

Autonomy and Depression: A Mixed Methods Study Exploring the Experience of

Decision-making for Residents in Residential Aged Care

Patricia Edwina Eastwood

Candidate's qualifications, BN (RMIT) MN (Avondale University)

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Principal Supervisor: Professor Brett Mitchell

Associate Supervisor: Associate Professor Joanne Lewis

Associate Supervisor: Professor Paul Race

Faculty Administering the Degree

Avondale University

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Statement of Original Authorship

I declare that the work contained in this thesis has not been submitted previously for a degree or diploma at this institution, an Australian or overseas university or any other institution of higher education. To the best of my knowledge and belief, this thesis contains no material previously published or written by another person except where due reference is made.

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Dedication

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Abstract

Depression in older adults represents a major and growing global health concern. Statistical evidence suggests the highest risk group for depression in the ageing populace is those living in residential aged care facilities. Several risk factors are associated with depression in this group, particularly loss of autonomy and environmental mastery, which result in reduced self-esteem and self-concept. Despite the prevalence of depression in residential aged care, there is a paucity of identified interventions that result in significantly reducing the symptoms of depression in this group. The purpose of this mixed methods study design was to evaluate the effectiveness of offering residents bedtimes and participation in an evening activity program on reducing depressive symptoms among older adults living in a residential aged care facility. The study also examined whether depression training improved residential aged care staff's knowledge of late-life depression. In addition, interviews with residents and staff were conducted to explore their experiences of the interventions and to identify factors influencing residents' autonomy. This research is particularly timely given the introduction of the Strengthened Aged Care Quality Standards (2025) introduced in November 2025, which require aged care facilities to actively promote resident choice and decision-making. The quasi-experimental resident intervention consisted of the assessment of resident participants' depression scores using the Geriatric Depression Scale-15 (GDS-15) tool at three points during the study; this included at baseline, after the three-month pre-intervention phase, and after the three-month intervention phase. During the pre-intervention phase, a cross-sectional questionnaire of staff knowledge of late-life depression pre and post a short education session was conducted. The 10-Item Knowledge of Late-Life Depression-Revised questionnaire was used for this study. The study concluded with thematic analysis to investigate the resident and staff experiences of the resident interventions, and residents' choices in their daily lives more broadly. The collective voices of the aged care residents and staff, and the thesis researcher's observations, were used for the qualitative study. Thematic analysis was conducted using the Consolidated Criteria for Reporting

Qualitative Research (COREQ) guidelines. The interpretation of the findings was guided by the theoretical frameworks of Self-Determination Theory (SDT), Person-Centred Care, and Personhood. The results of the resident intervention study indicated that there were no significant changes in depression scores following the interventions. The results of the staff's responses in the knowledge of late-life depression questionnaires denoted an improvement in staff knowledge following a short education session. Results of the resident interviews revealed four major themes: (1) facility routines impact choice; (2) factors that promote well-being; (3) barriers to engagement; and (4) confinement and isolation. Results of the staff interviews revealed three major themes: (1) confidence in recognising depressive symptoms; (2) experience of the evening program for residents and staff; and (3) catering to residents' choice. This study adds to the body of research exploring the complexities of supporting autonomy among residents in residential aged care facilities to enhance well-being and alleviate depressive symptoms. The findings highlight the need for organisational reforms, advocating a shift from institutionalised models of care toward more flexible frameworks that facilitate and prioritise individual choice and decision-making. Aged care providers need to be dedicated to a fundamental system structure that enables staff to apply person-centred care principles throughout their care practices.

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Abbreviations

ADLs - Activities of daily living

AIHW - Australian Institute of Health and Welfare

AIN - Assistant in Nursing

APA - American Psychiatric Association

CSDD - Cornell Scale for Depression in Dementia

DHAC - Department of Health and Aged Care

DON - Director of Nursing

DSMV - Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition

EN - Enrolled Nurse

GDS-15 - Geriatric Depression Scale-15

KTA- Knowledge to Action

L & L - Leisure and Lifestyle

MMSE - Mini-Mental State Examination

NSW - New South Wales

PCC – Person-Centred Care

QOL - Quality of life

RACF - Residential Aged Care Facility

RN - Registered Nurse

SDT – Self-Determination Theory

Glossary of Terms

Assistant in Nursing (AIN) – a carer with a Certificate III level qualification. They assist aged care residents with dressing, bathing, toileting, mobilising, and exercising. They report to a Registered Nurse.

Cognitive impairment – difficulty with remembering, learning, thinking, decision-making, and using judgment. It is caused by varying conditions and ranges from mild to severe.

Dementia – the term is used to describe a cognitive decline in remembering, reasoning, and thinking, and interferes with a person's daily activities and life. It is a term used for a group of diseases that cause abnormal brain changes.

Enrolled Nurse (EN) – also known as a Division 2 nurse in Australia, has a diploma-level qualification, and provides nursing care under a registered nurse's supervision. They are registered with the Nursing and Midwifery Board of Australia.

Environmental mastery – a person's ability to construct and select an environment that meets their needs. In aged care settings, residents having higher environmental mastery has been associated with lower depression and improved wellbeing. (Knight et al., 2011).

Geriatric Depression Scale–15 (GDS-15) – a validated screening tool used to assess depressive symptoms in older persons.

Heart rate variability (HRV) – is the variation in time interval between heartbeats.

Mini-Mental Status Examination (MMSE) – a mental health-validated screening tool used to assess an older person's cognitive status in community settings, hospitals, and aged care facilities. It is commonly used in clinical practice and for research purposes.

Orthostatic hypotension – a condition characterised by a sudden drop in blood pressure which can lead to light-headedness, dizziness, and fainting.

