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Caring self-efficacy of direct care workers in residential aged care settings: A mixed methods scoping review

Abstract:
The caring self-efficacy of direct care workers in residential aged care has been explored mostly as a predictor rather than the focus of interest in the literature. This scoping review aimed to provide an overview of aged care workers’ caring self-efficacy and influencing factors from the existing literature. A systematic search was performed in six electronic databases. All primary studies, qualitative and quantitative, including grey literature, were included. A protocol detailing the methodology of this scoping review was published before commencing the review. A total of 41 studies met the inclusion criteria. Caring self-efficacy was most often described by direct care workers in aged care as their capacity to deal with difficult situations. The self-efficacy score of direct care workers was high across studies. It was positively influenced by access to resources, relationships with residents and their families, the support of supervisors and co-workers, job satisfaction, and training opportunities. On the other hand, it was negatively affected by work pressure and burnout.

Keywords: Direct care workers; Nursing homes; Nursing staff; Scoping review; Self-efficacy; Residential aged care
Introduction

Residential aged care plays a key role in the spectrum of long-term care services for older people in most developed nations, and the number of people likely to require residential care is growing with the proportion of the population aged over 80 years.\(^1\) In Australia, it is estimated that nearly half of women and one-third of men aged 65 years will access residential aged care service permanently at some point in their remaining life.\(^2\)

A residential aged care facility provides accommodation and support for older people who cannot live independently and require assistance to perform activities of daily living.\(^3\) While organisational leadership is responsible for ensuring the care quality and safety of residents in residential aged care facilities,\(^4\) direct care workers, such as nurses and care aides/assistants, provide the most assistance and care to residents.\(^5\) The performance of direct care workers is affected by their self-efficacy in providing care to their clients.\(^6\)

The concept of self-efficacy is grounded in Social Cognitive Theory, which recognises that individuals’ thought processes influence their motivation, attitudes, and actions.\(^7\) Self-efficacy is not concerned with the number of skills one has but with what people believe they can do with what they have under various circumstances.\(^8\) Efficacy beliefs influence the courses of action chosen, along with an individual’s effort, perseverance in the challenges faced, resilience to adversity, and level of accomplishment.\(^8\) Self-efficacy is not a universal attribute. It varies across tasks and contexts, based on experiences, social modelling, social persuasion, and choice processes.\(^7\)

Self-efficacy in caring refers to a perceived ability of care workers to establish compassionate relationships with clients and meet their caring needs.\(^9,^{10}\) Positive self-judgement about being able to provide care to the optimum level influences the level of performance care workers can achieve.\(^7\) As self-efficacy is a contextual concept, its attributes vary between different care settings.\(^7\)
Alavi et al. explored understandings of caring self-efficacy from paediatric nurses’ perspectives. They found that interpersonal communication, creativity in care, management of the care process, altruism, and application of knowledge and skills into practice are essential attributes of caring self-efficacy. The same concepts may not be applicable in aged care. However, there is a relative dearth of information on the conceptual understandings of caring self-efficacy from the perspective of aged care workers. Older residents’ ongoing deterioration in health despite the provision of continuous care differentiates aged care settings from many other care settings and makes them challenging to work in.

Prevalence rates of multimorbidity, including various forms of physical illness, dementia, depression and other behavioural disorders, are high among residents in residential aged care facilities, with many requiring substantial assistance with activities of daily living. The complex nature of aged care may influence direct care workers’ ability to provide quality care. Low caring self-efficacy in aged care workers is associated with burnout, while burnout in turn reduces the quality of care provided to older residents.

Several studies have reported high caring self-efficacy of direct care workers, and factors such as supervisory support, perseverance, and access to structural resources have been associated with high confidence. However, these studies have utilised different measures of caring self-efficacy and most explored self-efficacy as a predictor or mediator rather than the central interest of the study.

