to them why they should not use these strategies.			
Teri, L. et al. (2005); Risk of bias: High; Comment: Randomisation, concealment and blinding methods not reported. Very small sample. Primary outcome, job satisfaction, not measured with a previously validated instrument.				
A small randomised controlled trial with data collected at baseline, and eight weeks later (immediately post-intervention).	<p>The program was based on an integrated model of person-environment fit and social learning theory. The program taught staff how to identify factors within their environment, and within their interactions with residents, that can be modified to improve the care they provide and reduce resident distress.</p> <p>The program focused on: a) basic information about dementia and its consequences, b) communication skills, c) 'pleasant events' for residents, and d) managing residents' distress.</p> <p>The program was delivered over a period of two months, as two half-day workshops and four individualised sessions. Not reported who delivered the intervention.</p>	n=25 direct care staff in n=4 assisted living facilities in Washington, US; group sizes not reported.	Job satisfaction No significant changes were found.	Not applicable

Appendix 5. Team-building interventions summary table.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
Catanzaro, D. (1992); Risk of bias: High; Comment: A wide range of outcomes were measured (many referring specifically to satisfaction), yet statistical significance levels were not adjusted, with some analyses using $p < 0.1$ as level of statistical significance. Some differences between groups at baseline. very high dropout, approx. 60% (due to high staff turnover); those people were not included in the final analysis. Small final sample (n=25 at second post-test). Perceived influence was measured with a not validated tool (showed good internal reliability in the current study); satisfaction with influence was measured with the Satisfaction with influence questionnaire (Rafaeli, 1985); organisational commitment was measured with the Organisational Commitment Questionnaire (Mowday et al., 1979); turnover intention was measured with the Michigan Organisational Assessment Questionnaire (Cammann et al., 1983); role conflict and role ambiguity were measured with the Role Conflict and Ambiguity Scale (Rizzo et al., 1970); satisfaction of higher-order needs was measured with the Need Satisfaction Scale (Lawler & Hall, 1970); satisfaction with service role and satisfaction with organisational policies were measured with the Minnesota Satisfaction Questionnaire (Weiss et al., 1967); turnover rates were obtained from the participating facilities' administrators.				
A before and after study design with a control group. Data was collected at baseline, and 34 weeks and 50 weeks later (26 and 42 weeks post-intervention).	The program consisted of weekly one-hour problem-solving meetings. They were attended by NAs and other members of the care team, over a period of seven weeks. The meetings were attended by four to six people. Meeting 1 was used to identify a range of problems affecting the NAs daily work. Meetings 2 and 3 were used to examine causes contributing to the problems identified in meeting 1, and to rank the problems in terms of their impact on residents or families satisfaction. Meeting 4 was used to discuss the top two serious problems and brainstorm solutions. Meeting 5 was used to evaluate possible solutions, and to select one or two best solutions to each problem. During meeting 6, the NAs developed an action plan of how to implement the previously chosen solutions. Meeting 7 was used to finalise the action plan. The action plans were then presented to the management for their approval. The approved action plans were then implemented by NAs within the facility. Meeting 8 was a 'Behaviour modelling training sessions', where a training film was used to depict handling	n=72 NAs in n=4 nursing homes in Virginia, US; n=41 in the experimental group and n=31 in the control group.	Perceived influence Some significant findings reported but unclear in which direction. Satisfaction with influence No significant differences were found. Role conflict and ambiguity No significant differences were found. Satisfaction with higher-order needs No significant differences were found. Satisfaction with service role No significant differences were found. Satisfaction with organisational policies No significant differences were found.	Organisational commitment No significant differences were found. Turnover intention A significant improvement in the experimental group. Turnover No findings reported.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	common customer complaints. Meeting 8 was 90-minute long and was attended by two-three NAs. During this session, the NAs practiced the behaviours presented in the film, and received feedback from the facilities Director of Nursing.			
Hegeman, C. et al. (2007); Risk of bias: Study 1 High, Study 2 Very high (before and after study); Comment: Study 1 - no randomisation. Groups were not similar at baseline. Sample sizes not clear. This paper reports the results from two studies evaluating the same intervention. Retention rates were defined as the percentage of CNAs who, hired at the beginning of the project, still remained at the facility. In Study 2, one of the groups was not included in the analysis due to "insufficient data collection".				
Study 1: A before and after study with a control group. Data was collected at baseline, and at three months post-implementation (intervention still active). Study 2: A before and after study with no control. Data was collected at baseline, and at three and six months post-implementation (intervention still active).	<u>Same for both studies</u> This peer mentoring program aimed to improve CNA retention rates by improving orientation processes. Mentors were trained in a six-hour workshop consisting of a range of mini-lectures. Topics included: mentor's role, tools for mentoring, communication skills, importance of compassion, importance of attitude, leadership skills. Following the initial training, the mentors also received three three-hour booster sessions. These focused on reviewing the abovementioned content, and also on stress management, time management, adult education, and death and dying. Each mentor is then paired-up with a new CNA for approximately four weeks. Mentors role is to model correct care skills, positive attitudes, and time management. It was not reported who delivered the mentors training.	Both studies were conducted in New York, US. Study 1: CNAs in n=10 nursing homes in the experimental group and n=6 nursing homes in the control group. Study 2: CNAs in n=15 nursing homes; divided into three groups receiving the same intervention. Not clear how many facilities in each group.	Not applicable	Retention rates Study 1: A significant increase in the experimental group. No significant findings for the control group. Study 2: No report on pre-test vs post-test results. Significantly lower retention rates at six months compared to three months post-implementation. No other significant findings reported.
Howe, E. (2014); Risk of bias: Very high; Comment: No control group. Quality of work life was measured with the Quality of Work Life Survey (QWL) (Krueger et al., 2002). The study had a qualitative component evaluating participants' feelings of empowerment and reported that participants experienced an increased sense of empowerment as a result of the intervention.				
A single group before and after study design.	The Long Term Care Team Talk program consisted of a debriefing strategy, which involved an informal and brief but routine team meetings at the end of the shift to	n=15 nursing staff in a long term care facility in	Quality of work life	Intention to quit (QWL subscale) The authors reported significant difference in the intention to

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
Outcome measurements were collected at baseline and 12 weeks later (8 weeks post-intervention).	discuss the work day. The daily meetings were five-minute long and took place over a period of one month. The meetings were led by a rotating schedule of CNAs and focused on three aspects: 1) things that went well today, 2) things that can be improved, 3) what's needed in order to improve. Participants of the meetings included CNAs, nurses and other interdisciplinary team members as invited by the CNAs.	New York, US; n=8 CNAs and n=7 nurses.	A significant difference (improvement) in co-worker & supervisor support subscale was found between before and after scores. The authors reported significant difference in the characteristics of the unit subscale scores. However, these were reported as significant at $p<0.1$ level. No other significant differences were found.	quit/transfer subscale scores. However, these were reported as significant at $p<0.1$ level.
<p>Petterson, I. et al. (2006); Risk of bias: Very high; Comment: No control group. Not clear how many residential care nursing assistants took part. A range of outcomes were measured but it is unclear what tools were used and the only information on the tools psychometric properties is regarding their internal reliability (based on the study sample). These outcomes included: workload (e.g. work demands, physical workload), staff resources (e.g. support from management, job satisfaction, control), health and well-being (e.g. stress symptoms, well-being), health resources (e.g. coping, mastery).</p>				
A single group before and after study design. Outcome measurements were collected at baseline and 18 months later (immediately post-intervention).	This 18-month intervention focused on empowering healthcare staff in elderly care and improving their work and health conditions. In the first phase of the intervention, "Train the trainer" approach was used to facilitate participation. Selected NAs were trained one full day a week for ten weeks as leaders of the project in their own unit. The leaders were supported by each unit's management and staff unions. The leaders training involved: sessions on quality of care and ethics, session on work quality, sessions on communication, coping, oral presentations and role-playing. As a motivational incentive, the leaders were given a pay rise. In the second phase, the leaders returned to their units as trainers and managed competence circles where they were transferring the programme content to their colleagues. The circles were organised weekly for five weeks and took 6 hours each. These sessions were led by the leaders and supervised by geriatric teachers. In the third phase, all units started their own projects addressing local issues identified in phase two. For	n=200 nursing staff (80% were NAs, 20% were nurses and other staff) in n=14 care units in Sweden; n=127 nursing home staff and n=73 home carers.	<p>Workload No significant differences were found.</p> <p>Staff resources A significant decline in 'learning and development'. No other significant differences were found.</p> <p>Health and well-being Significantly worse scores on 'psychosomatic symptoms' and 'musculoskeletal symptoms'. Significant improvement in general health.</p> <p>Health resources No significant differences were found.</p>	Not applicable.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	example, orientation programs, quality improvement, nursing routines, etc.			
<p>Pillemer, K. et al. (2008); Risk of bias: Moderate; Comment: Randomisation, concealment and 'blinding' methods not reported. Turnover rates data was provided by the facilities and expressed as a number of all CNAs who left the facility in the preceding 6 months divided by the average number of CNAs on the payroll during that period. Job satisfaction was measured using the Generic Job Satisfaction Scale (MacDonald & MacIntyre, 1997); stress was measured with one not previously validated item; job commitment was measured with one not previously validated item. The intervention led to a significant decrease in turnover rates of CNAs. The authors suggest reconceptualising the intervention from a retention specialist to a retention team. They also argue the importance of booster sessions.</p>				
A randomised controlled trial with data collected at baseline, and at six and 12 months later (intervention still active).	<p>The program focused on training one CNA in each facility to become a Retention Specialist (RS) and to implement a range of retention strategies within their facility. This person received tools and ongoing support to carry out needs assessments, implement a range of retention strategies, evaluate the impact of their efforts and modify their approach as needed. This person served as the key internal advisor regarding retention programs.</p> <p>The first component of the program, the RS training, consisted of three days. It focused on promoting retention practices (retention issues, creating climate for retention, diagnosis of retention, implementing retention programs) and on specific retention programs (e.g. mentoring programs, respect and recognition programs, programs to improve interpersonal skills).</p> <p>The second component of the program was the ongoing technical assistance which was provided by the project staff. It involved access to retention-related resources online, and via telephone contact and print materials.</p> <p>The third component of the program was to leverage community resources through establishing a 'Living well, living healthy' information kiosks. The kiosks were easily available to all facility staff and covered topics related to personal issues (e.g. financial well-being or health lifestyle).</p> <p>It was not reported who delivered the program.</p>	n=762 CNAs in 30 nursing homes in New York area and Connecticut, US; n=379 CNAs in the experimental group and n=383 CNAs in the control group.	<p>Job satisfaction No significant differences were found.</p> <p>Stress No significant differences were found.</p>	<p>Turnover rates A significant decrease in turnover at 12-month assessment. A non-significant decrease at 6-month assessment.</p> <p>Job commitment A significantly different change between six and 12-month assessments favouring the experimental group.</p>

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
<p>Torsney, K. (2000); Risk of bias: High; Comment: It appears that both researchers and participants were aware of treatment allocation. Randomisation method not reported. Not clear whether groups were similar at baseline. Not all subjects analysed in the groups they were randomly allocated to. The turnover rates data came from the nursing care coordinators at each participating facility and was expressed as the number of people who had left the facility within the last fiscal year. Stress was measured with the Care Provider Questionnaire (Mahairas et al., 1990); self-esteem was measured with the Global Self-Esteem Scale (Rosenberg, 1965); coping style was measured with the Multidimensionality of Coping Scale (Endler & Parker, 1990). Authors suggest that the significant difference in coping style scores for between CNAs and LPNs by participation, indicated that empowering workers would have more of an effect for the workers with the lowest status.</p>				
A randomised controlled trial with data collected at baseline and 8 weeks later (immediately post-intervention).	<p>The program proposed including CNAs and Licensed Practical Nurses (LPN) in interdisciplinary team meetings.</p> <p>At the beginning of the intervention, all CNAs and LPNs were shown a short video describing the team approach in health care and team building.</p> <p>The participants had to attend and contribute to interdisciplinary team meetings for 15-minutes each week for eight weeks.</p>	n=64 nursing staff from n=10 long term care facilities in the Northeast, US; n=23 in the experimental group and n=23 in the control group; the sample included CNAs and LPNs (exact numbers not reported).	<p>Self-esteem No significant differences were found.</p> <p>Stress No significant differences were found.</p> <p>Coping style Subgroup analysis: A significant difference between CNAs who participated in the intervention and those who did not, when compared to LPNs who participated in the training and those who did not.</p> <p>No other significant differences were found.</p>	<p>Turnover rates No significant differences were found.</p>
<p>Webb, H. (2003); Risk of bias: High; Comment: Low attrition, especially in the experimental arm (only 36 out of 59 completed the post-test). No randomisation. There were differences between groups at baseline. The comparison nursing home stopped their staff training six months prior to the study commencement. Turnover data was provided by the participating facilities. Turnover rate was calculated as the total number of termination in the preceding six months divided by the total number of CAN positions available; revolving door turnover rate was calculated as the total number of CAN terminations within six months of hire date within six-month period divided by the total number of CAN positions available; retention rate was calculated as the total number of CNAs with one year or more of service at the assessment time divided by the total number of CNA positions available; job satisfaction was measured with a modified version of the Nurse Assistant Assessment Survey (Bell, 1998); morale was measured with the Staff Morale Survey (Educatorsnet, 2001); empowerment was measured with the Employee Empowerment Questionnaire (Hayes, 2001). This study reports very good improvements in staff turnover over time and compared to the control group. However, the retention rate they reported for control group (107%) is not possible and likely an error.</p>				
A quasi-experimental non-equivalent control (comparison) group study. Data was collected at baseline, and six months later	<p>This study combined two staff empowerment approaches, Character First and a Reward Program, to decrease CNA turnover. The study used Zimmerman's (2000) empowerment theory as the framework.</p> <p>The intervention was run over a period of six months. It focused on providing recognition of good character of CNAs and rewarding them for their continued service.</p> <p>The programs were facilitated by the supervisors who attended one-day training seminar.</p>	n=98 CNAs from n=2 nursing homes in Rhode Island, US; n=47 CNAs in the experimental group and n=51 in the control group.	<p>Job satisfaction No significant changes were found.</p> <p>Staff morale No significant changes were found.</p> <p>Empowerment No significant changes were found.</p>	<p>Turnover rate A significant decline in the experimental nursing home was reported.</p> <p>Revolving door turnover rate An improvement is reported, but no information provided regarding its statistical significance.</p> <p>Retention rate</p>

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
(immediately post-intervention).	Formal recognition took place during monthly staff meetings. Three to five qualities (from a list of 49 character qualities) were given to each CNA, in order to formally recognise their good character. Also, during the monthly meetings, rewards were given to staff who were celebrating their service anniversary. The rewards were related to the employee's career goal/dream. This was something that the employee always wanted to do in their career. The goal could be related to the employees' will to, for example, pursue an engineer career. The goal didn't have to be relevant to the nursing home. The aim of this approach was to show an interest in the employee and treating them as an asset, and not as an object of productivity.			An improvement is reported, but no information provided regarding its statistical significance.
Yeatts, D. et al. (2007); Risk of bias: High; Comment: No randomisation. Groups were not similar. The post-test period is reported as an average of 16 months for the intervention, and 17 months for the control group. The intervention was still running during post-test. The outcome measures were not previously validated.				
A before and after study with a control group. Measurements were taken at baseline, and 16-17 months later (intervention still active).	<p>The intervention focused on establishing empowered work teams of certified nursing assistants (CAN). The teams were organised by shift and service area (e.g. a wings of a nursing home). Establishing an empowered team involved training and orienting the CNAs, nurses and management of the facility.</p> <p>The aim of the intervention was to empower the CNAs through involving them in management decisions related to CNAs work, reviewing residents' health condition, reviewing new residents and their needs, and any other issues of concern to CNAs.</p> <p>The team provided weekly written summaries of each team meeting to nurse management. The management reviewed the summaries and provided feedback to the teams.</p> <p>The intervention involved also short stand-up meetings. These meetings were organised to address immediate</p>	Certified nursing assistants in nursing homes in Texas; n= 314 to 353 CNAs in total; the exact number of participants in each group was not reported.	<p>Self-esteem No significant changes.</p> <p>Burnout No significant changes.</p> <p>General job satisfaction No significant changes.</p> <p>Empowerment The experimental group improved significantly over time in global empowerment, autonomy, meaningfulness, and competence. The difference over time was statistically significant between the groups for all but the competence subscale.</p>	<p>Intention to quit No significant changes.</p> <p>Self-reported absenteeism No significant changes in the intervention group. Statistically significant increase in the control group.</p> <p>Turnover Significantly higher turnover in the control group post-intervention – however, baseline turnover unknown.</p> <p>Commitment No significant changes in the intervention group. Statistically significant decrease in the control group.</p>

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
	concerns. For example, determining the best way to get all the residents to a planned activity, given a staff's absence.			