Person-centred care - The Person-Centred Care approach involves staff working in alignment with the values and beliefs of those they care for, being sympathetically present, actively engaging with those in care, sharing decision-making, and caring for the physical needs (McCormack & McCance, 2006).

Personhood - ageing and dementia should not define individuals by their physical limitations or diagnoses. Rather, the personhood, the values, unique identity, relationships and history that constitute an individual, should be acknowledged (Kitwood, 1997).

Registered Nurse (RN) – also known as a Division 1 nurse in Australia, has a bachelor’s-level qualification and provides comprehensive nursing care. They are registered with the Nursing and Midwifery Board of Australia.

Residential aged care facility (RACF) - accommodation providing a variety of care alternatives for older persons no longer able to live in their own home (Department of Health Disability and Ageing, 2025a) Care ranges from assistance with activities of daily living to 24-hour nursing care. Australian RACFs are governed by the Aged Care Act 2024 and subsidised by the Commonwealth Government (Department of Health Disability and Ageing, 2025a).

Selective serotonin reuptake inhibitors (SSRIs) – a class of medication mostly used to treat depression.

Self-determination theory – a framework for understanding human behaviour, motivation and wellbeing. The theory asserts that to understand human motivation, the psychological need for relatedness, autonomy and competence must be considered (Deci & Ryan, 2000).

Tricyclic antidepressant – another class of antidepressants that work by blocking the reuptake of norepinephrine and serotonin in the brain.

Chapter 1: Introduction to the Thesis

1.1 Preface

This thesis provides an investigation of depression and autonomy in aged care. It explores the impact of offering choice in bedtimes and an evening activity program on depressive symptoms to older persons residing in a residential aged care facility. It also evaluated the effectiveness of depression-specific training in improving residential aged care staff's knowledge of late-life depression. Additionally, the study explores the experiences of residents and staff in relation to the implemented interventions, interpreting the findings through the theoretical frameworks of Self-Determination Theory (SDT), Person-Centred Care (PCC), and Personhood. My interest in this area is informed by over 13 years of professional experience as a registered nurse working in residential aged care. Throughout my career, I have held various roles, including Senior Registered Nurse, Continence Advisor, Clinical Educator, and Clinical Care Manager. I also worked across a range of aged care facilities in Western Australia and New South Wales, supporting the clinical education of Enrolled Nursing and Registered Nursing students during their clinical placements.

Throughout my work in aged care, it became increasingly evident that depression among older persons was frequently undertreated. When an older person was diagnosed with depression in the residential aged care facility, they were often prescribed antidepressants with no formal follow-up or reassessment by either their general practitioner or a mental health professional. A significant contributing factor appeared to be a lack of training among care staff in recognising the signs of depression in older people, leading to under-detection of those residents' experiencing symptoms of depression. Furthermore, there was a notable absence of clear guidelines for non-pharmacological interventions aimed at reducing the prevalence of depression, despite the identification of well-documented risk factors. One such factor is the loss of autonomy, and in my experience, opportunities for residents to make meaningful choices are frequently limited. I am deeply concerned about the growing

prevalence of depression in aged care and believe this research will add to the body of nursing knowledge and benefit the future care of older persons' mental health.

While I was developing the purpose of this research in 2018, a Royal Commission in Aged Care Quality and Safety was established. The Royal Commission conducted an inquiry into the quality of aged care in Australia to determine if it met the needs of older persons and identified any improvements that needed to be made. I believe that the findings of the study, particularly regarding resident autonomy in residential aged care, are highly relevant in the context of the Royal Commission's recommendations and may offer practical contributions to ongoing reforms in aged care.

1.2 Introduction to the Chapter

This chapter provides an overview of the background and context of the research for this thesis, outlining the key issues that underpin the study and identifying the central research problem. It details the development of the research questions and presents the rationale for their formulation. The chapter provides a definition of what constitutes a residential aged care facility and examines the global prevalence of depression among residents in such settings. The concept of depression is explored, with particular focus on how depressive symptoms manifest and vary across the lifespan. Depression screening tools specifically designed to detect depression in older persons, both with and without cognitive decline, are examined. The significance of this thesis is articulated, and the overall structure of the thesis is outlined.

1.3 Background to the Topic

Depression is an ongoing, prevalent mental health issue among the elderly over 65 worldwide. In Australia, the ageing population is growing, and with 20.1% of older adults affected by major depression, as a continent, it ranks highest globally for its prevalence in this age group (Abdoli et al., 2022). The evidence suggests that the incidence of depression is higher amongst older persons living in residential aged care facilities (RACFs) than those living in the community (Sakai et al., 2024); this makes it critically

important that interventions are identified to reduce the increasing prevalence of depression amongst the elderly, not only in Australia, but globally.

1.4 Residential Aged Care Facilities

A RACF in Australia has been defined by the Australian Government Department of Health, Disability and Ageing as accommodation providing a variety of care alternatives for older persons no longer able to live in their own home (Department of Health Disability and Ageing, 2025a). Care ranges from assistance with activities of daily living to 24-hour nursing care. Australian RACFs are governed by the *Aged Care Act 2024* (Cth) and subsidised by the Commonwealth Government (Department of Health Disability and Ageing, 2025a). The Department of Health, Aged Care and Disability has a significant role in RACF program management, quality regulation, and policy development (Department of Health Disability and Ageing, 2025a). As of June 30, 2024, Australia had approximately 2,617 RACFs, providing support to 252,379 people, with the Australian Government providing 75% of the total funding (Australian Institute of Health & Welfare, 2025). A person's eligibility to enter an Australian Government subsidised RACF is based on their care needs as determined by an Aged Care Assessment Team or Aged Care Assessment Service (ASCAS).