Overall, there is a gap in synthesising the existing literature to understand direct care workers’ caring self-efficacy comprehensively and to identify any potential omissions from the literature. A scoping review can provide insights on what comprises the existing knowledge base and what is yet to be explored. Hence, we aimed to conduct a scoping review to provide an overview of the self-efficacy of direct care workers in caring for older residents.
in residential aged care settings and explore factors that have been associated with caring self-efficacy. The three questions addressed by the scoping review were:

1. How is caring self-efficacy understood by direct care workers in aged care?
2. How high is the caring self-efficacy of direct care workers?
3. What affects the caring self-efficacy of direct care workers?

This scoping review is conducted based on the protocol published elsewhere by the authors. While we have described the methodology in the following section, detail methodology can also be accessed from the protocol.

Methods

A mixed methods scoping review was conducted to achieve the aims of this study, as different kinds of research evidence are best-suited to responding to the research questions. Question 1 (How is caring self-efficacy understood by direct care workers in aged care?) is best addressed by qualitative research; question 2 (How high is the caring self-efficacy of direct care workers?) can be addressed by two kinds of quantitative research (observational studies and intervention studies) and supported by evidence from qualitative research; and the third question (What affects the caring self-efficacy of direct care workers?) can be addressed by qualitative or observational studies. Therefore, our approach was to integrate sources of information to address the study aims.

We complied with the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Review checklist to ensure a complete and transparent reporting of results (see Supplementary file 1).

Ethical approval and informed consent are not applicable in this study, as it is a review of existing literature.

Eligibility criteria
Any primary studies, including masters or doctoral dissertations, were considered for inclusion if: 1) study participants were direct care workers in residential aged care settings, such as nursing homes or assisted living facilities, 2) the study reported caring self-efficacy or confidence to care for older residents, and 3) texts were written in English. ‘Direct care workers’ in this study refers to all paid or formal care staff (i.e., registered nurses, enrolled nurses, nursing assistants, and care aides) providing direct care to older people living in residential aged care facilities.

Studies that reported perceived self-efficacy of direct care workers in an individual component of care, such as pain management, managing agitated behaviour, or preventing falls, were not considered in the review. This is because staff who are confident in one component of care may not be so given another task or setting, and therefore, self-efficacy in relation to specific aspects of care requires separate examination. However, we included studies on self-efficacy in providing care for people with dementia or depression, given that a majority of residents are known to experience some level of cognitive impairment,26 and that our aim in this study was to provide an overview of the caring self-efficacy of direct care workers in general.

Similarly, we excluded studies reporting caring self-efficacy associated with end-of-life care. We acknowledge that aged care facilities are homes for older people near the end of life. However, end-of-life care involves end-of-life planning and, following the resident’s death, decision-making and support to families and relatives in bereavement27, which was beyond the scope of this review.

**Identification and selection of relevant studies**

The three-step strategy recommended by Joanna Briggs Institute 28 was followed to identify relevant studies. First, keywords and index terms were identified by a limited search of CINAHL and MEDLINE to develop a comprehensive search strategy, which was finalised
in collaboration with two senior librarians with experience in the health sciences. See Supplementary file 2 for the search strategy used in MEDLINE. In the second step, a systematic search was carried out in electronic databases—CINAHL, AgeLine, MEDLINE, PsycINFO, SCOPUS, and ProQuest Dissertations & Theses Global—to extract relevant records. Finally, a manual search of reference lists of all included studies was conducted.

A web-based literature review platform, Covidence, was used to facilitate the selection of relevant studies. Authors 1 and 2 independently screened titles and abstracts and then reviewed full texts of the studies selected from the title and abstract screening. Authors 3 and 4 resolved conflicts in both stages. The final decision for the inclusion of study was made by consensus within the review team.

**Charting and Extraction of Data**

Two team members independently extracted the data, and inconsistencies were resolved by consensus in the whole team. To validate the data extracted, another two members of the team further conducted data extraction of five studies each. Several data checks were undertaken during the data analysis and synthesis phase.

General information such as author/s, publication year, country of study, aim, study design, study method, study setting, number of care homes, study population, data collection year, sample size, sampling method, study context, and data source were extracted from included studies. Additionally, data extracted from quantitative studies included caring self-efficacy measures, the potential range of scores, participant characteristics, and statistical and narrative results on caring self-efficacy and influencing factors. We also extracted brief descriptions of interventions and pre- and post-intervention scores from intervention studies.