Appendix 6. Exercise and fitness interventions summary table.

Design	Intervention	Population	Psychosocial outcomes	Turnover-related outcomes
Brox, J. et al. (2005); Risk of bias: Moderate; Comment: Randomisation, concealment and blinding methods not reported. Unclear how job satisfaction was measured. Sick leave utilisation was expressed as the total number of sick days in the preceding seven months.				
A randomised controlled trial with data collected at baseline, and six months post implementation.	The study evaluated a fitness program intervention for nursing home employees. The program consisted of a weekly exercise session lasting for one hour. The program was based on an aerobic fitness model and aimed to improve cardiovascular fitness, muscle strength and flexibility. It was delivered by experienced fitness instructors. Additionally, the participants were offered classes on physical exercise, nutrition and stress management.	n=129 nursing staff (nurses and NAs) from a nursing home in Norway; n=65 in the experimental group and n=64 in the control group. Exact number of NAs in the sample not reported.	Job satisfaction No significant differences were found.	Sick leave utilisation A significant increase in sick leave utilisation in the experimental group.

Appendix 7. Full list of outcomes identified in studies included in Study 1A.

Over 35 outcomes were identified in the included studies. These outcomes were classified into 13 types of outcomes:

1. Turnover-related – turnover, turnover rates, revolving door turnover, and similar;
2. Retention rates;
3. Intention to quit – intention to quit, intention to leave, job commitment, and similar.
4. Absenteeism – absenteeism, sick leave utilisation, and similar;
5. Stress-related – stress levels, burnout, burden, strain, workload, coping style, distress, and similar. Where Maslach Burnout Inventory was used, I considered the Emotional Exhaustion total score;
6. General satisfaction – job satisfaction, life satisfaction, general satisfaction, happiness, and similar;
7. Other satisfaction – specific types of satisfaction, for example satisfaction with supervision;
8. Quality of life;
9. Self-esteem – self-esteem, self-efficacy, empowerment level, and similar;
10. General health – general health, health, well-being, and similar;
11. Depression – depression, anxiety, happiness, depressive symptomatology, and similar;
12. Staff attitude – staff attitude, staff morale, and similar;
13. Other – outcomes not fitting under any of the abovementioned categories.

Appendix 8. Study 1B focus group guide.

Focus group protocol

Prior to group starting –arrive early to set up space (e.g. organise voice recorder and refreshments). Get parking slips ready. Get name badges ready. Set up the prompts and poster.

General rules:

- a) Set a positive tone.
- b) Make sure everyone is heard; draw out quieter group members.
- c) Probe for more complete answers e.g. can you tell me more about that?
- d) Paraphrase and summarize long complex or ambiguous comments.
- e) Remain neutral as moderator.
- f) Don't argue a point with a participant.
- g) Monitor your questions and the time closely.

Part 1

1. Introductions.
2. Information sheets - answer any questions.
3. Consent forms and demographic forms - filled in and signed by all group participants.
4. **Reminder about confidentiality in focus groups – can't be guaranteed, but important that everyone respects that what is said in the group stays in group.**
5. Establish ground rules:
 - **don't talk over others;**
 - **respect other participants' contribution;**
 - **let everyone have a say.**
6. Establish an agreed finish time.
7. Remind that this discussion will be recorded.
8. Present the power point.

Part 2

Turn on the voice recorder when everyone is happy to get started.

1. Ask people to say their names for the transcriber – slow and clear.
2. Any questions about the presentation before we start our discussion?
3. Focus group questions:
 - What are your initial thoughts on the interventions?
 - The literature review findings:

A. What strategies/approaches

Which interventions/strategies are known to you? What is your experience in integrating them into practice?

Which of these interventions are most likely to improve the psychosocial outcomes and turnover rates for support workers? Why do you think so? What is it about them that makes them so?

What are pros and cons of each intervention?

Are there any strategies that you think would be effective but haven't been mentioned?

A. How to implement

What would it take to integrate these interventions into practice? How would they fit currently existing structures? What could the potential costs be?

Who are the people that would be directly or indirectly affected by these interventions? What could the implications be on their regular job tasks?

B. Proposing the intervention

What do you think about the proposed peer-mentoring approach? Would it be attractive to aged care facilities?

What should be the components of the Aged Care Support Specialist training?

How should the mentor (Aged Care Support Specialist) be selected?

How should their work as a mentor be organized (how many hours a week; group vs individual sessions; etc.)?

What could any potential barriers for the Specialist in performing their role? How could they be overcome?

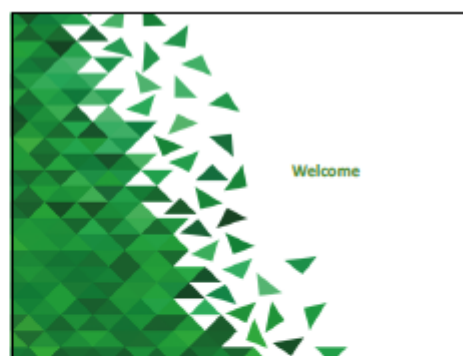
What kind of support could be required for the Specialist (e.g. refresher sessions, meetings with Specialists from other facilities, etc.)?

1. Round up - summarize the discussion explain what the next steps are.
2. Turn the recorder off.
3. Thank participants for their time (plus petrol vouchers).

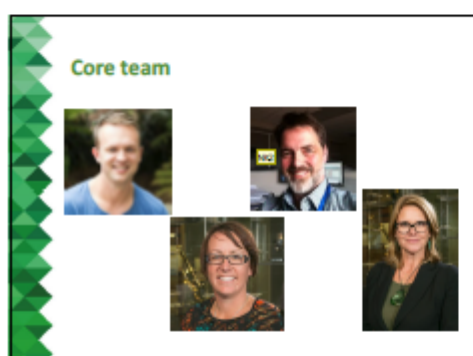
Appendix 9. Study 1B first focus group and interview presentation



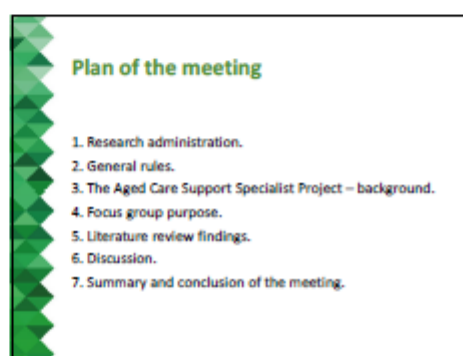
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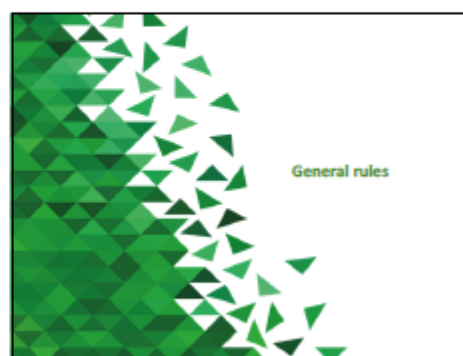
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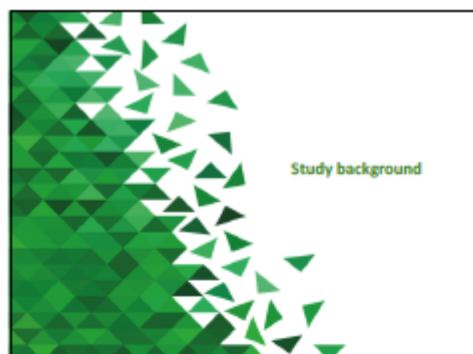
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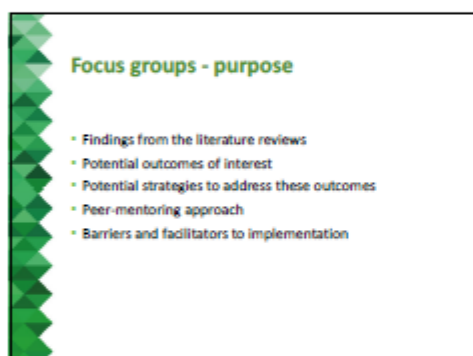
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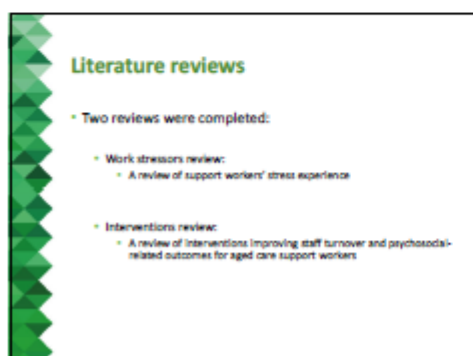
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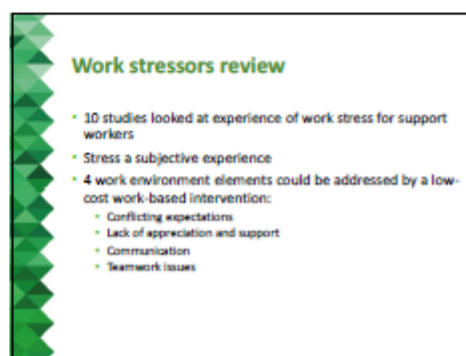
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Discussion

- Do these findings resonate?
- In what way do these stressors impact in your experience?
- How are they currently managed?
- What is missing from this list?

13

Interventions review

- Three outcomes most likely to be affected:
 - Stress
 - Satisfaction
 - Staff turnover
- Three approaches most likely to be effective:
 - Education sessions
 - Communication skills
 - Peer-mentoring

14

Interventions review

- EDUCATION:
 - Teaching about processes and stages of ageing and dementia
 - Well-being and managing stress
 - Managing residents' pain, discomfort and behaviour
- Shown to be effective in improving job satisfaction and reducing stress levels.

15

Interventions review

- COMMUNICATION:
 - Improving verbal and non-verbal communication skills
 - Active listening and giving feedback
 - Specific communication tool and approaches for working with people with dementia
- Shown to be effective in reducing staff turnover and intention to quit.

16

Interventions review

- PEER-MENTORING:
 - Train a support worker to become a mentor
 - The mentor runs workshops and one-on-one sessions, and helps other workers putting the newly acquired knowledge to use
 - The mentor promotes retention and motivates staff
 - The mentor implement recognition and respect programs
- Shown to be effective in reducing staff turnover.

17

Impression

1. Education, Communication skills development, and Peer-mentoring interventions effective at reducing work stress, intention to quit and staff turnover, and improving job satisfaction.
2. Peer-mentoring could serve as a cost-effective and feasible way of delivering these components

18

Discussion

- What strategies/approaches (A)?
 - How to implement (B)?
 - Peer mentoring as a strategy for delivering these (C)?
- AND
- Intervention structure; Training; Length; Intensity
 - Outcomes important to measure

19

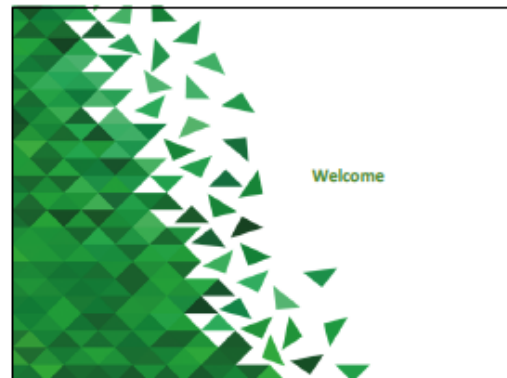
Summary and conclusion

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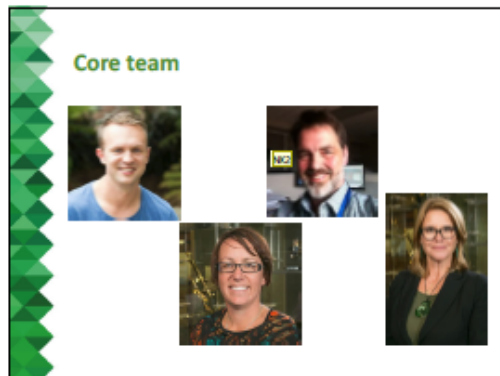
Appendix 10. Study 1B Second focus group presentation