1.5 Definition of Depression

Depression is defined by the American Psychiatric Association (APA) in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-V) as a disorder (American Psychiatric Association, 2013). The severity of depression is classified as mild, moderate, or severe and is determined by three different measures: functional disability, symptom severity, and number of symptoms (Luc et al., 2010). Depressive disorder is typified by at least two weeks with a minimum of one depressive symptom evident for most days during the two-week period (APA, 2013). Although the official disease coding system in Australia is the International Classification of Diseases 10 (ICD-10), Thirteenth Edition (Independent Health and Aged Care Pricing Authority, 2025), the DSM-V diagnostic criteria for depression

is the preferred diagnostic system used by Australian mental health medical practitioners, including psychiatrists and psychologists (Malhi et al., 2015).

Depressive symptoms include depressed mood, often described by sufferers as a feeling of hopelessness, discouragement or sadness, a significant decrease in pleasure or interest in most activities, substantial weight loss or weight gain, and insomnia or hypersomnia (APA, 2013). Other symptoms include restlessness or impotence, reduced concentration, loss of energy or fatigue and extreme guilt or feelings of worthlessness (APA, 2013). Some of the more severe symptoms are recurring thoughts of death and repeated suicidal ideation, suicide attempts, or plans for committing suicide (APA, 2013).

When diagnosing depression, it is essential to differentiate between grief and sadness as bereavement may present with depressive type symptoms but not necessarily constitute a depressive episode (APA, 2013). Symptoms of grief similar to depression experienced by a bereaved person include despair and distress, social withdrawal, insomnia, loss of appetite, and weight changes (Naef et al., 2013). Current grief models emphasise support for adaptive adjustment and meaning-making, with care tailored to each person's needs (Neimeyer et al., 2014).

The expression of depression varies across the lifespan (Mezuk & Kendler, 2012) and, although treatment and diagnosis of depression are similar for all ages, older persons do not always display characteristic depressive symptoms (Manepalli et al., 2011). Children and adolescents are inclined to experience weight gain, irritability, a negative life view, and hypersomnia (Manepalli et al., 2011). Self-harm, such as burning, cutting, and substance abuse can be manifestations of depression in adolescents (Coad, 2012). Depression is often recurrent and persistent in children and adolescents (Hetrick et al., 2021). Middle-aged persons report gastrointestinal problems, decreased libido, and middle insomnia (trouble staying asleep) (Manepalli et al., 2011). In the older person, signs of depression that differ include psychomotor retardation, motor restlessness, cognitive impairment, and somatic complaints (Manepalli et al., 2011). Other symptoms include slow and monotonous speech, expressions of hopelessness, and lethargy (Wrycraft, 2012). Woo and Keatinge (2008) suggest that one-third of

depressed older persons will recover within one year while one third will partially recover and one third will have a chronic depressive condition. Several depression screening tools have been developed to identify the risk of depression (refer to Table 1). Two of the screening tools, the Cornell Scale for Depression in Dementia (CSDD) and the Geriatric Depression Scale-15 (GDS-15), identify depression specifically in the elderly and will be discussed further in this review.

It is worth noting that there can be a subthreshold depression in the elderly, where the older person can have clinically significant depressive symptoms without being clinically depressed (Cherubini et al., 2012). Subthreshold depression is important as it can have negative outcomes for older persons, including increased risk of physical decline and cognitive impairment (Cherubini et al., 2012). Older persons' well-being can be significantly impacted by subthreshold depression and can precede major depression (Biella et al., 2019).

Table 1

Comparison of Depression Screening Tools

Screening tool	Target group	Design
Patient Health Questionnaire-9	General adult population	Self-administered
Patient Health Questionnaire-2	General adult population	Self-administered
Centre for Epidemiologic Studies Depression Scale	General adult population	Self-administered
The Symptom Driven Diagnostic System for Primary Care (16-items, 26-items, 54-items)	General adult population	Self-administered

Screening tool	Target group	Design
The 5-item World Health Organisation Well-being Index	General adult population	Self-administered
Beck Depression Inventory-II	General adult population	Self-administered
Beck Depression Inventory-Fast Screen	General adult population	Self-administered
Geriatric Depression Scale -15	Older population over 65	Health Professional Interview
Cornell Scale for Depression in Dementia	Older population over 65	Health Professional Interview- can be completed via proxy, i.e. carer or staff

Note. From (El-Den et al., 2018)

1.6 Prevalence of Depression With Ageing

Research suggests there is variation in the worldwide prevalence of depression in older people. A report by Castro-Costa compared the prevalence of depression amongst people 50 years and older across 10 European countries (Castro-Costa, 2007). The EURO-D—a 12-item self-reporting questionnaire, designed specifically for research into late-life cross-sectional depression—was used for the report (Castro-Costa, 2007). National survey organisations selected household samples and conducted interviews in Sweden, Denmark, Germany, the Netherlands, Switzerland, France, Austria, Italy, Greece, and Spain, with 57.4% of households responding overall (Castro-Costa, 2007). The study was devised to

cross-link the English Longitudinal Study of Aging (ELSA)¹ and the US Health and Retirement Study (HRS)² (Castro-Costa, 2007). The results of the EURO-D analysis suggested there was a variation of depression prevalence between 18% and 37% across the countries surveyed (Castro-Costa, 2007). Although the reasons for the variations were not clear, it was suggested that the variations may be best understood in terms of ethnocultural differences, with the higher prevalence in Latin nations rather than in Hellenic and Germanic nations (Castro-Costa, 2007).