Similarly, data related to the review objectives, including participants’ quotes and researchers’ interpretations, were extracted from reports of qualitative studies.
A critical appraisal of studies was not carried out as it is not generally performed in a scoping review, which examines the existing evidence base regardless of its quality.²⁸

**Data synthesis**

A narrative synthesis of data was conducted. Descriptive content analysis was applied to analyse qualitative data, and themes on the concept of self-efficacy and influencing factors were inductively categorised using NVivo, version 12. Influencing factors identified from both qualitative and quantitative data were grouped and presented together under three categories: personal factors, job-related intrinsic factors, and job-related extrinsic factors. These groupings were derived in consultation among the authors. Illustrative quotations were included to support the findings.

**Results**

We retrieved 8,737 records in total, of which 41 studies met the inclusion criteria. The study selection process is shown in a Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Review (PRISMA) flow chart (Figure 1). [Figure 1 near here]

The included studies were conducted across 11 countries, all of which were developed nations. Nineteen studies were conducted in North America, 12 in Europe, 7 in Oceania, and 3 in Asia. Of these, 19 were cross-sectional, and 22 were intervention studies. Intervention studies most commonly employed a pretest-posttest design, with or without control group. Most studies were quantitative (27), with some mixed methods (8) and qualitative (6) studies. Within mixed methods studies, data and perspectives related to confidence in caring were not always explored by both methods, as this measure/concept was not always the main focus of these studies. Only four of the eight mixed methods studies examined both quantitative and qualitative data related to confidence in caring, while three provided only qualitative data on caring self-efficacy, and one analysed only quantitative data on caring self-efficacy.
A significant number of included studies discussed self-efficacy in caring for residents living with dementia, five studies focused on restorative care, and the remaining studies on care in general. Only 11 of the studies had a primary focus on assessing the self-efficacy of direct care workers in caring for residents. Study settings were mostly nursing/care homes and assisted living facilities. Table 1 illustrates the general characteristics of the included studies. [Table 1 near here]

**How is caring self-efficacy understood by direct care workers in aged care?**

Among the 13 studies that reported qualitative data, eight presented the understandings of caring self-efficacy from the perspective of direct care workers. Based on findings from these studies, we identified five notions related to caring self-efficacy (Figure 2). [Figure 2 near here]

**Dealing with difficult situations**

Direct care workers felt confident when they saw themselves as acting appropriately in challenging circumstances. Some examples of challenging situations were when a resident became upset, agitated, or violent, causing the direct care workers to feel frightened, or when family members or colleagues had differing priorities.

Direct care workers reported that participating in interventions had enhanced their confidence level because they dealt better than they had before with their colleagues, residents’ families, and administrators and felt less fearful of residents’ challenging behaviours. “I feel confident like in what I’m doing now, dealing with families, with my residents and with other team members.”

**Accepting feedback**

Direct care workers argued that a confident care worker is willing to accept feedback about their caring abilities, including suggestions for improvements, be it from residents themselves or their families. A positive feedback gave them the confidence that they are
doing a good work, while any form of feedback increased their sense of responsibility and
belongingness towards residents.

**Understanding residents**

Direct care workers expressed the view that the behaviour of residents was contingent
upon the degree to which staff could adopt residents’ perspectives—“*He punches carers
because they don’t understand him*”.\(^{30}\(p537\)) Staff reported that understanding residents’ side
of the story via communication increased their confidence in approaching those residents
when manifesting challenging behaviours—“*I have no fear because I know how to deal with
him, I know what he wants*”.\(^{30}\(p537\)) Direct care workers reported that a confident care worker
could understand what a resident is feeling or thinking.\(^{35}\) A positive response from residents,
either in words or gestures, was considered a sign of having done a good job.\(^{30}\)

**Feeling worthy in job**

Direct care workers knew that they were confident to carry out their job as they felt worthy.\(^{35}\)
They acknowledged the value of their work and reported that they had an inner sense of
satisfaction with their work—“*I cannot feel worthless in my job because I am doing
something*”.\(^{35}\(p674\))