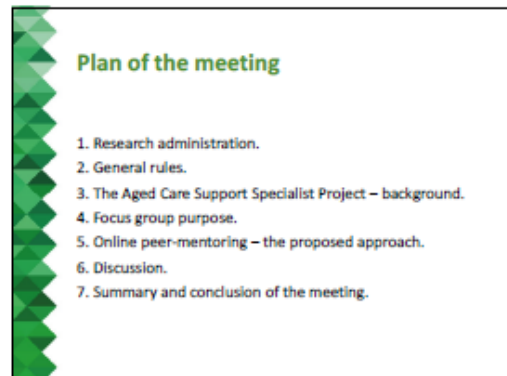
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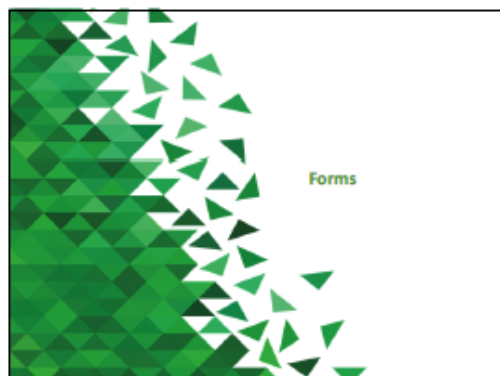
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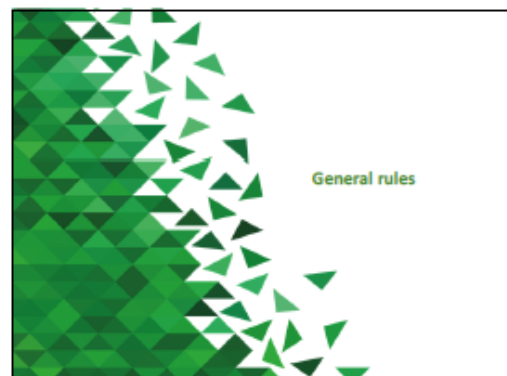
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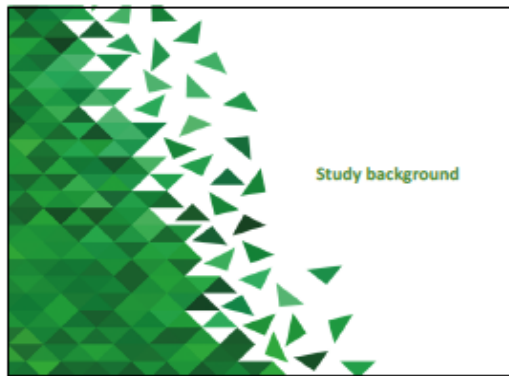
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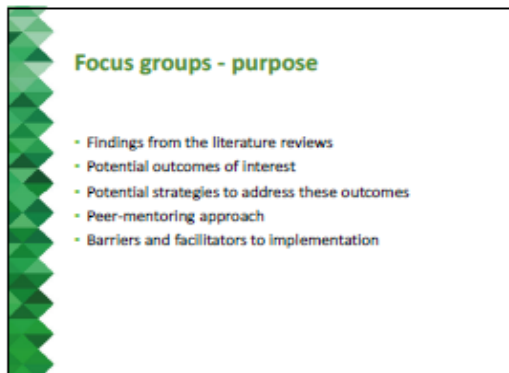
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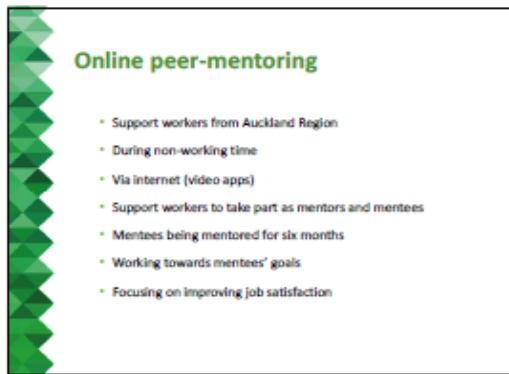
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FINNEMA ET AL 2005

INTERVENTION

Focused on emotion-oriented care and used a peer-mentoring approach. Emotion-oriented care aims to develop workers empathy skills.

All workers received a two-day training on emotion-oriented care. Selected workers received an additional ten days of training, and became 'advisers'.

'Advisers' were responsible for implementation of emotion-oriented care on their wards and provided on-going support to other workers.




SETTING



99 nursing assistants in nursing homes in USA.

OUTCOMES



Stress
Some significant improvements in workers who got better in emotion-oriented care.

Satisfaction
No significant changes.

Absenteeism
No significant changes.

+

-

-

EFFECTIVE INTERVENTIONS FOR SUPPORT WORKERS

This work was carried out to inform development of a work-based intervention improving support workers' turnover and psychosocial-related outcomes. Two systematic literature reviews were completed: a review of interventions for aged care support workers, and a review of support workers' stress experience. The below presents the main findings from the interventions' effectiveness review.

EDUCATION



Interventions focusing on staff education:

- a) Teaching processes and stages of ageing and dementia
- b) Well-being and managing stress
- c) Managing residents' pain, discomfort and behaviour.

Can improve job satisfaction and reduce stress levels.

COMMUNICATION



Interventions focusing on staff's communication skills:

- a) Improving workers' verbal and non-verbal skills
- b) Active listening and giving feedback
- c) Specific communication tools and approaches for working with people with dementia.

Effective in reducing staff turnover and intention to quit.

PEER-MENTORING



Interventions using this approach trained a support worker to become a mentor, and to:

- a) Help other support workers use newly acquired knowledge into practice;
- b) Promote retention and motivate staff;
- c) Implement recognition and respect programs.

Effective in reducing turnover rates.

Appendix 12. Second focus group guide.

Focus group protocol

Prior to group starting –arrive early to set up space (e.g. organise voice recorder and refreshments). Get parking slips ready. Get name badges ready.

General rules:

- a) Set a positive tone.
- b) Make sure everyone is heard; draw out quieter group members.
- c) Probe for more complete answers e.g. can you tell me more about that?
- d) Paraphrase and summarize long complex or ambiguous comments.
- e) Remain neutral as moderator.
- f) Don't argue a point with a participant.
- g) Monitor your questions and the time closely.

Part 1

1. Introductions.
2. Information sheets - answer any questions.
3. Consent forms and demographic forms - filled in and signed by all group participants.
4. **Reminder about confidentiality in focus groups – can't be guaranteed, but important that everyone respects that what is said in the group stays in group.**
5. Establish ground rules:
 - **don't talk over others;**
 - **respect other participants' contribution;**
 - **let everyone have a say.**
6. Establish an agreed finish time.
7. Remind that this discussion will be recorded.

Part 2

Turn on the voice recorder when everyone is happy to get started.

1. **Ask people to say their names for the transcriber – slow and clear.**
2. Any questions before we start our discussion?
3. Focus group questions:

What do you think about the proposed e-mentoring approach? Would it be attractive to aged care support workers? Motivation to take part in any intervention as an aged care support worker?

What would you want the program to focus on - psychosocial support? Career development?
What would it need to offer to be of interest? Main outcomes –

job satisfaction; also life satisfaction, self-esteem, empowerment, and community participation?

Would you be interested in being a mentor and why? What about being a mentee?

How should the mentors be selected – what criteria should be used (experience, NZQA qualifications, etc)?

How would you like this to be delivered – online only? Some face-to-face interaction? Email/txt?

Matching – what should a good mentoring relationship look like? What should the main matching characteristics be?

Mentoring relationship – starting the relationship? frequency of meetings? Duration of relationship? Scheduling meetings – who should do it? Meetings structure – how could a meeting look like?

Communication – access to internet/mobile? Videoconferencing tools; website?

Establishing goals for the relationship – how? What could some challenging areas of support workers life be? What types of goals could there be? How would you like to receive feedback on your progress as a mentee?

What could any potential barriers for the e-mentoring programme? How could they be overcome?

What kind of training and support could be required for the mentor (e.g. refresher sessions, meetings with Specialists from other facilities, etc.)?

What would be the best way of signing up?

How could one promote this intervention among support workers?

What names/words come to your mind when thinking about this intervention?

What type of features/elements would you want on the study website?

1. Round up - summarize the discussion explain what the next steps are.
2. Turn the recorder off.
3. Thank participants for their time (plus petrol vouchers).

how to be care-oriented?
- to maximize care-orientation?

Mgrs foc group

363 with an intervention the new people being more career orientated than just task orientated

364 P5: I think that's a really important focus but they have got to learn how to mix the caring with

365 the provision of the task that the employer needs

366 P3: Yeah I would challenge that just a little bit from my philosophy around orientation so my

367 orientation process is 2 weeks and you start that 2 weeks orientation fully paid

368 P5: RN's have a month

369 P3: And they're looking on their own they are not responsible or accountable they are simply

370 there to observe get in do the work but I also am very careful on who I allow them to be

371 mentored or buddied with so my preceptors because what I want my preceptors to be doing

372 over those 2 weeks is not just about the task but about the caring and about the

373 knowledge and living this is their home they live here we are privileged to look after them

374 you know to the smallest thing as you never enter a room if you don't knock and say morning

375 Mary how are you that's the start of the day that is not barging through pump the breakfast

376 down and go that's a task and so I think the focus has to be really strongly about that

377 orientation process because in that time you set the tones for level of care and your

378 expectation of the person I that role so if you do that well they don't take I mean our whole

379 whole orientation process is 2 months

332

Appendix 14. Mentee manual.

Starts on next page.



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Kia ora!

Thank you for your interest in WeCare – an internet-based mentoring (e-mentoring) programme for New Zealand support workers in aged care. My name is Karol Czuba and this programme is part of my doctoral project.



This project was inspired by my personal experience of caregiving and my passion for aged care. I know how rewarding it can be to give care, but also how challenging this job can be at times. The cover page of this manual makes me think of the balance between the powerful Moana, the rugged Whenua, and the unbounded Rangi – the sea, the land, and the sky. They coexist in perfect harmony. However, if that balance is lost, these forces can cause a lot of damage. Similarly, it is crucial to find the right balance between the rewards and demands of caregiving to ensure that all support workers can be healthy and well.

WeCare aims to create an e-mentoring community for support workers who work in residential aged care sector in New Zealand. This community will encourage and facilitate professional and personal development of its members, and help ensure a healthy and resilient aged care workforce for the ageing population of New Zealand.

Support workers, like yourself, are central to ensuring a sustainable aged care system in New Zealand. They provide high-quality care to frail elderly people and make a positive difference in their lives. However, the job is a challenging one, and support workers commonly deal with high levels of stress, poor working conditions, and high workloads. Working in such demanding conditions puts their health and well-being under threat.

Our research has found that many support workers would value more support and opportunities for professional and personal development. Many workers expressed a desire to share their experiences with other workers to work together to develop strategies to help them feel valued in their role, and manage their own health and well-being as they navigate life as a support worker. They wanted to talk to someone who understands their work, is not in a senior role and is available when they need them.

WeCare has been developed in response to the expressed needs and preferences of support workers in New Zealand. It offers free and flexible access to a collective resource of knowledge and experience of the aged care support workers. This programme aims to help its users grow, both professionally, and personally.

Our aim is to develop a tool that authentically reflects the needs of aged care support workers in New Zealand. We are mindful about the need for a Māori version of this manual, and would like to translate it to Māori in the future. For now, our team decided to focus on developing an English version with extensive input from people representing the many groups of people associated with aged care in New Zealand.

This booklet will introduce you to the programme, and provide all necessary information for you to participate and benefit from it.

Karol Czuba

Karol Czuba
The WeCare Team

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1. Introduction

Welcome to the WeCare Mentoring Programme. This manual will prepare you for taking part in the programme. Please read it carefully and familiarise yourself with its contents.

Through reading this manual, you will learn:

- What e-mentoring and its benefits are;
- What your role will be;
- What will happen during the programme;
- When you will choose and meet your mentor;
- How to communicate with your mentor;
- How to prepare for your mentoring sessions;
- Important safety information;
- And some other useful tips.

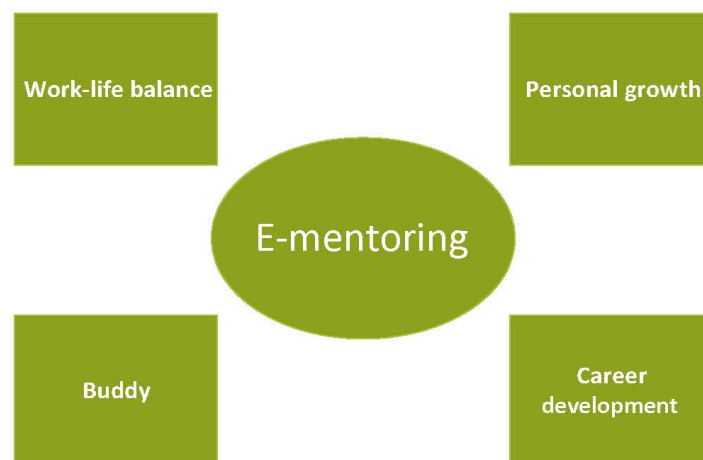
Please take your time reading the information provided. At the end of this booklet you will find space for personal notes (page 38). Use this space to write down your thoughts, comments or any questions you have while you are familiarising yourself with this manual.

We will contact you soon to schedule a **briefing session** during which we will discuss this manual, answer any questions you have, and give you some tips on preparing for your first mentoring session.

2. What is e-mentoring?

Mentoring is a relationship between a mentor and a mentee, where a reciprocal sharing of experiences and knowledge occurs, and offers mutual benefits. A mentoring relationship is usually focused on negotiating personal and/or professional goals or objectives, and working towards achieving them. This programme uses a peer-mentoring approach, meaning all participating mentors and mentees are employed as support workers. Taking part in a mentoring programme allows individuals to maximise their potential. It has been shown to increase people's satisfaction with work and life, and improve their ability to cope with work stress.

E-mentoring is a new approach to delivering peer mentoring which uses digital communication channels (e.g. internet) as a platform for establishing the mentoring relationship. The biggest advantage of e-mentoring is that it can be done anywhere at any time, so mentors and mentees do not have to be geographically close or work at the same time.



Who can be a mentee?

There are no limits on age or experience. A mentee can be any support worker who is seeking support or advice. They may wish to share their experiences with someone who understands where they are coming from and explore some options for helping them manage their ongoing health and well-being in the context of their support worker role.

"It was simple, not too much preparation. (...) It will be very helpful."

(Past WeCare mentee)

Who are WeCare mentors?

A mentor is someone who has 'been there, done that' and is happy to listen and to share their experiences and knowledge with a mentee. A mentor's primary role is to provide a safe space for the mentee to share their experiences, needs and concerns, and to listen and draw on their own experiences to support the mentee in navigating those issues. As such, a mentor is usually an experienced support worker with strong interpersonal skills, who is a good listener, and is able to develop positive and productive relationships with others.

WeCare mentors have at least five years of work experience in a support worker role, and hold a Certificate in Health Care Assistant NZQA level 4.

"I have mentored a lot of staff (NB: in the past; not as part of this intervention).

They are doing well on their own, they are confident. (...) I am proud of them!"

(Past WeCare mentor)

Benefits of e-mentoring

E-mentoring, and mentoring in general, offers a range of benefits, both to mentees and to mentors. A number of research publications noted the important role that mentoring plays in the personal and career development of persons who are new to a given profession¹. Mentoring is an opportunity for you to express any issues or worries you might have to someone who has likely been through similar experience.

There are many positive outcomes associated with being a mentee. Taking part in a mentoring programme allows individuals to maximise their potential and increase their confidence. It has been shown to increase people's satisfaction with work and life, and improve their ability to cope with work stress. Participation in a mentoring programme can also improve your communication and teamwork skills. Many people find it useful as it expands their support network. Its flexible scheduling means that you can meet with your mentor when it suits you both.



¹A) Chandler, D. E., Kram, K. E., & Yip, J. (2011). An ecological systems perspective on mentoring at work: A review and future prospects. *Academy of Management Annals*, 5(1), 519-570.

B) Clutterbuck, D. (2005). Establishing and maintaining mentoring relationships: An overview of mentor and mentee competencies. *SA Journal of Human Resource Management*, 3(3), 2-9.

C) Neely, A. R., Cotton, J., & Neely, A. D. (2017). E-mentoring: A Model and Review of the Literature. *AIS Transactions on Human-Computer Interaction*, 9(3), 220-242.

3. Being a mentee

Firstly, well done on making the decision to reach out! It takes courage to ask for support or advice.

As a mentee, you are central to the mentoring relationship. You are the main reason for this relationship, but also the driving force behind it. This means that you get to decide what the focus of the relationship should be, what the goals are, and how you are going to achieve them. Your mentor will support you along the way by sharing their knowledge and experience.