Rashal and Tahir (2015) examined a 2006 systematic review that compared the percentage of depressed elderly of European descent living in the community in the United Kingdom, the United States, France, and Italy. Depressed elderly of European descent living in the community were estimated to be 17% in the United Kingdom, 36% in the US, 14% in France, and 30–49% in Italy. In 2004 the prevalence of depression amongst the elderly living in the community in Asian-Pacific countries was estimated to be 33.8% in Indonesia, 30.3% in Japan, and 17.2% in Vietnam (Rashal & Tahir, 2015). The Australian Institute of Health and Welfare suggests that in 2015, 10–15 % of older Australians living in the community had depressive symptoms (Australian Institute of Health & Welfare, 2015).

A recent systematic review by Abdoli et al. (2022) suggests that the global prevalence of major depression in the elderly was 13.1%, with 11.9% of women and 9.7% of men experiencing major depression. Australia was ranked the continent with the highest global prevalence of major depression in the elderly at 20.1% (Abdoli et al., 2022). Europe followed with a prevalence of 12.9%. The prevalence of depression in the elderly reported for countries includes 33.5% in Japan, 17.2% in the United States, and 14.6% in the United Kingdom (Abdoli et al., 2022). These results highlight that depression is a global health issue necessitating culturally informed and geographically targeted interventions.

¹ The ELSA is a report of longitudinal multidisciplinary data on the socioeconomic health and wellbeing of a representative sample of the English population 50 years and older (Stephens, Breeze, Banks & Nazroo, 2012).

² The HRS is a longitudinal national survey on the health and wellbeing of 37,000 persons 50 years and over from 23,000 US households (Sonnega, A., Faul, J. D., Ofstedal, M. B., Langa, K. M., Phillips, J. W. R., & Weir, D. R. (2014). Cohort profile: the Health and Retirement Study (HRS). *International Journal of Epidemiology*, 576-585. <https://doi.org/doi: 10.1093/ije/dyu067>).

Several research studies indicate that the prevalence of depression tends to be higher amongst the elderly living in RACFs than those living in the community. Approximately 35% of aged care residents in the Netherlands have depressive symptoms (Dozeman et al., 2012) and 42% in Sweden (Conradsson et al., 2010). Other studies suggest 40% of aged care residents in the United Kingdom (Ellard et al., 2014) and 30%–40% in China have depressive symptoms (Ouyang et al., 2015). Due to the wide variance of prevalence across the world, Guerra et al. (2016) propose there is a need for further study to understand how depression is expressed amongst different cultures. Factors that influence the prevalence and duration of depression also require attention (Guerra et al., 2016).

In 2012, the AIHW was contracted by the Department of Health and Ageing to evaluate depression amongst elderly Australians living in residential aged care (Australian Institute of Health & Welfare, 2013). Data was collected using Aged Care Funding Instrument (ACFI) evaluations (Australian Institute of Health & Welfare, 2013). The AIHW identified that the statistics were based on all permanent residents (166,362) in aged care on June 30, 2012 (Australian Institute of Health & Welfare, 2013). Depression was diagnosed using the Cornell Scale for Depression in Dementia (CSDD). The results of the study suggested the percentage of older Australians living in permanent aged care with depressive symptoms was approximately 52 % (Australian Institute of Health & Welfare, 2013). Thirteen percent had major symptoms of depression, 16% had moderate symptoms, and 24% had mild symptoms. Symptoms were marginally higher in women (53%) than in men (51%). Sixteen percent of the women had moderate symptoms compared to 15% of the men. Thirteen percent of women had major symptoms compared to 12% of men, and 24% of both men and women had mild symptoms (Australian Institute of Health & Welfare, 2013). The report emphasised that there was a significant increase in the percentage of RACF residents with depressive symptoms between 2008 and 2012 (Australian Institute of Health & Welfare, 2013). In 2008, the overall percentage of aged care residents was 40%, of which 10% had major symptoms, 11% had moderate symptoms, and 19% had mild symptoms (Australian Institute of Health & Welfare, 2013). With the prevalence of depression on the rise in RACFs, there is a need to critically

examine assessment strategies and risk factors, and explore effective interventions to manage depression in the residential care environment (McCabe et al., 2013).

In 2024 the Australian Institute of Health & Welfare (2024) reported that 62.5% of persons over 65 years of age entering residential aged care from 1 July 2017 to 30 June 2022 had mild symptoms of depression, and around 16% had major depressive symptoms. Slightly fewer older persons with dementia had mild symptoms of depression (59.6%) than older persons without dementia (65.1%) (Australian Institute of Health & Welfare, 2024). It was noted that there were variations in the percentage of residents assessed for depressive symptoms by region. Depression was not measured for 17.3% of all older people entering a residential aged care facility in Victoria, 20.2% in Tasmania and the Australian Capital Territory, 26% in New South Wales, 27.6% in Queensland, 28.3% in South Australia, 41.8% in Western Australia, and 44% in the Northern Territory (Australian Institute of Health & Welfare, 2024).

1.7 Assessment of Depression in Aged Care

Two common depression screening tools used in residential aged care are the Cornell Scale for Depression in Dementia (CSDD) and the Geriatric Depression Scale-15 (GDS-15), a comparison of these tools is summarised in Table 2. The CSDD is widely used and was initially developed to assess depression in residents with impaired cognition but is also utilised to assess residents without cognitive impairment (Snowdon et al., 2011). Snowdon et al. (2011) suggest the CSDD is designed to increase the awareness of staff to depressive signs and symptoms and provide an impartial structure for measuring improvements in depressive symptoms. It consists of 19 questions answered by the care recipient and/or a caregiver based on their observations of the resident in the format of a semi-structured interview (Towsley et al., 2012). A score of 12 or above indicates probable depression. If inconsistencies occur between the responses of the care recipient and caregiver, it is recommended the interviewer—either a registered nurse or medical practitioner—meets with both the care recipient and caregiver a second time and base the final depression rating on their clinical judgement (Towsley et al., 2012).