**Being aware of their actions**

Self-awareness of actions was described in relation to two different types of scenarios.
Difficult situations may make direct care workers feel stressed and overwhelmed, but those
who were aware of their own actions could opt to use a person-centred approach and ‘*people
skills*’.\(^{23}\) Being confident about the care they provided and being able to articulate this to the
care recipient generated assurance of good care.\(^{23}\)

**How high is the caring self-efficacy of direct care workers?**

Of all articles included in the review, 32 studies measured self-efficacy in caring for
older residents quantitatively. As shown in Table 2, 22 different measures of self-efficacy
were used in total. Caring efficacy in dementia care was assessed mainly using the Perceived Self-Efficacy in Dementia Care Survey and the Inventory of Geriatric Nursing Self-Efficacy. Nursing Assistants’ Self-efficacy for Restorative Care Activities Scale was used to assess the self-efficacy in providing restorative care to older residents. Confidence on Depression Management and Care Scale was mostly used on studies measuring self-efficacy in caring for residents with depression. Measures used in studies assessing care in general were mostly designed specifically for the study.

Most studies reported the level of self-efficacy using the mean score with standard deviations, while some expressed it in proportions. The self-efficacy score of direct care workers was high, as interpreted by the authors. Qualitative studies also supported this finding: for example, “I have a lot of self-confidence in the care I give”.

In interventional studies, the pre-intervention score was similar to that reported by cross-sectional studies. Post-intervention, the caring self-efficacy of direct care workers improved significantly in most of the studies, mainly when interventions were directed towards understanding the caring needs of residents living with dementia. In contrast, there was no significant improvement in the confidence level of direct care workers in providing restorative care post-intervention.

What affects the caring self-efficacy of direct care workers?

Several factors that influence the caring self-efficacy of aged care workers providing direct care to residents were identified and grouped by the research team in consultation. Detailed quantitative findings are presented in the Table 2. Relevant quotations from qualitative studies are used to illustrate findings where appropriate. The summary of factors influencing direct care workers’ caring self-efficacy is presented in Table 3. [Table 2 and 3 near here]

Personal factors
Scerri et al. (2019) found that age was significantly and positively associated with self-efficacy in caring for residents with dementia. However, in other studies, age was not a significant factor in predicting caring self-efficacy. A survey by Casper et al. found that health care assistants who identified themselves as Caucasian had significantly higher perceived ability to provide person-centred care to aged care residents. In addition, direct care workers with strong self-esteem and self-determination had higher caring self-efficacy.

**Job-related intrinsic factors**

Job-related factors that stemmed from the care workers and could be in their own control rather than the control of the organisation were included within this category. Direct care workers’ knowledge about, attitudes towards, interest in, and personal care strategies used with residents with depression or dementia influenced their level of self-efficacy when caring for residents with these conditions. This finding was also reflected in qualitative studies, where direct care workers believed that their knowledge about the characteristics and impacts of such conditions helped them approach their clients confidently and to look after residents’ caring needs specific to the disease condition. In addition, when care workers were able to link the changed behaviour of residents to their medical history, they reacted more respectfully and confidently to the situation. “Being able to say these three symptoms, this is probably what it is. And being able to go confidently to a nurse and say: Look, this is what’s happening.”

Duration of work experience and seniority also significantly influenced the confidence level of direct care workers to carry out their job. Qualitative studies by Coates and Fossey and Mistretta and Kee also backed this association. For example, a staff with five years of experience stated, “I have a lot of self-confidence in the care I give because I know a lot about the disease (dementia), and I’ve worked with these people for a long time.”
Similarly, the higher the job satisfaction, the greater the level of caring self-efficacy observed. Direct care workers with higher perceived perseverance in the course of caregiving had greater caring self-efficacy than those with low perseverance. Likewise, direct care workers in a more senior role or working in specialised care unit were more confident in what they were doing. In contrast, high burnout negatively influenced their confidence level.

The positive impact on residents observed in response to their care also increased direct care workers’ beliefs in themselves. For example, when residents expressed satisfaction, direct care workers felt more skilled in their job: “You feel more competent to perform your work and then the clients get more satisfaction knowing that they are being looked after, they can feel it, so it’s good for everybody here.”