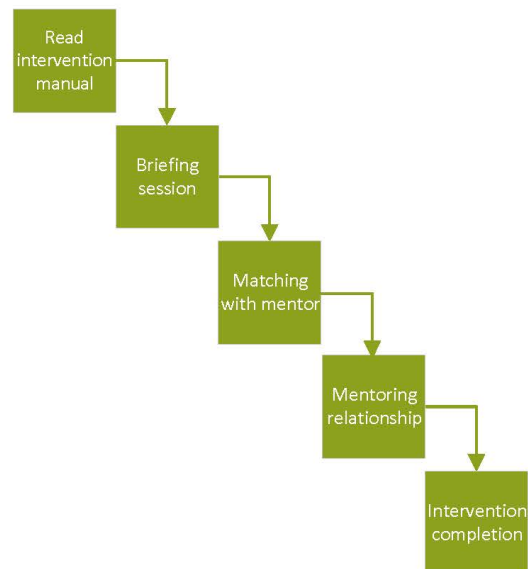
As a mentee, you are expected to:

- Reflect on your experience;
- Identify areas for development;
- Accept challenge;
- Organise the scheduling of meetings;
- Prepare meeting plans and drive the meetings' content;
- Be professional and respect your mentor's time and contribution;
- Work on your agreed goals;
- Protect your patients' and co-workers' privacy.



4. Mentoring process

Once you are familiar with this manual, we will schedule a short briefing session during which you will be able to ask questions and get help with setting up your mentoring relationship.



Following the briefing session, you will be matched with your mentor. This process will be organised by the WeCare Team. Mentors and mentees will be matched based on their demographic characteristics, preferences, and personality. As a mentee, you will be presented with profiles of three best-fitting candidates, and asked to choose one of them to become your mentor. Once you are matched with your mentor, you will be introduced to them via email by one of the WeCare Team.

Mentoring relationship phases

There are three main phases in a mentoring relationship: introduction phase, progressions phase, and final evaluation phase. WeCare is a six-month programme. We suggest meeting approximately once a month for 30-60 minutes over this period.



1. Introduction phase.

The aim of this phase is for you and your mentor to get to know each other, to explore perceived expectations, agree on the ground rules, and identify goals you want to focus on through this mentoring relationship. These areas can be work-related and/or life-related. During this phase you will focus on finding commonalities, shared interests, and getting to know each other's professional backgrounds.

Your mentor will be responsible for scheduling the first meeting. All meetings are scheduled outside of your and mentor's working hours, unless your employer agrees otherwise.

The WeCare Team have prepared a meeting plan for your first meeting (page 33). We have also prepared a mentoring programme plan (page 34), which will facilitate progress of your mentoring relationship. These plans are intended to be completed by you (with your mentor's support), during the first or second meeting.

This plan will help you develop a shared understanding of expectations and goals for the mentoring relationship. You will decide on the best time to review your goals at your first meeting (for example in the third and sixth month).

2. Progression phase.

During the progression phase, you and your mentor will continue to meet once or more a month. Your focus should be on increasing your responsibility for managing the relationship, namely: scheduling the meetings and preparing meeting plans.

In this phase, you will be working towards achieving your goals. You might be making good progress, but you also might be experiencing some set-backs. No matter how well or bad you are going, your mentor will be supporting you through this journey.

It is important that you take time to reflect on the session and the discussion you had with your mentor. You might simply note your thoughts down, or use a mind-map to organise your thoughts. Whatever you do, it is important you record your thoughts either on paper, or on your computer. You can use the Personal notes (the last four pages of this manual) to record your thoughts.

The mentoring plan that you and your mentor developed during the introduction phase should be revisited regularly during the progression phase. It might need to be developed further or changed, but it will be very helpful to keep your mentoring relationship on track.

3. Final evaluation phase.

This programme is a six-month mentoring relationship and your last meeting will be focused on the final evaluation. At the last meeting, your focus will be on formally reviewing and celebrating what has been achieved in those six months. The last meeting is used to wind down and help you develop a 'where to from here' plan. This plan will focus on identifying any other supports and resources you may find useful moving forward once you close the mentoring relationship with your mentee.

Reporting

You will complete a short meeting report after each meeting. A link to the report will be emailed to you after each mentoring session and you will be able to complete it online. **This report will help you reflect** on what was discussed at your last mentoring meeting, and whether you have any concerns or any other feedback regarding your mentoring relationship. These reports will be reviewed by the WeCare Team to make sure you and your mentee are not encountering any difficulties and are safe. The information provided in these reports will be used by the WeCare Team to create a meeting plan for your following meetings.

For your information, a report template is attached at the end of this manual (see Appendix 3, page 35).

Meeting plans

The meeting plans will provide structure for your mentoring meetings and will help you focus on the topics important to you.

We have prepared the first meeting plan for you (see page 33). Plans for each following meeting will be emailed to you by the WeCare Team (see the template on page 37), once we receive your meeting report. These plans will be pre-populated with your current goals and some discussion points. You will be able to edit these plans and add more discussion points if necessary.

We will answer any potential questions you might have regarding these plans during the upcoming briefing session.

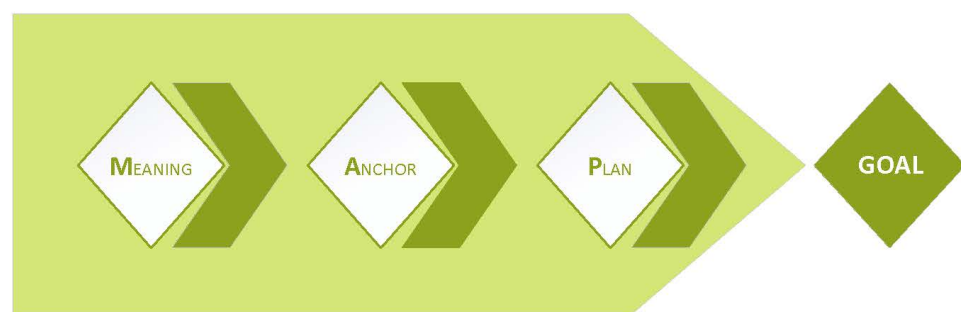
Focus of the mentoring relationship

In this programme you will focus on identifying personal and professional goals or objectives, and working towards achieving them. Your mentor will support you in identifying and managing changes they would like to make. **Setting these goals is crucial, as they will provide the structure for your meetings.** Once you know what they are, they need to be written down and reviewed periodically.

You might already have a well-defined goal for the mentoring relationship. For example, you want to be able to 'vent' to someone about your concerns, preferences or challenges. Or you want to discuss your career plans with someone who understands your situation. You might not feel like changing anything, and this is perfectly fine. Use this mentoring relationship as something that provides a safe context to express your thoughts, and help you build confidence to tackle any issues you come across.

MAP – Meaningful goals map

If you are unsure what you want to achieve through the mentoring relationship, it may be helpful to use a tool called the Meaningful goals map (MAP) to negotiate your goals and develop plans for achieving them. You may find using this tool particularly helpful during the first one or two mentoring sessions.



1. Meaning.

The MAP process starts with you and your mentor identifying things that are important to you. Knowing what matters to you provides context for all goal-related activities. Reflecting and expressing your thoughts are crucial in this stage. Think about **areas of your work or life you would like to improve, or things that you would like to achieve**; try to understand why these things matter to you.

2. Anchor.

Once you identify the meaningful goals in Step 1, focus on anchoring them to 'concrete' targeted goals, i.e. breaking down the meaningful goals into smaller, manageable steps. This will **help you make sense of how what you discuss during your mentoring sessions connects to your meaningful goals.**

For example, you might have expressed concerns about the impact your work is having on your family, and in particular your relationship with children. You have identified that this is something that really matters to you, that you would like to work on. Given this, you explore what it is about your work role that contributes to this impact. You highlight that the fact your work often involves extra evening or weekend work can mean you have less time with your children. You also say the stress you are under at work can impact on how 'present' you are at home. You and your mentor discuss a range of possible things that could help you manage this situation, drawing on your and your mentor's own experiences where relevant and appropriate. You agree that some steps to help you could include:

- *Planning your work week ahead to find time to spend with your children.*
- *Limiting the amount of extra shifts you agree to at work.*
- *Developing some strategies to try and reduce the impact stress at work has on home life.*

3. Plan.

Once you have identified some meaningful goals, and negotiated steps required to achieve them, the focus will be on translating them into life. Planning is crucial in the MAP process as it **provides you with specific steps you need to take, whilst addressing any barriers and facilitators to achieving your goals.**

One very helpful way of planning is to develop a very specific action plan known as an 'If-then plan'. When using If-then plans, you identify situations that support or trigger the goal-directed behaviour, and also identify things that may get in the way of that activity.

For example:

***If** it is 4 pm, **then** I will take my children to the beach.*

... with an additional plan to manage potential barriers:

***If** I am asked to take on an extra shift, **then** I will check if I have reached my maximum before confirming if I can take on that shift.*

***If** I notice that I am letting my stress at work get in the way of things at home, **then** I will do [agreed strategy]*

There can be a variety of plans for the same task or goal and they all depend on what you want to achieve. Your mentor will support you through this process.

4. Mentoring communication

WeCare is an online-based initiative and requires you to have access to internet, an email account and a Skype account.

The WeCare Team are happy to set you up with a new email and Skype account if you do not wish to use your personal accounts. We suggest you do not use your work email for this programme.

Email communication

Email is the primary form of communication with your mentor. Once you are matched with your mentor, you will receive an email containing their contact details and bio. Your mentor will be responsible for scheduling your first mentoring session.

We suggest you use email communication to schedule your mentoring meetings, but also to follow-up on previous meetings and forward any resources you might have discussed during a mentoring meeting.

You are expected to respond to your mentor without any unnecessary delays. We recommend you try to response to your mentee within three days. If you experience any issues or delays in communication with your mentor please contact the WeCare Team.

Skype communication

Skype is freely available, easy to use and provides a very similar experience to an in-person meeting, without having to be in the same geographical location as the other person. It can be downloaded on your phone, laptop or tablet.

Please, when possible, always use video during your mentoring sessions. Being able to see the other person helps build trust and facilitates better understanding. Kanohi ki te kanohi (face-to-face) meetings are the most desirable way of communicating for many cultures.

The signal strength of your internet connection can affect the quality of your Skype call. If you are experiencing connection issues during your mentoring session, try disconnecting and calling again. If this doesn't solve the problem, try turning the video off and only using audio connection. If the problem persists, end your call, and email your mentor, explaining the situation and suggesting an alternative time to meet.

Tips for using Skype

1. Use a headset with a microphone, if possible.
2. Try to find a space with a light-coloured background.
3. Ideally, call from a quiet room and keep the door shut.
4. Inform people around you about the call – you do not want to be interrupted.
5. Feel free to switch between Skype and other applications on your device, e.g. to have a look at the meeting schedule or this manual.

If you require any help with Skype please contact the WeCare Team or use the following website:

<https://support.skype.com/en/faq/FA11098/how-do-i-get-started-with-skype>

5. Mentoring sessions

It is important to take a moment to prepare for and reflect after your mentoring meetings. This will help you focus on the goals you want to achieve.

Preparing for your first mentoring session:

1. Familiarise yourself with the manual and attend the briefing session.
2. Read the First Meeting Plan (go to page 33) and the Mentoring Programme Plan (page 34).
3. Read the Frequently Asked Questions on page 28.
4. Write down some thoughts on what you expect to achieve in this programme.
5. Make sure your Skype is working.
6. Have your intervention manual printout handy.
7. Have a pen and paper ready to take notes during the meeting.

During the meeting

1. Your mentor will lead the first mentoring session. You will introduce yourself and follow your mentor's lead. We recommend you lead the following meetings, with some help from your mentor. This way you will be able to truly focus on the things that important to you.
2. Your mentor will use The First Meeting Plan (page 33) to lead this meeting. They will also use the Mentoring Programme Plan to discuss what you would like to achieve in this programme.
3. Take notes during the meeting.
4. You might feel nervous at the first meeting. This is normal and nothing to worry about.

After your first meeting:

1. Complete the Mentoring Programme Plan (it will be emailed to you before the meeting; you can see the template on page 34) as per the discussion with your mentor. If you have not finished discussing all the fields in the plan, leave them blank. Please email the completed plan to your mentor and to Karol Czuba (kczuba@aut.ac.nz).
2. Complete the Meeting Report (template on page 35). At the first meeting, your mentor will explain how to complete this report. Immediately following your mentoring session, you will receive an email with a link to the report. Completing this report will help you reflect on the things you discussed during the mentoring session. It will also help the WeCare Team to create the meeting plan for your next mentoring session.

Preparing for the following meetings:

1. Please check your emails for any updates from your mentor or the WeCare Team.
2. Add any topics you would like to discuss to the meeting plan.
3. Please review the notes from your previous mentoring session.
4. Write down any thoughts/issues you would like to discuss at the meeting.
5. Have a pen and paper ready to take notes during the meeting.
6. Have the training manual printout handy.



6. Confidentiality

From the beginning, there should be a bond of trust established between you and your mentor. Maintaining confidentiality is one of the ways you demonstrate respect for your mentor. You are required to sign a confidentiality agreement and abide by it.

Everything that is discussed during your mentoring sessions is to be held in strictest confidence and not discussed with anyone else. However, there are certain situations where the information may be disclosed.

Your mentor or you may discuss any arising issues with the WeCare Team representative. However, all members of the WeCare Team are subject to the same confidentiality rules as the mentor and mentee.

Additionally, information can or must be disclosed:

1. Where you or your mentor give consent.
2. Where compelled by law.
3. Where there is a serious risk of harm to you, your mentor, or others.
4. Where the information is so grave, that confidentiality cannot be maintained, for example where compelled by law.



7. Privacy

As a health sector employee, you are required to abide by your employment agreement and The Health Information Privacy Code 1994. This means that you should not disclose any specific work-related information unless you have a good reason to do it. You should not assign any unique identifiers (for example a person's name) unless you have obtained a permission.

In this programme, you will be discussing issues relevant to a range of areas of your and your mentor's lives. It is important to remember that there is a fine line between your professional and personal lives. You will be responsible for respecting each other's privacy and autonomy.

To protect your mentor and yourself, always follow these rules:

- A. Avoid using people's real names.**
- B. Always use hypothetical examples when describing work situations.**
- C. If you believe your mentor might be disclosing someone's private information without permission, ask them to stop and to use a different example.**

8. Boundaries

Your mentor is a volunteer and offers their knowledge and experience to you for free. You have an obligation to respect your mentor's autonomy and dignity, and treat them fairly. Your duty is to be honest with your mentor and keep promises.

It will be helpful to discuss any specific boundaries you may want to set with your mentor, for example what is an acceptable email response time, when is not a good time to be contacted by your mentor, etc.

This programme is based online, and uses email and Skype as the main communication media. **Any meetings in person, are considered outside the remit of this e-mentoring programme. In other words, in this programme you should only be meeting online.** We encourage people to resist meeting in person until after the six-month duration of their mentoring relationship.

However, if you and your mentor decide to use any other media or meet in person, you are doing so at your own risk. If you decide to meet with your mentor in-person, only do so if you feel comfortable with this. Tell your friends or family who, when and where you are meeting, and meet in a public place.

Under any circumstances, you should not become intimately involved with your mentor.

9. Reporting unsafe practice and misconduct

If during your mentoring interactions you become aware of situations which appear to be unsafe practice or misconduct, you should contact the study researcher, Karol Czuba, and report such situations.