Table 2*Comparison of Aged Care Depression Screening Tools*

Screening tool	Number of questions	Scoring	Design
Geriatric Depression Scale-15	15	Score of 5 and above suggests depression	Questions answered by care recipient or care giver
Cornell Scale for Depression in Dementia	19	Score of 12 or above indicates probable depression	Best answered by care recipient as proxy assessment less accurate

Note. From (El-Den et al., 2018)

Self-reporting of symptoms in early stages of dementia is accepted however, in later stages, when cognitive function declines, observation by a clinician or caregiver to evaluate depression is recommended (Towsley et al., 2012). The CSDD is not flawless as the accuracy of such reports is dependent on the informant (Towsley et al., 2012). However, it is proposed that the caregiver's evaluation of the resident's level of depression is less accurate than that of a care recipient's self-evaluation, and nurse proxy responses are more likely to underrate depressive symptoms than residents' self-reporting (Towsley et al., 2012). The study concludes that it is therefore important to consider the residents' input whenever possible, rather than entirely rely on proxy observation (Towsley et al., 2012).

The GDS-15 consists of 15 questions with a score above 5 suggesting depression (see Appendix F). The GDS was originally designed with 30 simple yes/no questions intentionally devised with minimal somatic symptoms, which might otherwise cause diagnostic issues in older persons (Mitchell et al., 2010). The 15-item shorter version was developed to improve its utility (Mitchell et al., 2010). An analysis of the GDS-15 by Mitchell et al. (2010) determined that the GDS-15, although not perfect, is an effective tool in

diagnosing depression in later life and is more accurate, with a gain of 8% additional detections, than unassisted GP detection alone (Mitchell et al., 2010). However, it is suggested the GDS-15 is less effective as a diagnostic tool when assessing older persons with cognitive impairment (Jeon et al., 2014). A proxy-based assessment using the GDS-15 is less accurate than direct responses from the older person (Jeon et al., 2014). In many of the research studies discussed in this chapter, the GDS-15 has been used by the researchers as a diagnostic tool.

1.8 Impact of COVID-19 on the Doctoral Program and Research

The purpose of this research was to examine the impact of two key interventions: resident-selected bedtimes combined with an evening program, and staff training on depression and depressive symptoms in older adults living in RACFs. The original study was designed as a quasi-experiment across two aged care sites to evaluate the effectiveness of these interventions in addressing the research questions.

However, the emergence of the COVID-19 pandemic in 2020 led to necessary protective measures within aged care settings, reflecting the heightened vulnerability of residents. These measures, including restrictions on visitors and non-essential staff, as well as limits on travel, resulted in a temporary 12-month pause in data collection.

When the study resumed in 2021, the larger of the two participating facilities was unable to continue its participation due to ongoing operational pressures. As a result, the study proceeded at a single site. While this impacted the planned scale of the research and posed challenges for the recruitment and data collection, the study adapted to these constraints as effectively as possible by navigating COVID-19 restrictions within the facility.

During this period, the PhD candidate also continued full-time employment as a clinical coordinator, supporting nursing student placements amid the uncertainty of the pandemic. Balancing these responsibilities during an unprecedented time added complexity to the research process.

Despite these unforeseen challenges, the research remained focused on its core aim. The project was successfully adapted to explore complementary and meaningful research questions through robust qualitative studies. Although these studies were conducted under COVID-19- related constraints, they were completed successfully and added valuable insights into the overall thesis.

This doctoral work was undertaken during a uniquely difficult period, particularly for the aged care sector. Nevertheless, the study demonstrates resilience, adaptability, and a continued commitment to improving the mental health and well-being of older adults in RACFs.

1.9. Aim of Thesis

This thesis seeks to deepen the understanding of factors that both promote and impede autonomy in residential aged care facility settings. It aims to explore strategies that enhance resident outcomes, with a particular focus on reducing depressive symptoms. Central to this investigation is to provide insight into the impact on depressive symptoms when residential aged care facility residents are provided with the choice of bedtimes and an evening activity program. Additionally, this thesis aims to investigate whether training staff in the recognition and management of late-life depression leads to meaningful changes in care delivery, particularly in supporting resident autonomy and promoting decision-making to reduce depression symptoms. An evaluation of these interventions, informed by interviews with residents and staff, aims to provide a more comprehensive understanding of how autonomy-promoting practices can improve mental health outcomes in RACF settings.

To address the aims of this thesis, six research questions have been formulated. These are examined through three interconnected studies: a resident intervention study—evaluating the impact of bedtime choice and evening activities on depressive symptoms and autonomy; a staff knowledge of late-life depression questionnaires study—assessing aged care staff's understanding of late-life depression through structured questionnaires; and a resident and staff interviews study—exploring personal experiences and perspectives on the resident interventions and autonomy more broadly from both residents and staff. The research questions guiding this study are:

- For residents of a RACF on the Central Coast of New South Wales, Australia, using a single-group pre-test/post-test study design, what is the effect of implementing residents' choice of bedtimes and the opportunity to attend a daily evening activity program on reducing symptoms of depression within a three-month period? This question is addressed in Chapter 4.
- How has staff knowledge of depression been impacted by the knowledge of late-life depression questionnaires study? This question is addressed in Chapter 6.
- What is the resident's experience related to the implementation of the choice of bedtimes and an evening activity program? This question is addressed in Chapter 8.
- What factors impact residents' sense of autonomy? This question is addressed in Chapter 8.
- What is the staff experience related to the implementation of the residents' choice of bedtimes and an evening activity program? This question is addressed in Chapters 8 and 9.
- What are staff perceptions of factors that impact residents' ability to make choices? This question is addressed in Chapter 9.