Furthermore, qualitative data suggested that the better the direct care workers knew residents, the higher their confidence to look after them. Quality interaction with residents was integral to understanding them and building a belief that they can meaningfully engage with their clients. Direct care workers argued that when residents in care homes behaved violently, this was because of care workers’ inability to empathise with the residents’ perspectives. Moreover, differing priorities and expectations from those of residents’ families reduced direct care workers’ confidence level. Qualitative studies also reported that direct care workers’ perceived inherent ability to care made them more confident to do their job as care workers.

**Job-related extrinsic factors**

Job-related factors mainly influenced by the organisational environment were included within this category. Access to structural resources such as policy and procedure
manuscripts, clinical practice guidelines, journals, and notice boards in the workplace enhanced the confidence of care aides to carry out their job. Qualitative studies also reported that the clarity of the rules and regulations set by the facility played an essential role in determining the self-efficacy of direct care workers. For instance, a care assistant shared how a change in the medication administration process put them in a dilemma: “In the past, you had to put [it] in jam or anything and they take it. Not now, if they don’t like it, what can you do?” Likewise, an organisational climate fostering autonomy and trust among the staff concerning work procedures and priorities enhanced their confidence. Support from supervisors and co-workers boosted the confidence of direct care workers. Contrarily, the pressure on task completion and performance standards did the opposite.

In addition, intervention studies recounted that training and professional development opportunities significantly improved the caring self-efficacy of aged care workers. Knowledge-based or skill-focused training on caring for residents—by simulation, in a real-life scenario, or using video clips—enhanced the staff members’ confidence in responding and meeting residents’ needs in different situations. One instance of a professional development program was an innovative Aged Care Graduate Nurse Program (ACGNP) in Australia for newly graduated RNs working in aged care. ACGNP enhanced staff members’ confidence in dealing with difficult situations: “(This program) has made me a lot more confident in dealing with difficult situations at work and talking to the residents and their families or even the other health care members.” In another study in the USA, after participating in an online education training about dementia care, a nursing assistant stated, “I know now what it means to connect with residents.”

Discussion

What caring self-efficacy means to direct care workers
The concept of caring self-efficacy from the perspective of direct care workers working in residential aged care settings has not yet been explored directly as the focus of qualitative studies. However, notions of what self-efficacy means to direct care workers are evident from incidental findings in existing qualitative research. Among the notions identified in the current review, being able to deal with difficult situations was most often mentioned.

Aged care is a challenging job where care recipients require multidimensional care—physical, psychological, and social. An aged care home environment that is not home-like, coupled with residents’ declining physical and mental health status or reduced social life, may precipitate challenging behavioural symptoms. Similarly, direct care workers may encounter conflict with residents’ families or co-workers due to differing priorities and expectations, which have an impact on how they provide care. Our review found that direct care workers who dealt with all different kinds of difficult circumstances and still built a caring relationship with residents identified themselves as confident care workers.

Another important notion of caring self-efficacy was accepting feedback. Feedback and suggestions often open the door for improving skills and knowledge, thereby enhancing the impact of the work. It can be argued that care workers who have enough self-efficacy to welcome all kinds of criticism as opportunities for improvement may confidently deal with challenging situations at work. However, there was not enough data in this regard in the literature to come to a conclusion. Care workers also linked caring self-efficacy to understanding residents, feeling worthy in the job, and being aware of their actions while caring for residents.

Level of caring self-efficacy

Although direct care workers had high caring self-efficacy across studies, it is important to note that caring self-efficacy in the included studies was measured in different contexts, using various caring self-efficacy measures. Only a few were validated for use in
aged care settings—namely, the Perceived Self-Efficacy in Dementia Care Survey, Inventory of Geriatric Nursing Self-Efficacy, Nursing Assistants’ Self-efficacy for Restorative Care Activities Scale, and Confidence on Depression Management and Care Scale. We recommend future studies use previously validated measures or test measures’ reliability and validity in relevant settings.