Examples of unsafe practice and misconduct include, but are not limited to:

- Physical assault;
- Verbal abuse;
- Bullying or intimidation of any other person;
- Neglect of a resident;
- Failure to report abuse or neglect;
- Sexual harassment;
- Falsification of company or patient documents;
- Theft;
- Failure to report any accident, incident or injury at work;

If you become concerned about your mentor's conduct at work, please discuss your concerns with Karol Czuba.

10. Safety guidance

If you have any concerns about your own or your mentor's safety, please ensure that you contact the study researcher, Karol Czuba. Ensure you document your concerns, detailing conversations, times, dates and actions. Details are quickly lost after the event. Karol will be very happy to discuss any concerns and offer any support you might require.

Please read the resource on talking with people thinking of suicide (please follow the website link on page 31).

Safety concerns

If you are concerned for your mentor's safety, but you don't think that there is an imminent threat to life:

- Explain that you are concerned;
- Ask if there is anybody with them that they are able to talk to;
- Say that you would like to contact their GP / councillor to let them know of your concerns;
- Ask who their GP is and seek their permission to contact them;
- Contact Karol Czuba to discuss, who will make a decision regarding any further action;
- Call back participant to let them know what you have done; AND/OR
- Provide contacts if it feels more appropriate:

Samaritans – 0800 726 666, <http://www.samaritans.org.nz/>

Lifeline – 0800 543 354, <https://www.lifeline.org.nz/>

Imminent danger

If you think the mentor is in imminent danger or they present an imminent danger to others:

- Explain that you are concerned;
- Ask if there is anybody with them that is able to help;
- Explain that you are going to call someone for assistance;
- If ideation **of self-harm**, call the Mental Health Crisis team:
Tel: 0800 800 717 (for Auckland, operating 24/7)
<https://www.health.govt.nz/your-health/services-and-support/health-care-services/mental-health-services/crisis-assessment-teams>
- If imminent **danger to others and/or self**, call the police emergencyline:
Dial 111;
- Let Karol Czuba know straight away;
- Keep a detailed written record of exactly what was said, and actions taken.

11. Frequently Asked Questions

A. Who runs this mentoring programme?

This mentoring programme is being run by a team of researchers from Auckland University of Technology (AUT) in collaboration with a range of aged care stakeholders, including aged care workers, managers, and users. It is led by Karol Czuba, a PhD candidate at AUT, as part of his PhD course requirements.

B. What is mentoring?

There are many definitions of mentoring. We think that this one, offered by Eric Parsloe, who is an international expert on mentoring, is quite accurate:

*“Mentoring is a way of **supporting** and **encouraging** people to manage **their own learning** in order to **maximise** their **potential**, develop their **skills**, and become the **best person they want to be**.”*

C. How can I build trust?

1. Be reliable – do what you say you will do.

Do not be late for your mentoring sessions. If you told your mentor you were going to send them an email or prepare something for your meeting, make sure you do. If you cannot do what you promised, you need to explain to your mentor why. Failing to follow through will undermine your trustworthiness.

2. Express your feelings.

It is very important to let your mentor know how you feel about certain things, for example the challenges you have been through. While it might be difficult to be fully open about your emotions with someone you do not know very well, it is crucial for you to be authentic about how you feel and share some of those emotions with your mentor. It can help build trust between you and them.

3. Be open.

It is often a good idea to provide more information, rather than being vague. For example, if your mentor asks how your day was, it is ok to tell them more than just “it was ok”. You may want to tell them about the old friend you met in the morning, or about your doctor’s appointment. You can share as much or as little as you feel comfortable with. If you do not want to answer your mentor’s questions – say so, and explain why (it is fine to say “I cannot share this information with you yet”). Being open can help increase your trustworthiness.

4. Be respectful.

During your mentoring sessions you should fully focus on the discussion with your mentor. Your mentor wants to help you be the best person you want to be. If something they say makes you feel uncomfortable and you do not know how to respond to your mentor, treat them how you want to be treated.

D. What could we talk about?

Your mentor and you get to decide what you want to talk about during your mentoring sessions. Potential topics could include:

- Career development;
- Work-life balance;
- Technical skills;
- Cultural issues.

What the focus of your sessions is, exactly, will be determined at the first meeting and might change as you progress through your mentoring relationship.

E. What if we would like to meet more often than once a month?

We recommend one meeting per month as the minimum meeting frequency for this programme. If your mentor and you feel it would be beneficial and possible for you to meet more often, it is up to you to decide. Meeting more frequently might be particularly beneficial in the introduction phase, when you are still building a good rapport with the mentor.

F. What if my mentor and I would like to continue the mentoring relationship?

This mentoring programme lasts six months. At the end of the programme, you will both evaluate your mentoring relationship and wind it down. This is where the programme ends. It is up to you and your mentor whether you wish to stay in touch after this mentoring programme ends.

Naturally, it is possible that your mentoring relationship will develop into a friendship. However, it is important that while in this programme, you and your mentor focus on what your goals are and continue working towards achieving them.

G. What if I have issues with my mentor?

If you have technical difficulties (e.g. no response to your emails), please contact the study researcher, Karol Czuba.

If your mentoring relationship is not working out, please do not be concerned. Please get in touch with Karol Czuba and he will be able to resolve any issues, or terminate the relationship if necessary.

H. Are there any tools we can use to identify my goals?

There are many tools that could be used to identify your goals. We recommend using the MAP goals framework (Section 3 of this booklet). Alternatively, some useful tips about setting SMART goals can be found on this website:

<https://www.mindtools.com/page6.html>

I. I don't like using emails. Can we use other forms of communication?

We recommend email as your primary mean of communication for this programme. However, if your mentor and you decide you would like to use other forms of communication (e.g. mobile texting), it is up to the two of you.

12. Important websites

Here is a list of websites that we recommend you visit as part of your mentoring training:

1. Goal setting <https://www.mindtools.com/page6.html>
2. "Are you worried someone is thinking of suicide?"_
<https://www.mentalhealth.org.nz/assets/ResourceFinder/worried-about-someone.pdf>

13. Appendices

1. First meeting plan
2. Mentoring programme plan
3. Reporting template
4. Meeting plan template

1. FIRST MEETING PLAN

Focus of the meeting: Developing a mentoring plan		Date of the meeting:
Activity	Notes	
1. Introduction	Mentor to introduce themselves (your background, experience, your family, your hobbies, your current role, why you are taking part in the programme, etc.). Mentee to introduce themselves (your background, experience, your family, your hobbies, your current role, why you are taking part in the programme, etc.).	
2. Mentoring programme plan	Please use the mentoring programme plan (page 34), discuss and complete.	
3. Meeting reporting	Mentor will explain how to complete this. A meeting reporting template can be found in Mentee's manual as an appendix. It is the mentee's responsibility to complete this report. It is a brief summary of the mentoring meetings. It is to be completed after every mentoring session. Once completed by mentee, this report will be emailed to the mentor by WeCare team.	
4. Next meeting	Please schedule your next 1-2 meetings Date – Mentee to identify things to discuss at the next meeting.	

2. MENTORING PROGRAMME PLAN

Mentoring programme plan		
Mentor initials:	Mentee initials:	Date:
<p>This document should be completed by both mentor and mentee at the first or second meeting. It will help facilitate progress of the programme, the development of shared goals and expectations moving forward. Both mentor and mentee should retain a copy of this plan.</p>		
Expectations		
<p>Mentee: I expect my mentor to...</p> <p>Mentor: I expect my mentee to...</p>		
Communication arrangements		
<p>By what methods and how often will we communicate with each other? <i>Please note, that email and Skype are the recommended methods of communication.</i></p> <p>Methods:</p> <p>How often:</p>		
Goals/Areas to focus on		
<p>What do we want to achieve with this mentoring programme? Mentor - <i>Please refer to Section 3 in Mentor's manual (Setting Goals) to help identify the goals.</i></p> <p>Things we hope to get out of this mentoring relationship:</p>		
Evaluation		
<p>Choose when you want to review and discuss the progress of the mentoring relationship (e.g. in the third and sixth month).</p>		
Confidentiality reminder		
<p>The contents of our discussions are confidential. Are there any exceptions to this? Please discuss these and note them here.</p>		

3. MEETING REPORT TEMPLATE

Name:

Date:

My current goals are:

Progress I have made since our last meeting (1-2 sentences):

Key topics discussed at today's meeting (1-2 sentences):

What I will work on until our next meeting (1-2 sentences):

Any other comments (1-2 sentences):

What we will discuss at our next meeting:

Are there any issues or concerns following today's meeting?

4. Meeting plan template

You will receive a new meeting plan for each mentoring session.

Date:

Current goals:

Discussion points	Notes
1. Update on progress since last meeting.	
2.	
3.	

PLEASE NOTE

THE 'Current goals' FIELD WILL BE COMPLETED WITH THE GOALS YOU PROVIDED IN THE MEETING REPORT UNDER 'My current goals are'.

DISCUSSION POINTS WILL BE COMPLETED WITH THE INFORMATION YOU PROVIDED IN THE MEETING REPORT UNDER 'What I will work on until our next meeting' AND 'What we will discuss at our next meeting'.

YOU CAN ADD MORE DISCUSSION POINTS IF YOU WOULD LIKE TO DISCUSS THEM AT THE MEETING.

PLEASE TAKE NOTES DURING THE MEETING.

14. Personal notes

Please use this space for your personal notes and reflections.

Appendix 15. Mentor manual.

Starts on next page.

WeCare

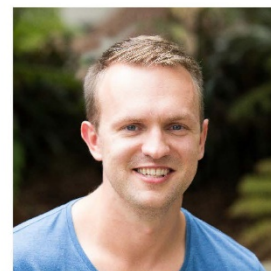
A MENTORING PROGRAMME FOR
SUPPORT WORKERS

Mentor's manual

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Kia ora!

Thank you for your interest in WeCare – an internet-based mentoring (e-mentoring) programme for New Zealand support workers in aged care. My name is Karol Czuba and this programme is part of my doctoral project.



This project was inspired by my personal experience of caregiving and my passion for aged care. I know how rewarding it can be to give care, but also how challenging this job can be at times. The cover page of this manual makes me think of the balance between the powerful Moana, the rugged Whenua, and the unbounded Rangi – the sea, the land, and the sky. They coexist in perfect harmony. However, if that balance is lost, these forces can cause a lot of damage. Similarly, it is crucial to find the right balance between the rewards and demands of caregiving to ensure that all support workers can be healthy and well.

WeCare aims to create an e-mentoring community for support workers who work in residential aged care sector in New Zealand. This community will encourage and facilitate professional and personal development of its members, and help ensure a healthy and resilient aged care workforce for the ageing population of New Zealand.

Support workers, like yourself, are central to ensuring a sustainable aged care system in New Zealand. They provide high-quality care to frail elderly people and make a positive difference in their lives. However, the job is a challenging one, and support workers commonly deal with high levels of stress, poor working conditions, and high workloads. Working in such demanding conditions puts their health and well-being under threat.

Our research has found that many support workers would value more support and opportunities for professional and personal development. Many workers expressed a desire to share their experiences with other workers to work together to develop strategies to help them feel valued in their role, and manage their own health and well-being as they navigate life as a support worker. They wanted to talk to someone who understands their work, is not in a senior role and is available when they need them.

WeCare has been developed in response to the expressed needs and preferences of support workers in New Zealand. It offers free and flexible access to a collective resource of knowledge and experience of the aged care support workers. This programme aims to help its users grow, both professionally, and personally.

Our aim is to develop a tool that authentically reflects the needs of aged care support workers in New Zealand. We are mindful about the need for a Māori version of this manual, and would like to translate it to Māori in the future. For now, our team decided to focus on developing an English version with extensive input from people representing the many groups of people associated with aged care in New Zealand.

This booklet will introduce you to the programme, and provide all necessary information for you to participate and benefit from it.

Karol Czuba

Karol Czuba
The WeCare Team

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1. Introduction

Welcome to the WeCare Mentoring Programme. This manual will prepare you for taking part in the programme. Please read it carefully and familiarise yourself with its contents.

Through reading this manual, you will learn:

- What e-mentoring and its benefits are;
- What your role will be;
- What will happen during the programme;
- When you will meet your mentee;
- How to communicate with your mentor;
- How to be a great mentor;
- How to set goals;
- How to communicate with your mentee;
- How to prepare for your mentoring sessions;
- Important safety information;
- And some other useful tips.

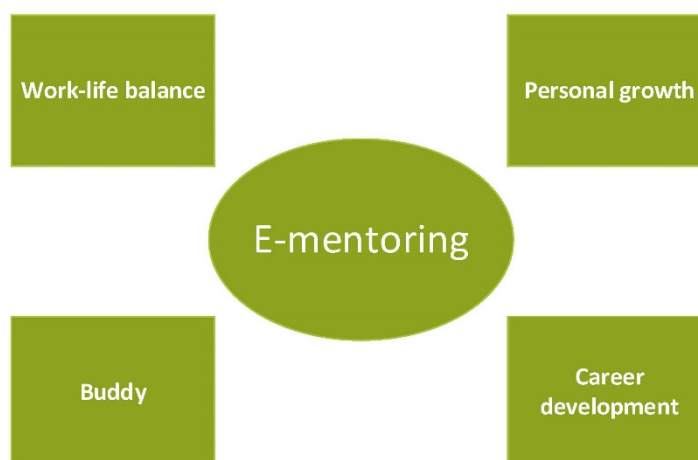
Please take your time reading the information provided. Please take your time reading the provided information. At the end of this booklet you will find space for personal notes (page 43). Use this space to write down your thoughts, comments or any questions you might have while you are familiarising yourself with this manual.

We will contact you soon to schedule a **briefing session** during which we will discuss this manual, answer any questions you might have, and give you some tips on preparing for your first mentoring session.

2. What is e-mentoring?

Mentoring is a relationship between a mentor and a mentee, where a reciprocal sharing of experiences and knowledge occurs, and offers mutual benefits. A mentoring relationship is usually focused on negotiating personal and professional goals or objectives, and working towards achieving them. This programme uses a peer-mentoring approach, meaning all participating mentors and mentees are employed as support workers. Taking part in a mentoring programme allows individuals to maximise their potential. It has been shown to increase people's satisfaction with work and life, and improve their ability to cope with work stress.

E-mentoring is a new approach to delivering peer mentoring which uses digital communication channels (e.g. internet) as a platform for establishing the mentoring relationship. The biggest advantage of e-mentoring is that it can be done anywhere at any time, so mentors and mentees do not have to be geographically close or work at the same time.



Who can be a mentee?

There are no limits on age or experience. A mentee can be any support worker who is seeking support or advice. They may wish to share their experiences with someone who understands where they are coming from and explore some options for helping them manage their ongoing health and well-being in the context of their support worker role.

"It was simple, not too much preparation, (...) It will be very helpful."

(Past WeCare mentee)

Who can be a mentor?

A mentor is someone who has 'been there, done that' and is happy to listen and to share their experiences and knowledge with a mentee. A mentor's primary role is to provide a safe space for the mentee to share their experiences, needs and concerns, and to listen and draw on their own experiences to support the mentee in navigating those issues. As such, a mentor is usually an experienced support worker with strong interpersonal skills, who is a good listener, and can develop positive and productive relationships with others.

To be a WeCare mentor, you need to have at least five years of work experience in a support worker role, and hold a Certificate in Health Care Assistant Level 4 (or equivalent).