1.10 Significance of the Study

The study is significant given the high prevalence of depression in residential aged care facilities and its substantial impact on the residents' overall wellbeing and quality of life. The findings of this research are significant in the context of the recommendations of the recent Australian Royal Commission into Aged Care and Safety and the Strengthened Aged Care Quality Standards released in January 2025. Clearly embedded in the recommendations from the Royal Commission and the Strengthened Aged Care Quality Standards (2025) is the need for aged care providers and employees to respect the individuality and choice of older persons to foster quality of life, a sense of autonomy, and inclusion (Department of Health and Aged Care, 2025). Supportive strategies to intentionally involve residents in decision-making in their daily lives, promoting autonomy and environmental mastery, are essential. Furthermore, improving

residential aged care facility staff knowledge and understanding of depression has the potential to inform practice and contribute to improvements in the quality of care delivered.

This mixed methods study provides a timely and meaningful input into aged care through its exploration of interventions that promote autonomy to support the prevention of depression. The significance of this research lies in its aim to identify some of the facilitators and barriers to residents' choice in aged care and how these factors influence depressive symptoms and overall wellbeing. It addresses a gap in the research regarding strategies and interventions that promote autonomy, which is closely linked to mental health outcomes, including depression, among older persons in aged care.

1.11 Thesis Structure

The research is presented in twelve chapters, with associated documents as appendices. This section will comprise a brief synopsis of each chapter.

Chapter 1 includes a background to the doctoral research and identifies the research problem and the development of the research questions. It provides an overview of the prevalence of depression in residential aged care. The chapter defines what constitutes a residential aged care facility and examines the definition of depression and how depressive symptoms vary across the lifespan. It explores depression screening tools developed to specifically identify depression in older persons with or without cognitive impairment. It also provides the significance of the research and an overview of the thesis structure.

Chapter 2 reviews published literature on the risk factors associated with depression among older adults living in aged care and examines interventions that have been investigated to mitigate these risks. It identifies gaps in the research, particularly in relation to interventions aimed at minimising the risk of loss of autonomy and environmental mastery in residential aged care facilities, and the subsequent impact this may have on residents' depressive symptoms. In conclusion, it is noted that, with the introduction of strengthened accreditation standards in November 2025, aged care facilities will be

required to implement interventions that promote resident choice. Accordingly, innovations that support resident decision-making warrant further exploration. The chapter also provides an outline of the conceptual frameworks that underpin the studies presented.

Chapter 3 provides a description of the research for the resident intervention study, arguing that a mixed methods design was appropriate to examine the impact of the interventions on the resident participants' depressive symptoms. It provides a description of the ethical considerations for the study, the study setting, recruitment of the study site and resident participants, and data sources and collection methods. The chapter also gives a comprehensive overview of the resident interventions and the statistical analysis methods of the study. It presents the ethical considerations and describes the study setting. It also details data collection and analysis methods, including the challenges of collecting data during the COVID-19 pandemic with visitation restrictions in residential aged care facilities.

Chapter 4 includes a detailed overview of the research findings for the resident intervention study quasi-experiment. It identifies the sample size and demographics of the study participants, and tables provide the descriptive statistics relevant to the study. It also provides an overview of the main results of the resident intervention study. This chapter addresses Research Question 1.

Chapter 5 contains a description of the research methodology employed in the aged care staff's knowledge of late-life depression questionnaires cross-sectional study. It outlines the reasoning for a cross-sectional method used in this study. It provides the ethical considerations for the study and a description of the study site and participant sample size. It details the data collection and analysis methods for the study, with the inclusion of challenges posed by the COVID-19 pandemic restrictions. The chapter also presents an overview of the 10-item- Knowledge of Late-Life Depression-Revised questionnaire.

Chapter 6 presents a description of the research findings for the aged care staff's knowledge of late-life depression questionnaires. It provides study participant characteristics and displays tables

presenting the descriptive statistics related to the study. The chapter also presents an overview of the main results of the aged care staff's knowledge of late-life depression study. This chapter addresses Research Question 2.

Chapter 7 comprises details of the qualitative research methodology employed for the resident and staff interview studies. It provides a background to the study and the research questions for this study. It discusses the researcher's characteristics and presents the ethical considerations for the studies. The chapter also describes the study site and participant sampling for both resident and staff participants. It provides data collection and analysis methods for these studies and includes the interview questions for both resident and staff interviews. It also outlines an overview of the data processing and data analysis, along with the methods used to ensure the quality of the research.

Chapter 8 presents the objectives of the resident interviews and outlines the characteristics of resident participants. It provides the findings from the resident participant interviews in four overarching themes that align with the study objectives. Nine related subthemes clarify the topics, and the key findings are summarised in the chapter conclusion. This chapter addresses Research Questions 3, 4, and 5.

Chapter 9 includes the objectives of the staff interviews and outlines the staff participants' characteristics. It presents the details of the findings from the staff participant interviews in three overarching themes that aligned with the objectives of this study. Seven related subthemes explain the overarching topics.

Chapter 10 contains an integrated synthesis of the mixed methods study findings, accentuating the significant components, and placing the findings within published research literature. It provides an overview of the fundamental points that emerged from the quantitative and qualitative findings. This chapter addresses Research Questions 5 and 6.