Factors influencing caring self-efficacy

Similar to our findings, studies in various settings have also found that an individual’s self-esteem, intrinsic motivation, and consistent positive self-evaluation enhances one’s ability to perform better. Age was not a significant factor determining the caring self-efficacy of direct care workers, except in one study in our review. However, it can be argued that individuals may become more resilient in dealing with difficult situations with increasing age and experience. This argument is supported by other studies in different care settings.

While ethnicity was another factor influencing caring self-efficacy, it was not widely explored. Many ethnicities or cultural groups are present in aged care in several countries, leaving room for researchers to consider cultural background as a potential predictor of caring self-efficacy. Despite the significant presence of migrant direct care workers in aged care, the influence of migration status on their self-efficacy has not yet been explored.

Similarly, other intrinsic factors related to the job also had a significant impact on the self-efficacy of direct care workers. Strong belief towards one’s inherent capabilities in caregiving led care workers to handle challenging situations faced with residents or their families more confidently. The aged care literature has also indicated that the longer direct care workers have been working, the better they understand their clients and the more able they are to build relationships with them. The literature also suggested that high job satisfaction and lower levels of job strain enhanced the application of person-centred care strategies. Martínez et al. found satisfaction among residents and their families was
higher with a person-centred care approach. Our review has shown that the lower the level of conflict with residents or their families, the more confident the staff feel. Undoubtedly, these factors are intertwined with each other and contribute to enhancing the caring self-efficacy of direct care workers.

Moreover, the organisational environment also determined the confidence level of direct care workers in caring for residents. Organisation-related factors are critical because aged care providers and managers can intervene directly on these factors to improve the caring self-efficacy of their care staff. We found that professional development opportunities boosted direct care workers’ confidence to establish relationships with residents, avoid distress, apply their knowledge and skills directly into care, and deal with difficult situations at work. Employers should foster independence and trust towards the staff concerning work procedures and priorities while increasing institutional support via access to resources, training, and other opportunities.

Gao et al. identified coping resources, such as the support of co-workers and supervisors, as significant factors in reducing care staff turnover in residential aged care, which might be due to increased confidence to perform the job. Having a better relationship with colleagues and supervisors was found to reduce working stress, allowing staff time to build relationships with their clients. Employers can also assign their staff to one specific unit rather than rotating their duty roster inside the whole facility to help them become acquainted with residents and build confidence to cope with residents’ challenging behaviours.

**Strengths and limitations**

This scoping review has several strengths. We developed a comprehensive search strategy including a wide range of terms in consultation with senior librarians. The inclusion of all primary studies—qualitative and quantitative, and both peer-reviewed and grey
literature—widened the scope of this review, providing a broad overview of research on the
caring self-efficacy of aged care workers. The extensive participation of the review team in
each stage of the review increased the reliability of the results.

There are also a few limitations of this review. Articles in languages other than
English were not considered, and therefore, relevant papers could have been missed. In
addition, readers must be cautious that the result of this review may not apply to end-of-life
care scenarios, as we excluded studies relating to end-of-life care. Moreover, all included
studies in this review were conducted in developed countries only. This might be because
long-term care systems are absent or comparatively new in low and middle-income countries.
However, we cannot confirm the lack of research in these countries, as we only considered
studies written in English.

Conclusion

The importance of self-efficacy in aged care has been well recognised in the literature.
Although not explicitly explored by the literature, dealing with difficult situations was the
most discussed notion of caring self-efficacy present across several studies. The gap in
research regarding the conceptual understanding of self-efficacy resulted in the development
of several tools to measure the caring self-efficacy among aged care direct care workers. The
self-efficacy score of direct care workers was high across studies. Job-related factors mainly
influenced caring self-efficacy, including organisational factors where aged care providers
could intervene directly to enhance the self-efficacy of their staff to provide quality care to
older residents.

The review did not find any studies addressing the self-efficacy of migrant aged care
workers, despite their significant representation in the aged care workforce and the fact that
the concept of residential aged care is still new in many of their home countries. Hence, this
review would recommend future research to increase the conceptual understanding of caring
self-efficacy in aged care more explicitly as well as explore the caring self-efficacy of migrant aged care workers.

Declaration of Competing Interest

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