"I have mentored a lot of staff (NB: in the past; not as part of this intervention). They are doing well on their own, they are confident. (...) I am proud of them!"

(Past WeCare mentor)

Benefits of e-mentoring

E-mentoring, and mentoring in general, offers a range of benefits, both to mentees and to mentors. A number of studies have noted the important role that mentoring plays in the personal and career development of persons who are new to a given profession ¹.

There are many positive outcomes associated with being a mentor. Many mentors gain satisfaction through assisting their mentees and seeing them achieve their goals. Through helping others grow, you can achieve a sense of personal fulfilment and improve your interpersonal and communication skills. Participation in a mentoring programme can also improve your leadership skills. While it is usually the mentors who provide knowledge and expertise, it is not uncommon for mentees to teach their mentors something new – relationships are often two-way! Mentors help build a strong and resilient community of workers, and lead discussions around professional and social issues affecting the workforce. It is also great for your CV!



¹ A) Chandler, D. E., Kram, K. E., & Yip, J. (2011). An ecological systems perspective on mentoring at work: A review and future prospects. *Academy of Management Annals*, 5(1), 519-570.

B) Clutterbuck, D. (2005). Establishing and maintaining mentoring relationships: An overview of mentor and mentee competencies. *SA Journal of Human Resource Management*, 3(3), 2-9.

C) Neely, A. R., Cotton, J., & Neely, A. D. (2017). E-mentoring: A Model and Review of the Literature. *AIS Transactions on Human-Computer Interaction*, 9(3), 220-242.

3. Being a mentor

Mentors are the most valuable resource of this programme. They provide an ongoing relationship for general support, encouragement and guidance. Their main task is to create a safe and privileged time for a mentee to concentrate and reflect on themselves.

A good mentor is expected to:

- Listen to their mentee and get to know and understand them well;
- Take interest in their mentee's progress;
- Help the mentee to see the big and long-term picture;
- Help the mentee to reflect on their experiences and recognize their strengths;
- Manage the framework of the mentoring sessions;
- Share their knowledge and experience with the mentee;
- Encourage the mentee to take responsibility for the content.

To be a mentor means to commit to knowing the mentee.



Mentoring tips

The following tips will help you be a great mentor. It might be challenging at the start, but over time you will continue to develop your mentoring skills and confidence.

1. Listen, listen, and listen.

Getting to know your mentee starts from listening to them. This cannot be overstated – listening actively to your mentee is key to being a good mentor. You need to pay attention to what your mentee has to say, and you need to demonstrate that you are listening.

Some of the strategies that can be helpful include: nodding, smiling, eye contact, and responding in ways which pick up what your mentee has said. For example:

Mentee: ... and when it happened, I felt really disappointed, furious.

Mentor: oh... you felt furious? can you tell me more?

2. Use open-ended questions.

Using open-ended questions helps lead to more thoughtful or complete responses. Asking someone 'if they are happy being a support worker?' will most likely be answered with a short 'yes' or 'no'. In a mentoring relationship, it is often recommended mentors use open-ended questions, for example:

Mentor: Tell me what you enjoy most in being a support worker...

3. Reflect.

Being able to reflect on what your mentee says is one of the biggest skills you can have as a mentor. Your mentee wants you to understand their needs and where they are in their life. They want you to listen and then draw on your own related experiences to help them make sense of and consider how they might navigate their own experiences.

Mentee: So when I leaned forward to get the plate off her bed, she punched me. I got really angry and left the room.

Mentor: It sounds like she really upset you. What could be the reason she punched you? What could you do to avoid this in the future?

4. Do not interrupt.

Your mentee wants to hear you talk about yourself, right? Wrong. They want you to understand what they are going through. Therefore, when they speak, you should never interrupt. As we have already mentioned – listening is key. If you interrupt, it looks as if you are not listening, even if you are. Let them speak, take notes, and **then relate back to some of your own experiences that might resonate with them to help them reflect on what might help them to navigate the challenges they have identified.**

5. Keep an open mind.

As a mentor, you might be tempted to think ahead and make judgements before your mentee finishes speaking. However, it is important to keep an open mind. Always be aware of your own issues and remember that people may have different perspectives on the same issue.

Keeping an open mind will help you identify any risks, find opportunities, understand your mentee well, and manage any potential uncertainty. Try to understand your mentees' perspective, sympathise and let them be their own judge. If you do not know the answer – it is fine! Tell your mentee you will think about it and let them know your thoughts next time you meet.

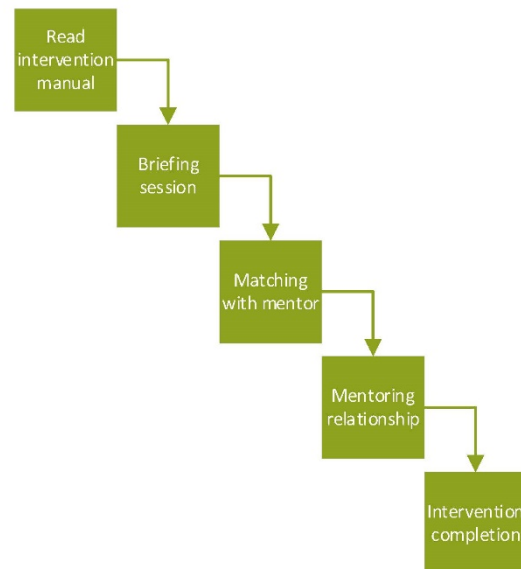
6. Be creative.

Once you have a good understanding of your mentee's concerns, needs and preferences, use your judgement in how you want to guide them. Sometimes it might be enough to just ask them for possible solutions. Other times, it might help if you share some examples from your own experience. If you think you can help them find the solution, try it. Use your knowledge and experience to guide them through their challenges, but let them find the answers themselves.

Remember – your role is to point them towards the right direction, not to control their moves.

4. Mentoring process

Once you are familiar with this manual, we will schedule a short briefing session during which you will be able to ask questions and get help with setting up your mentoring relationship.



Following the briefing session, you will be matched with your mentee. This process will be organised by the WeCare Team. Mentors and mentees will be matched based on their demographic characteristics, preferences, and personality. Once you are matched with your mentee, you will be introduced to them via email by one of the WeCare Team.

Guiding principles

Your main responsibility as a mentor is trying to understand your mentee's perspective and guiding them towards constructive decisions. Anything else will be a bonus.

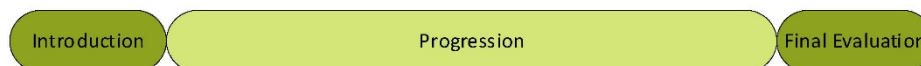
Here are some guiding principles which should help you being a great mentor:

- **Let your mentee be true to themselves; their journey will be different to yours.**
- **Let your mentee do their own work; reflect on moments when you want to do things for them, their growth comes from their own processes.**
- **Let your mentee make their own decisions; they need your support with developing their own decision-making skills.**



Mentoring relationship phases

There are three main phases in a mentoring relationship: introduction phase, progressions phase, and final evaluation phase. WeCare is a six-month programme. We suggest meeting approximately once a month for 30-60 minutes over this period.



1. Introduction phase.

The aim of this phase is for you and your mentee to get to know each other, to explore perceived expectations, agree on the ground rules, and identify goals your mentee wants to focus on through this mentoring relationship. These goals can be work-related and/or life-related. During this phase you will focus on finding commonalities, shared interests, and getting to know each other's professional backgrounds.

As a mentor you will be responsible for scheduling the first meeting. All meetings are scheduled outside of your and mentee's working hours, unless your employer agrees otherwise. You may find the introductory email template helpful (page 39).

The WeCare Team have prepared a meeting plan for your first meeting (page 40). **Please use it at your first meeting.**

We have also prepared a mentoring programme plan (page 41), which you will start completing with your mentee at the first meeting. It will facilitate progress of your mentoring relationship. This plan is intended to be completed by you and your mentee, during the first or second meeting.

This plan will help you develop a shared understanding of expectations and goals for the mentoring relationship. **Setting goals for the mentoring relationship is very important as it will provide the structure for your meetings.**

You will decide on the best time to review your mentee's goals at your first meeting (for example in the third and sixth month).

2. Progression phase.

During the progression phase, you and your mentee will continue to meet once or more a month, with a focus on the mentee sharing their progress, reviewing their goals, and exploring what is working and what is not working.

During this phase, there will also be a focus on increasing mentee's responsibility for managing the relationship, i.e. scheduling the meetings and preparing meeting plans.

In this phase, your mentee might be making good progress towards their goals, but they also might be experiencing some set-backs. However, your success as a mentor does not depend on your mentee achieving their goals. What is the most important is for you to show understanding, draw on your own experiences as a support worker to help them consider different ways of managing their experiences, and provide support and encouragement.



The mentoring plan that you and your mentee developed during the introduction phase should be revisited regularly during this phase. It might need to be developed further or changed, but it will be very helpful to keep your mentoring relationship on track.

3. Final evaluation phase.

This programme is a six-month mentoring relationship and your last meeting will be focused on its final evaluation. At the last meeting, your focus will be on formally reviewing and celebrating what has been achieved in those six months. The last meeting is used to wind down and help you develop a 'where to from here' plan. This will focus on identifying any other supports and resources you may find useful moving forward once you close the mentoring relationship with your mentee.

Reporting

You will have to complete a short meeting report after each mentoring session. **These reports will help you reflect** on whether you have any concerns or any other feedback regarding your mentoring relationship. These reports will be reviewed by the WeCare Team to make sure you and your mentee are not encountering any difficulties and are safe.

The reports will be emailed to you and completed online. A report template is attached for your information (see Appendix 4, page 42).



Focus of the mentoring relationship

In this programme you and your mentee will focus on negotiating personal and professional goals or objectives, and working towards achieving them. Your aim is to support your mentee in identifying and managing changes they would like to make.

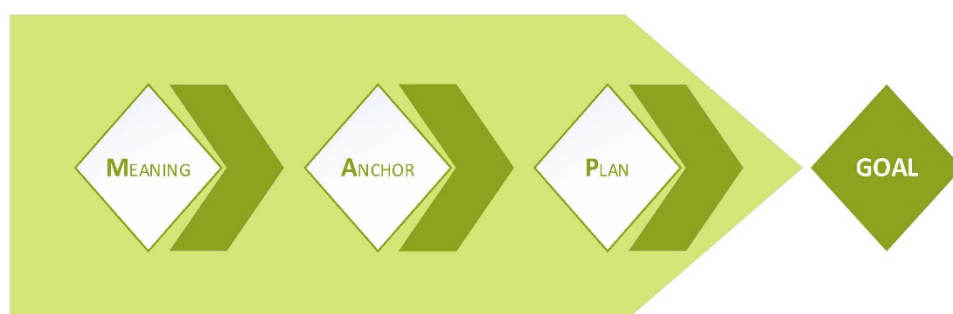
Setting these goals is crucial, as they will provide the structure for your meetings.

Once your mentee knows what they are, they need to be written down and reviewed periodically.

Your mentee might already have a well-defined goal for the mentoring relationship. For example, they simply want to be able to 'vent' to someone about their concerns, preferences or challenges. Or they want to discuss their career plans with someone who understands their situation. They might not feel like changing anything, and this is perfectly fine. Listen to them, provide a safe context to express their thoughts, and help them build confidence to tackle any issues they come across.

MAP – Meaningful goals map

If your mentee is unsure what they want to achieve through the mentoring relationship, it may be helpful to use a tool called the Meaningful goals map (MAP) to negotiate their goals and develop plans for achieving them. You may find using this tool particularly helpful during the first one or two mentoring sessions.



1. Meaning.

The MAP process starts with you and your mentee getting to know each. Knowing what matters to your mentee provides context for all goal-related activities. Listening to your mentee and allowing them time to reflect and express their thoughts is crucial in this stage. Ask your mentee about **areas of their work or life they would like to improve, or things that they would like to achieve**; ask them why these things matter to them.

2. Anchor.

Once you identify the meaningful goals in Step 1, focus on anchoring them to 'concrete' targeted goals, namely breaking down the meaningful goals into smaller, manageable steps. This will **help your mentee make sense of how what you discuss during your mentoring sessions connects to their meaningful goals.**

For example, your mentee might have expressed concerns about the impact their work is having on their family, and in particular their relationship with their children. They have identified that this is something that really matters to them, that they would like to work on. Given this, you explore with them what it is about their work role that contributes to this impact. They highlight that the fact their work often involves extra evening or weekend work can mean they have less time with their children. They also say the stress they are under at work can impact on how 'present' they are at home. You discuss a range of possible things that could help them manage this situation, drawing on your own experiences where relevant and appropriate. You agree that some steps to help them manage this could include:

- *Planning their work week ahead to find time to spend with their children.*
- *Limiting the amount of extra shifts they agree to at work.*
- *Developing some strategies to try and reduce the impact stress at work has on home life.*

3. Plan.

Once your mentee has identified some meaningful goals, and negotiated steps required to achieve them, the focus will be on translating that into life. Planning is crucial in the MAP process as it **provides your mentee with specific steps they need to take, whilst addressing any barriers and facilitators to achieving their goals.**

One very helpful way of planning is to develop a very specific action plan known as an 'If-then plans'. When using If-then plans, you identify situations that support or trigger the goal-directed behaviour, and also identify things that may get in the way of that activity.

For example:

If it is 4 pm, then I will take my children to the beach.

... with an additional plan to manage potential barriers:

If I am asked to take on an extra shift, then I will check if I have reached my maximum before confirming if I can take on that shift.

If I notice that I am letting my stress at work get in the way of things at home, then I will do [agreed strategy]

There can be a variety of plans for the same task or goal and they all depend on what your mentee wants to achieve. Your role is to support them through this process.

4. Mentoring communication

WeCare is an online-based initiative and requires you to have access to internet, an email account and a Skype account.

The WeCare Team are happy to set you up with a new email and Skype account if you do not wish to use your personal accounts. We suggest you do not use your work email for this programme.

Email communication

Email is the primary form of communication with your mentee. Once you are matched with your mentee, you will receive an email containing your mentees contact details and their bio. You are responsible for scheduling your first mentoring session (see page 39 for an introductory email example).

We suggest you use email communication to schedule your mentoring meetings, but also to follow-up on previous meetings and forward any resources you might have discussed during a mentoring meeting.

You are expected to respond to your mentee without any unnecessary delays. We recommend you try to response to your mentee within three days. If you experience any issues or delays in communication with your mentee please contact the WeCare Team.

Skype communication

Skype is easy to use, freely available and provides a very similar experience to an in-person meeting, without having to be in the same geographical location as the other person. It can be downloaded on your phone, laptop or tablet.

Please, when possible, always use video during your mentoring sessions. Being able to see the other person helps build trust and facilitates better understanding. Kanohi ki te

kanohi (face-to-face) meetings are for many cultures the most desirable way of communicating.

The signal strength of your internet connection can affect the quality of your Skype call. If you are experiencing connection issues during your mentoring session, try disconnecting and calling again. If this doesn't solve the problem, try turning the video off and only using audio connection. If the problem persists, end your call, and email your mentor, explaining the situation and suggesting an alternative time to meet.

Tips for using Skype

1. Use a headset with a microphone, if possible.
2. Try to find a space with a light-coloured background.
3. Ideally, call from a quiet room and keep the door shut.
4. Inform people around you about the call – you do not want to be interrupted.
5. Feel free to switch between Skype and other applications on your device, e.g. to have a look at the meeting schedule or this manual.