Chapter 11 consists of the implications of the thesis, particularly in the context of the Royal Commission into Aged Care Quality and Safety, the draft Strengthened Aged Care Quality Standards, the Code of Conduct for Aged Care, and the *Aged Care Act 2024* (Cth). It provides recommendations for clinical practice, residential aged care facility design, education, and policy guidelines. It also includes the implications for future research.

Chapter 12 comprises a summary of this thesis and a summary of the significance of the research. It identifies the strengths and limitations of this thesis. It also contains reflections on the impacts of COVID-19 on the study and the researcher's reflections on the research process employed in this thesis. It concludes with a summary of the thesis.

1.12 Conclusion to the Chapter

This chapter identifies the background to the research, the research problem, and the development of the research questions. It offers an overview of the global prevalence of depression in residential aged care facilities. It defines what constitutes a residential aged care facility and examines the definition of depression and how depressive symptoms vary across the lifespan. It explores depression screening tools developed to specifically identify depression in older persons with or without cognitive impairment. It also contains the significance of the study and an overview of the thesis structure.

A review of literature related to depression in aged care is contained in the following chapter. While the initial review was conducted in 2019, more recent literature has been incorporated to ensure the review reflects current evidence and developments in the field. The literature review examines key risk factors associated with depression amongst aged care residents, as well as interventions that have been implemented to address and manage depression in this setting. The chapter also includes a summary of the reviewed literature and identifies existing gaps that have informed and justified the need for this research.

Chapter 2: Literature Review

2.1 Introduction to the Chapter

The previous chapter identified a background to the research, the research problem, and the research questions. It presented an overview of the prevalence of depression in residential aged care facilities. The chapter also contained the significance of the research and an overview of the thesis structure. In the following literature review, known risk factors associated with depression amongst older persons living in residential aged care facilities are explored. A wide range of literature is investigated to examine measures that have been used to address depression in aged care residents. It also surveys the management strategies that have been implemented to identify appropriate ways to manage depression in RACF residents.

A narrative review, also known as a traditional literature review, was selected as the approach for synthesising the existing literature for this thesis. Unlike systematic reviews, which typically focus on narrowly defined questions and require stringent inclusion and exclusion criteria, the narrative approach allows for greater flexibility in identifying and incorporating relevant sources (Polit & Beck, 2022). This method was considered appropriate given the broad and exploratory characteristics of the research topic, which encompasses both the risk factors associated with depression in older adults, and the variety of interventions trialled to reduce its incidence within RACFs (Whitehead et al., 2018). The narrative review enables the integration of a wide range of literature, drawing from diverse disciplines, theoretical perspectives, and research designs, offering a comprehensive understanding of the topic (Efron & Ravid, 2018).

2.2 Search Strategy

A variety of databases were accessed for the literature review by a single reviewer, including PubMed, CINAHL, Cochrane Library, PubMed Central, PsycINFO, Embase, and Medline. The search terms

used included: aged care; care homes; depression; autonomy; decision-making; loneliness; social isolation; socialisation; “interventions for depression in aged care”; “autonomy in aged care”; “socialisation and depression”; “environmental mastery in aged care”; “staff knowledge of depression in aged care”; “staff training in aged care”; “social therapies in residential aged care”; “medications for depression in the elderly”; “loneliness in aged care”; “medications for depression in older persons”; “social isolation in aged care”; “depression in residential aged care”; “depression in aged care”; “depression in care homes”; “nursing homes”; “exercise and depression in aged care”; “exercise and depression in care homes”; “music therapy and depression”; “depression treatment in aged care”; “technology and depression in aged care”; “technology and depression”; “life-style activities in aged care”; “depression management in aged care”; “risk factors for depression”; and “risk factors for depression in aged care”.

2.3 Risk Factors

A range of risk factors linked to depression in older persons in residential aged care facilities have been identified in both Australian and international literature. Risk factors include loss of autonomy, environmental mastery, and self-efficacy (Knight et al., 2011), along with poor staff knowledge of the signs and symptoms of depression (Atkins, Naismith, Luscombe, & Huickie, 2013), social isolation and loneliness (Franck et al., 2015). This section will examine the literature and discuss the impact of these risk factors and management strategies that have been explored.

2.3.1 Depression and the Loss of Autonomy, Self-concept, and Environmental Mastery

Research studies suggest there is a strong association between depression in RACF residents and their sense of environmental mastery and autonomy. These components of well-being are closely linked as they pertain to a person’s sense of control over their own life. Environmental mastery has been defined by Knight et al. (2011) as a person’s ability to construct and select an environment that meets their needs. Autonomy refers to an individual’s capacity to choose how they live their life, including decisions that reflect their values and interests (Steckermeier, 2021).

The impact of loss of environmental mastery on well-being and mental health was examined in a study of 96 Australian aged care residents (Knight et al., 2011). The study aimed to determine the degree to which perceived environmental mastery is associated with depression (Knight et al., 2011). A range of validated assessment tools was used to measure residents' perceptions of environmental mastery (Knight et al., 2011). The study implied that residential aged care residents perceive that they have minimal influence or control over daily decisions and the choices that are made for them within the facility (Knight et al., 2011). The authors concluded that the study results indicated a strong relationship between depression and the residents' perceived loss of environmental mastery. Data analysis revealed that 55% of the variance in the depression scores of the recipients could be attributed to the level of self-reported environmental mastery (Knight et al., 2011). The study had limitations, including a relatively small number of participants and an absence of longitudinal assessment of environmental mastery; however, despite these limitations, further research studies support the findings by Knight et al. (2011).