If you require any help with Skype, please contact the WeCare Team or use the following website:

<https://support.skype.com/en/faq/FA11098/how-do-i-get-started-with-skype>

5. Mentoring sessions

It is important to take a moment to prepare for and reflect after your mentoring meetings. This will help you focus on the goals you want to achieve.

Preparing for your first mentoring session:

1. Familiarise yourself with the manual and attend the briefing session.
2. Read the First Meeting Plan (page 40) and the Mentoring Programme Plan (page 41) and be prepared to follow it.
3. Read the Frequently Asked Questions on page 33.
4. Email your mentee and schedule the first meeting (template on page 40).
5. Write down some thoughts on what you expect to achieve in this programme.
6. Write down a couple of sentences on why you wanted to become a mentor.
7. Make sure your Skype is working.
8. Have your intervention manual printout handy.
9. Have a pen and paper ready to take notes during the meeting.

During the meeting

1. You are expected to lead the first mentoring session. We recommend your mentee leads the following meetings, with some help from you if required.
2. The First Meeting Plan (page 40) will help you lead this meeting. Simply follow the steps in the plan. You will also use the Mentoring Programme Plan (page 41) to discuss what your mentee would like to achieve in this programme.
3. Take notes.
4. If you need to look at the mentoring manual, it is fine to do so. Simply excuse your mentee for a moment and tell them you need to check something.
5. If you are unsure about answering your mentee's questions, let them know you will think about it and try to answer next time:
"Good question! I will have a think and let's discuss it next time."
6. You might feel nervous at the first meeting. This is normal and nothing to worry about.

After your first meeting:

1. Complete the Meeting Report (template on page 42). Immediately following your mentoring session, you will receive an email with a link to the report. Completing this report will help you reflect on the things you discussed during the mentoring session, and will allow the WeCare team to manage any health and safety concerns you might have regarding your mentee or yourself.
2. We encourage you to email your mentee within 24 hours after the meeting to let them know your thoughts regarding the last meeting. Something like the following would be fine:

Hi XYZ,

Hope you are well. It was a very productive meeting yesterday. It is great to see you are making progress towards achieving your goals. Looking forward to catching up at our next meeting.

Best regards, ABC

Preparing for the following meetings:

1. Please check your emails for any updates from your mentee or the WeCare Team.
2. Please review the notes from your previous mentoring session.
3. Have a pen and paper ready to take notes during the meeting.
4. Have the training manual printout handy.



6. Confidentiality

From the beginning, there should be a bond of trust established between you and your mentee. Maintaining confidentiality is one of the ways you demonstrate respect for your mentee and your position as a mentor. You are required to sign a confidentiality agreement and abide by it.

Everything that is discussed during your mentoring sessions is to be held in strictest confidence and not discussed with anyone else. However, there are certain situations where the information may be disclosed.

Your mentee or you may discuss any arising issues with the WeCare Team representative. However, all members of the WeCare Team are subject to the same confidentiality rules as the mentor and mentee.

Additionally, information can or must be disclosed:

1. Where you or your mentee give consent.
2. Where compelled by law.
3. Where there is a serious risk of harm to you, your mentee, or others.
4. Where the information is so grave, that confidentiality cannot be maintained, for example where compelled by law.



7. Privacy

As a health sector employee, you are required to abide by your employment agreement and The Health Information Privacy Code 1994. This means that you should not disclose any specific work-related information unless you have a good reason to do it. You should not disclose any unique identifiers (for example a person's name) unless you have obtained permission.

In this programme, you will be discussing issues relevant to a range of areas of your and your mentee's lives. It is important to remember that there is a fine line between your professional and personal lives. You will be responsible for respecting each other's privacy and autonomy.

To protect your mentee and yourself, always follow these rules:

- A. Avoid using people's real names.**
- B. Always use hypothetical examples when describing work situations.**
- C. If you believe your mentee might be disclosing someone's private information without permission, ask them to stop and to use a different example.**

8. Boundaries

You have been chosen to be a mentor because of your professional background, knowledge and experience. You have an obligation to respect your mentee's autonomy and dignity, and treat them fairly. Your duty is to empower your mentee, be honest with them and keep promises.

It will be helpful to discuss any specific boundaries you may want to set with your mentee, for example what is an acceptable email response time, when is not a good time to be contacted by your mentee, etc.

This programme is based online, and uses email and Skype as the main communication media. **Any meetings in person, are considered outside the remit of this e-mentoring programme. In other words, in this programme you should be only meeting online.** We encourage people to resist meeting in person until after the six-month duration of their mentoring relationship.

However, if you and your mentee decide to use any other media or meet in person, you are doing so at your own risk. If you decide to meet with your mentee in-person, only do so if you feel comfortable with this. Tell your friends or family who, when and where you are meeting, and meet in a public place.

Under any circumstances, you should not become intimately involved with your mentee.

9. Reporting unsafe practice and misconduct

If during your mentoring interactions you become aware of situations which appear to be unsafe practice or misconduct, you should contact the study researcher, Karol Czuba, and report such situations.

Examples of unsafe practice and misconduct include, but are not limited to:

- Physical assault;
- Verbal abuse;
- Bullying or intimidation of any other person;
- Neglect of a resident;
- Failure to report abuse or neglect;
- Sexual harassment;
- Falsification of company or patient documents;
- Theft;
- Failure to report any accident, incident or injury at work;

If you become concerned about your mentee's conduct at work, please discuss your concerns with Karol Czuba.

10. Safety guidance

If you have any concerns about your own or your mentee's safety, please ensure that you contact the study researcher, Karol Czuba. Ensure you document your concerns, detailing conversations, times, dates and actions. Details are quickly lost after the event. Karol will be very happy to discuss any concerns and offer any support you might require.

Please read the resource on talking with people thinking of suicide (please follow the website link on page 37).

Safety concerns

If you are concerned for your mentee's safety, but you don't think that there is an imminent threat to life:

- Explain that you are concerned
- Ask if there is anybody with them that they are able to talk to
- Say that you would like to contact their GP / councillor to let them know of your concerns
- Ask who their GP is and seek their permission to contact them
- Contact Karol Czuba to discuss, who will make a decision regarding any further action
- Call back participant to let them know what you have done AND/OR
- Provide contacts if it feels more appropriate:

Samaritans – 0800 726 666, <http://www.samaritans.org.nz/>

Lifeline – 0800 543 354, <https://www.lifeline.org.nz/>

Imminent danger

If you think the mentee is in imminent danger or they present an imminent danger to others:

- Explain that you are concerned
- Ask if there is anybody with them that is able to help
- Explain that you are going to call someone for assistance
- If ideation **of self-harm**, call the Mental Health Crisis team:
 Tel: 0800 800 717 (for Auckland, operating 24/7)
<https://www.health.govt.nz/your-health/services-and-support/health-care-services/mental-health-services/crisis-assessment-teams>
- If imminent **danger to others and/or self**, call the police emergency line: Dial 111
- Let Karol Czuba know straight away
- Keep a detailed written record of exactly what was said, and actions taken.

11. Frequently Asked Questions

A. Who runs this mentoring programme?

This mentoring programme is being run by a team of researchers from Auckland University of Technology (AUT) in collaboration with aged care stakeholders, including aged care workers, managers, and users. It is led by Karol Czuba, a PhD candidate at AUT, as part of his PhD course requirements.

B. What is mentoring?

*Eric Parsloe, who is an international expert in mentoring, offered this definition: "Mentoring is a way of **supporting** and **encouraging** people to manage **their own learning** in order to **maximise** their **potential**, develop their **skills**, and become the **best person they want to be**."*

C. How can I build trust?

1. *Be reliable – do what you say you will do.*
Do not be late for your mentoring sessions. If you told your mentee you were going to send them an email or prepare something for your meeting, make sure you do. If you cannot do what you promised, you need to explain to your mentee why. Failing to follow through will undermine your trustworthiness.
2. *Express your feelings.*
While, as a mentor, your primary role is to listen to your mentee, it is very important to let your mentee know how you feel about certain things, e.g. the challenges your mentee has been through. Showing that you are compassionate and understanding will help build trust between you and your mentee.
3. *Be open.*
It is often a good idea to provide more information, rather than being vague. For example, if your mentee asks how your day was, it is ok to tell them more than just "it was ok". Sharing a bit of yourself with your mentee will help them to feel safe and comfortable to share with you. It is hard to expect them to share their

personal stories with you if they know nothing about you. You can share as much or as little as you feel comfortable with. If you do not want to answer your mentee's questions – say so, and explain why (it is fine to say "I cannot share this information with you yet"). Being open can help increase your trustworthiness.

4. Be respectful.

During your mentoring sessions you should offer your full attention to your mentee. You should respect their views, even if they are different to yours. Remember – your role is not to change your mentee; it is to help them be the best person they want to be. And if you do not know how to respond to your mentee, treat them how you want to be treated.

D. What could we talk about?

Your mentee and you get to decide what you want to talk about during your mentoring sessions. Potential topics could include:

- *Career development;*
- *Work-life balance;*
- *Technical skills;*
- *Cultural issues.*

The focus of your sessions will be negotiated between you at the first meeting and might change as you progress through your mentoring relationship depending on your mentees needs and preferences at that time.

E. What if we would like to meet more often than once a month?

We recommend one meeting per month as the minimum meeting frequency for this programme. If your mentee and you feel it would be beneficial and possible for you to meet more often, it is up to you to decide. Meeting more frequently might be particularly beneficial in the introduction phase, when you are still building a rapport with your mentee.

F. What if my mentee is not engaging in a discussion?

If your mentee appears disinterested, do not take it personally. Try to encourage them to talk by asking follow-up questions, e.g.:

- a) Can you tell me more about this?*
- b) What else could one do in this situation?*
- c) What would the ideal solution look like?*

At the end of the day, your mentoring relationship is about your mentee's goals and if they do not want to talk about them, it is not your fault. Simply ask your mentee, if they would like to finish the meeting and schedule time for the next one. If this situation repeats, please contact the WeCare team.

G. What if my mentee doesn't achieve their goals?

*Think of yourself as a "learning facilitator" rather than the person with all the answers. **Your role is not** to make your mentee achieve their goals. Your role is to support and encourage them to progress some of the things they have identified to be important to them in the context of their support worker role. Thus, listening to what they want to share and showing understanding is your primary focus. Anything else you can do to help them achieve their goals is a bonus.*

H. What if my mentee tells me about a malpractice incident?

If you become aware of a situation which you deem to be indicative of unsafe practice or misconduct, you have to contact the study researcher, Karol Czuba, and report the situation. Please refer to Section 8 of this booklet for examples of unsafe practice and misconduct.

I. What if my mentee requires professional help?

Your mentee, as any other person, might be going through a challenging time in their life. If you become concerned about your mentee's well-being, it is important that you discuss your concerns with them and agree a plan for how you can help

them. Please refer to Section 9 of this booklet for more information on what to do in such situations.

J. What if my mentee and I would like to continue the mentoring relationship?

This mentoring programme lasts six months. At the end of the programme, you will both evaluate your mentoring relationship and wind it down. This is where the programme ends. It is up to you and your mentee if you wish to stay in touch after this mentoring programme ends. Any ongoing interactions beyond the programme end date will be at your own risk.

Naturally, it is possible that your mentoring relationship will develop into a friendship. However, it is important that whilst in this programme, you and your mentee focus on what the goals are and continue working towards achieving them.

K. What if I have issues with my mentee?

If you have technical difficulties (e.g. no response to your emails), please contact the study researcher, Karol Czuba.

If your mentoring relationship is not working out, please do not be concerned. Please get in touch with Karol Czuba and he will work with you to resolve any issues, or terminate the relationship if necessary.

L. Are there any tools we can use to identify goals for my mentee?

There are many tools that could be used to identify goals for your mentee. We recommend using the MAP framework (Section 3 of this booklet).

Another tool, that you might be familiar with is the SMART goals framework. More information on SMART goals can be found on this website:

<https://www.mindtools.com/page6.html>

M. I don't like using emails. Can we use other forms of communication?

We recommend email as your primary means of communication for this programme. However, if your mentee and you decide you would like to use other forms of communication (e.g. mobile texting), it is up to the two of you.

12. Important websites

Here is a list of websites that we recommend you visit as part of your mentoring training:

1. Goal setting <https://www.mindtools.com/page6.html>
2. Tips on mentoring <https://www.theguardian.com/culture-professionals-network/culture-professionals-blog/2014/mar/11/mentoring-tips-mentor-mentee>
3. "Are you worried someone is thinking of suicide?"
<https://www.mentalhealth.org.nz/assets/ResourceFinder/worried-about-someone.pdf>

13. Appendices

1. Introductory email template
2. First meeting plan
3. Mentoring programme plan
4. Reporting template

1. INTRODUCTORY EMAIL TEMPLATE

*PLEASE DELETE ALL TEXT IN BRACKETS BEFORE SENDING THIS EMAIL

Hi [MENTEE'S NAME],

My name is [YOUR NAME]. I received your details from Karol Czuba from the WeCare Mentoring Programme. Thank you for accepting me as your mentor.

By now, you will have received an information pack about the WeCare mentoring programme along with my short bio. Please take your time to read these materials before our first meeting. This will help to ensure we both understand the mentoring process and how the mentoring relationship will work for both of us.

Karol suggested that we communicate via Skype as soon as possible as we need to develop a mentoring plan and sign an initial agreement between you and me. I am based in [name city/town]. Could you please let me know some times when you would be available to meet and your preferred method of contact? [You may wish to add details of your own availability here as a starting point].

I am very interested in learning about you and what you would like to achieve in the coming months while taking part in this programme. Thanks again for choosing me as your mentor!

Looking forward to hearing from you.

Kind regards,
[YOUR NAME]

2. FIRST MEETING PLAN

Focus of the meeting: Developing a mentoring plan		Date of the meeting:
Activity	Notes	
1. Introduction	Mentor to introduce themselves (your background, experience, your family, your hobbies, your current role, why you are taking part in the programme, etc.). Mentee to introduce themselves (your background, experience, your family, your hobbies, your current role, why you are taking part in the programme, etc.).	
2. Mentoring programme plan	Please use the mentoring programme plan (page 41), discuss and complete.	
3. Meeting reporting	Mentor will explain how to complete this. A meeting reporting template can be found in Mentee's manual as an appendix. It is mentee's responsibility to complete this report. It is a brief summary of the mentoring meetings. It is to be completed after every mentoring session. Once completed by mentee, this report will be emailed to the mentor by WeCare team.	
4. Next meeting	Please schedule your next 1-2 meetings Date – Mentee to identify things to discuss at the next meeting.	

3. MENTORING PROGRAMME PLAN

Mentoring programme plan		
Mentor initials:	Mentee initials:	Date:
<p>This document should be completed by both mentor and mentee at the first or second meeting. It will help facilitate progress of the programme, the development of shared goals and expectations moving forward. Both mentor and mentee should retain a copy of this plan.</p>		
Expectations		
<p>Mentee: I expect my mentor to...</p> <p>Mentor: I expect my mentee to...</p>		
Communication arrangements		
<p>By what methods and how often will we communicate with each other? <i>Please note, that email and Skype are the recommended methods of communication</i></p> <p>Methods:</p> <p>How often:</p>		
Goals/Areas to focus on		
<p>What do we want to achieve with this mentoring programme? <i>Please refer to Section 3 (Setting Goals) to help identify your goals.</i></p> <p>Things we hope to get out of this mentoring relationship:</p>		
Evaluation		
<p>Choose when you want to review and discuss the progress of the mentoring relationship (e.g. in the third and sixth month).</p>		
Confidentiality reminder		
<p>The contents of our discussions are confidential. Are there any exceptions to this? Please discuss these and note them here.</p>		

4. Meeting report template

Mentor's name:

Mentee's name

Date:

General reflections and comments following today's meeting (1-2 sentences):

Are there any issues or concerns following today's meeting?

14. Personal notes

Please use this space for your personal notes and reflections.

Appendix 16. WeCare Mentoring Demographic form.

Appendix B: Improving Outcomes for Support Workers in Aged Care



Demographic Form

Improving Outcomes for Support Workers in Aged Care

Principal Investigator: Mr Karol Czuba kczuba@aut.ac.nz 09 921 9999 ext. 7768

1. Age
2. Gender
3. Year(s) of experience in aged care
4. Working hours per week
5. NZ immigration status (circle one) Work visa holder Citizen/Resident
6. Ethnicity
 - New Zealand European ☐
 - Maori ☐
 - Samoan ☐
 - Cook Island Maori ☐
 - Tongan ☐
 - Niuean ☐
 - Chinese ☐
 - Indian ☐
 - Other, please state:



Appendix 17. Study 3 Mentee preferences.

Appendix B: Improving Outcomes for Support Workers in Aged Care



Mentoring preferences

Mentee

Improving Outcomes for Support Workers in Aged Care

Principal Investigator: Mr Karol Czuba kczuba@aut.ac.nz 09 921 9999 ext. 7768

My key interest are:

In the future, I would like to work as:

I would like my mentor to be (name up to five characteristics):

How did you find out about this study?



Appendix 18. Study 3 Mentor preferences.

Appendix B: Improving Outcomes for Support Workers in Aged Care



Mentoring preferences

Mentor

Improving Outcomes for Support Workers in Aged Care

Principal Investigator: Mr Karol Czuba kczuba@aut.ac.nz 09 921 9999 ext. 7768

My key interest are:

In the future, I would like to work as:

I would like my mentee to be (name up to five characteristics):

How did you find out about this study?

What is the number maximum number of mentees you would be willing to mentor at any one time (circle your answer)?

1 2 3 4 5



Appendix 19. Study 3 Ten Item Personality Inventory.

Ten-item measure of the Big Five 1

Ten-Item Personality Inventory-(TIPI)

Here are a number of personality traits that may or may not apply to you. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

Disagree strongly	Disagree moderately	Disagree a little	Neither agree nor disagree	Agree a little	Agree moderately	Agree strongly
1	2	3	4	5	6	7

I see myself as:

1. ____ Extraverted, enthusiastic.
2. ____ Critical, quarrelsome.
3. ____ Dependable, self-disciplined.
4. ____ Anxious, easily upset.
5. ____ Open to new experiences, complex.
6. ____ Reserved, quiet.
7. ____ Sympathetic, warm.
8. ____ Disorganized, careless.
9. ____ Calm, emotionally stable.
10. ____ Conventional, uncreative.

TIPI scale scoring ("R" denotes reverse-scored items):

Extraversion: 1, 6R; Agreeableness: 2R, 7; Conscientiousness: 3, 8R; Emotional Stability: 4R, 9;

Openness to Experiences: 5, 10R.

Interview guide - Mentee

This interview guide consists of three parts. During part 1, the Think Aloud Interview, participants will be asked to perform a range of task associated with a single mentoring session. Their role will be to verbalise whatever crosses their mind during the task performance. In part 2, the Semi-Structured Interview, participants will be reflecting on their experience of participating in the mock mentoring session. In part 3, the Stimulated Recall Interview, a purposefully selected extract of the video recording from their mock mentoring session will be played to them. They will be asked to explain what was going on, what they were thinking, why they did what they did, and how this may have impacted them.

Think Aloud Interview (Part 1)

Setting the context and re-confirming consent

- Setup the camera – behind the participant, with the computer screen in the frame.
- Explain purpose to the participant – to document their performance using email and videoconferencing software in a mock mentoring session. Video will be used only for the purpose of the research and no other purpose.
- We are testing the process; **not the user!**
- Encourage the participant to verbalise their thoughts and feelings during task performance.

Start video-recording

Task 1

You will receive an email from your mentor. Respond and agree to proposed start time.

Task 2

Take part in the mock mentoring session.

Task 3

Complete the Mentoring Meeting Diary.

Task 4

Complete the Outcome Measures form.

End of Part 1

Stop video-recording

Semi-structured interview (Part 2)

Start audio-recording

The main focus of this interview is on participants' experience of participating in the mock mentoring session.

Mock mentoring session

What are your first impressions?

How did you find the scheduling process?

How did you find the mentoring session?

How did you manage engaging in a mentoring session with the other participant?

What did you like about the overall process? What did you not like?

Intervention training

Can you tell me a bit about your thoughts on the training manual?

Did you feel prepared for the session?

Was there anything missing that might have been helpful during the session?

What else could be helpful?

General impressions

Can you tell me a bit more about your impressions regarding the intervention?

In general, how relevant is this intervention to you?

What would make you want to become a mentor/mentee?

In what ways could this intervention affect its users?

What could affect people's engagement in this intervention?

End of Part 2

Stop audio-recording

Stimulated Recall Interview (Part 3) – within 72 hours post Part 2

RE-CONFIRM CONSENT

Explain purpose of interview – participants to watch a video extract and to explain what was going on, what they were thinking, why they did what they did, and how this may have impacted them.

The video is used to stimulate the discussion.

Example prompts to be used:

- Can you tell me what is going on here?
- What were you thinking at the time?
- How did this make you feel?

End of Part 3

Interview guide - Mentor

This interview guide consists of three parts. During part 1, the Think Aloud Interview, participants will be asked to perform a range of task associated with a single mentoring session. Their role will be to verbalise whatever crosses their mind during the task performance. In part 2, the Semi-Structured Interview, participants will be reflecting on their experience of participating in the mock mentoring session. In part 3, the Stimulated Recall Interview, a purposefully selected extract of the video recording from their mock mentoring session will be played to them. They will be asked to explain what was going on, what they were thinking, why they did what they did, and how this may have impacted them.

Think Aloud Interview (Part 1)

Setting the context and re-confirming consent

- Setup the camera – behind the participant, with the computer screen in the frame.
- Explain purpose to the participant – to document their performance using email and videoconferencing software in a mock mentoring session. Video will be used only for the purpose of the research and no other purpose.
- We are testing the process; **not the user!**
- Encourage the participant to verbalise their thoughts and feelings during task performance.

Start video-recording

Task 1

Email your mentee to introduce yourself and schedule the session – propose start in 10 minutes from now. You can use the introductory email template from the Mentor's manual.

Task 2

Conduct a mock mentoring session – use the 'First meeting plan' from the Mentor's manual to facilitate the meeting.

Task 3

Complete the Mentoring Meeting Diary.

Task 4

Complete the Outcome Measures form.

End of Part 1

Stop video-recording

Semi-structured interview (Part 2)

Start audio-recording

The main focus of this interview is on participants' experience of participating in the mock mentoring session.

Mock mentoring session

What are your first impressions?

How did you find the scheduling process?

How did you find the mentoring session?

How did you manage engaging in a mentoring session with the other participant?

What did you like about the overall process? What did you not like?

Intervention training

Can you tell me a bit about your thoughts on the training manual?

Did you feel prepared for the session?

Was there anything missing that might have been helpful during the session?

What else could be helpful?

General impressions

Can you tell me a bit more about your impressions regarding the intervention?

In general, how relevant is this intervention to you?

What would make you want to become a mentor/mentee?

In what ways could this intervention affect its users?

What could affect people's engagement in this intervention?

End of Part 2

Stop audio-recording

Stimulated Recall Interview (Part 3) – within 72 hours post Part 2

RE-CONFIRM CONSENT

Explain purpose of interview – participants to watch a video extract and to explain what was going on, what they were thinking, why they did what they did, and how this may have impacted them.

The video is used to stimulate the discussion.

Example prompts to be used:

- Can you tell me what is going on here?
- What were you thinking at the time?
- How did this make you feel?

End of Part 3

Appendix 22. WeCare Mentoring - monthly email example.

Dear WeCare Study participants,

Hope this finds you well 😊 Welcome to Month 3 of the WeCare Mentoring Programme!

I hope you have got to know your mentor a little bit already and are make some good progress towards your personal and professional goals 😊

The mentors are telling me that they have been having some great conversations with you guys and that they have learned some new things from their mentees.

Just a quick reminder – please complete your meeting report as soon as possible following your mentoring meeting.

If you need any help with the programme, please let me know.

Have a great month ahead! I will be in touch soon.

Best regards,
Karol

WeCare Mentoring

STUDY TESTING A MENTORING PROGRAMME FOR SUPPORT WORKERS

Are you a support worker? ✓

Would you like to change or improve something in your life? ✓

Would you like to help other people? ✓

Contact Karol to find out more about this study or why it might be good for you.

 kczuba@aut.ac.nz

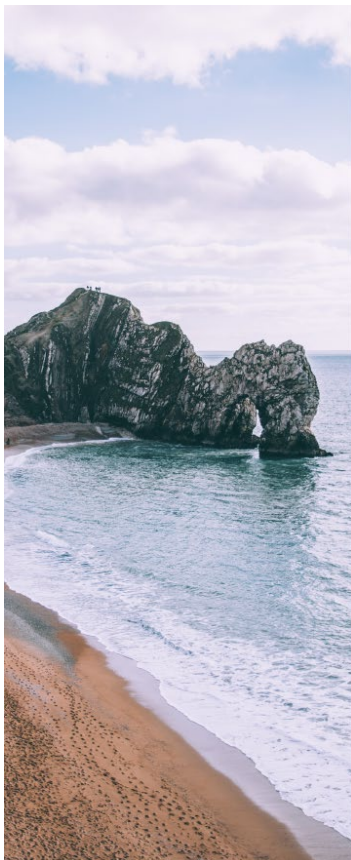
 021 246 9207

AUT

hrc

Looking for Mentees and Mentors

December 2019



WE CARE MENTORING CERTIFICATE OF COMPLETION

THIS IS PRESENTED TO

Name Surname

for successfully completing
the WeCare Mentoring Programme

KAROL CZUBA

WeCare Study Manager



Interview guide - Mentee

In this semi-Structured Interview, you will be reflecting on your experience of participating in the e-mentoring programme.

Start audio-recording

The main aim of this interview is on perceived acceptability and other feasibility aspects of the e-mentoring programme.

Acceptability and suitability of recruitment protocols

How did you find out about the study?

How was the recruitment process for you?

What did you like about the process? What did you not like?

Acceptability and suitability of the programme

Can you tell me a bit more about your impressions regarding the programme? What did you like? Not like?

What did you find most useful? Least useful?

How could the programme be improved?

In general, how relevant is this programme for you?

What could affect people's engagement in this programme?

What did you think about the programme manual?

Tell me about your mentor. What did you like/not like about their approach?

What characteristics do you think make a good mentor?

Preliminary responses to the programme

In what way did this programme affect you? How did it affect you as a support worker?

What did you think about the frequency of your sessions? What about duration?

Would you recommend this programme to others? Why? Why not?

Acceptability and suitability of data collection procedures and outcome measures

How did you go with completing the online surveys?

What did you think about the format and wording of the items?

Can you tell me about any difficulties you experienced completing the surveys?

What did you think about the constructs we have selected to measure? Where these surveys able to capture the impact of the programme on you? What other constructs would you recommend focusing on?

Stop audio-recording

Interview guide - Mentor

In this semi-structured Interview, you will be reflecting on your experience of participating in the e-mentoring programme.

Start audio-recording

The main aim of this interview is on perceived acceptability and other feasibility aspects of the e-mentoring programme.

Acceptability and suitability of recruitment protocols

How did you find out about the study?

How was the recruitment process for you?

What did you like about the process? What did you not like?

Acceptability and suitability of the programme

Can you tell me a bit more about your impressions regarding the programme? What did you like? Not like?

What did you find most useful? Least useful?

How could the programme be improved?

In general, how relevant is this programme for you?

What could affect people's engagement in this programme?

What did you think about the programme manual?

What characteristics do you think make a good mentor?

Tell me about your mentee. What did you like/not like about their approach?

Preliminary responses to the programme

In what way did this programme affect you? How did it affect you as a support worker?

What did you think about the frequency of your sessions? What about duration?

Would you recommend this programme to others? Why? Why not?

Acceptability and suitability of data collection procedures and outcome measures

How did you go with completing the online surveys?

What did you think about the format and wording of the items?

Can you tell me about any difficulties you experienced completing the surveys?

What did you think about the constructs we have selected to measure? Where these surveys able to capture the impact of the programme on you? What other constructs would you recommend focusing on?

Stop audio-recording

Appendix 27. Study 3 Union invitation email.

Research study for caregivers – WeCare Mentoring

Are you a caregiver/support worker/healthcare assistant?

Do you work at an aged care facility?

Karol Czuba, a PhD researcher from AUT University, is currently developing an online mentoring programme for aged care caregivers. The programme is delivered online, meaning you can participate from anywhere and at any time that works for you.

All it takes is:

a little bit of preparation,

6 Skype calls (only one per month), and

completing an online survey on three different occasions.

All aged care support workers are invited to take part and become a mentee. Those of you who have completed the Healthcare Assistant Certificate Level 4 AND have at least 5 years of experience in aged care could potentially take part as mentors.

For contributing your time to this research you will receive a \$90 koha (3x\$30 gift vouchers).

Would you like to help Karol test this exciting initiative? Would you like to know more?

Get in touch now - recruitment ends at the end of June!

Email Karol at karol.czuba@aut.ac.nz or txt/call on 021 246 9207

Appendix 28. Study 3 Outcome measure scores correlations.

Pearson's correlations between outcome measures at baseline, three and six-month assessments.

Outcome 1	Outcome 2	Assessment	Correlation Coefficient	Lower 95%CI	Upper 95%CI	St Error
JSS	SWLS	1	0.30	-0.11	0.62	0.18
JSS	SWLS	2	0.38	-0.05	0.69	0.18
JSS	SWLS	3	0.74	0.45	0.89	0.10
JSS	GSES	1	0.46	0.08	0.74	0.16
JSS	GSES	2	0.24	-0.30	0.60	0.20
JSS	GSES	3	0.55	0.16	0.79	0.15
JSS	PSS	1	-0.07	-0.45	0.34	0.20
JSS	PSS	2	0.16	-0.28	0.54	0.21
JSS	PSS	3	-0.08	-0.50	0.36	0.22
SWLS	GSES	1	0.44	0.05	0.71	0.16
SWLS	GSES	2	0.14	-0.30	0.53	0.21
SWLS	GSES	3	0.59	0.21	0.81	0.14
SWLS	PSS	1	-0.15	-0.51	0.26	0.20
SWLS	PSS	2	0.30	-0.14	0.64	0.19
SWLS	PSS	3	0.06	-0.38	0.48	0.22
GSES	PSS	1	-0.05	-0.44	0.35	0.20
GSES	PSS	2	-0.16	-0.54	0.28	0.21
GSES	PSS	3	-0.06	-0.48	0.38	0.22