One such study aimed to analyse the impacts of biopsychosocial factors, including environmental mastery, on depression in RACF residents (Davison et al., 2012). In this cross-sectional study, other psychosocial variables measured were personal growth, self-acceptance, purpose in life, autonomy, religiosity, and positive relations with others (Davison et al., 2012). Results indicated a stronger association between depression, loss of autonomy, and lower levels of environmental mastery and purpose in life than the other examined variables, including well-established risk factors such as disability, limited social support, and poor physical health (Davison et al., 2012).

The researchers proposed that low levels of environmental mastery result from residents feeling incapable of improving or changing their current situation and controlling their outside world in the RACF environment, which led to residents experiencing symptoms of depression (Davison et al., 2012). The strong link between depression and loss of autonomy is associated with aged care residents being given limited opportunities to independently make decisions about their daily lives (Davison et al., 2012). According to Davison et al. (2012), low levels of environmental mastery could be mitigated by actively

involving older persons in their care and routines. The authors further suggest that targeted staff training aimed at promoting autonomy may reduce the risk of depression in aged care settings (Davison et al., 2012).

The link between low levels of purpose in life has been associated with feelings of boredom and disinterest in life, and a diminished sense of personal growth, all of which can contribute to the development of depression among aged care residents (Davison et al., 2012). This connection underscores the importance of meaningful and individualised activities to enhance the residents' sense of purpose. However, further research is required to explore the effectiveness of such interventions in promoting psychological well-being within residential aged care facilities (Davison et al., 2012).

Consistent with the previous evidence, a sense of loss of control, or autonomy, and the association with depression was also a key finding of a study undertaken by Bostrom et al. (2014). The cross-sectional study of 392 participants from the community and RACFs explored the association between depression in older persons and their activities of daily living (ADLs) (Bostrom et al., 2014). Activities of daily living measured in the study included continence, toileting, grooming, feeding, transfer, mobility, dressing, and bathing (Bostrom et al., 2014). The research findings indicate that overall dependency in ADLs was not independently associated with depressive symptoms (Bostrom et al., 2014). However, dependency specifically in dressing and transfers shows a significant independent association with symptoms of depression (Bostrom et al., 2014). The authors suggest that this link may be due to the intensive nature of care required for these tasks—such as toileting, bathing, transfers in and out of bed—which can contribute to a diminished sense of self-efficacy and personal control among residents (Bostrom et al., 2014).

Another study exploring the association between self-concept and depression in RACFs also suggests a correlation between loss of autonomy, self-concept, and depression (Grace & Toukhsati, 2014). The study suggested that an older person's self-concept erodes and de-stabilises with health-related

losses and the resulting intensification of constraints (Grace et al., 2014). Self-concept and depression were examined in the cross-sectional study, which consisted of 45 non-randomly selected residents from 10 Australian RACFs. A range of validated assessment tools were used to measure these variables (Grace et al., 2014).

Results from the Grace et al. (2014) study implied that self-concept is critically impacted by loss of autonomy in the older person residing in RACFs and is adversely associated with depression (Grace et al., 2014). Although the generalisation of the conclusions was limited by the small sample size, the study provides support to other research, which suggests that low self-concept or self-esteem—due to losses in personal autonomy—can result in depression amongst RACF residents (Grace et al., 2014).

The analysis of another study into autonomy, as well as social relationships, also suggested these factors have a significant impact on residents' quality of life (QOL) (McCabe et al., 2021). The study aimed to analyse the choice of activities of daily living on the QOL of aged care residents (McCabe et al., 2021). The study consisted of 604 aged care residents self-reporting their QOL using the Quality of Life in Alzheimer's Disease (QoL-AD) tool. The QoL-AD is devised for older persons to rate their psychological, physical, and social aspects as either poor, fair, good, or excellent (McCabe et al., 2021).

The results showed that the factors that had a significant impact on the quality of life of aged care residents were the autonomy to choose their clothes, morning and bedtime routines, and movement around the home, along with socialising choices (McCabe et al., 2021). The study highlighted that the opportunity to choose social relationships was particularly important to residents' well-being (McCabe et al., 2021). It also focused on the importance of the staff-resident relationship in supporting resident autonomy (McCabe et al., 2021). The study was limited to participants who had minimal to moderate impairment, so these results could not be generalised for residents with severe cognitive impairment (McCabe et al., 2021).

Research examining factors that increase the risk of depression found that involvement in the decision-making process was a particular determinant for risk of depression during the transition phase into aged care (Polacsek & Woolford, 2022). In this qualitative study, a total of 35 interviews were conducted in a not-for-profit Australian RACF, consisting of 14 resident participants and 19 staff participants. The results suggested that when the resident is not involved in the decision-making, they can experience loss, anger, depression, isolation, confusion, disorientation, and anxiety (Polacsek & Woolford, 2022).

The authors recommended that aged care providers should provide new residents with information relating to facility routines, the roles and responsibilities of staff, facilities offered by the RACF, and visiting hours to assist with the transition process (Polacsek & Woolford, 2022). Another suggested resource is a diagram representing the facility routines, such as mealtimes, laundry, timing of activities, and shift times (Polacsek & Woolford, 2022). Polacsek and Woolford (2022) recommended pastoral care staff to assist in bridging the gap in transitional support by welcoming residents and developing a relationship to provide appropriate emotional support.

The influence of mastery, environmental fit, as well as meaningful life experiences, on depression in aged care was analysed in another prospective observational cohort study. The study consisted of two trial periods with participants from 15 aged care facilities (Chau et al., 2020). Meaningful existence was measured using the validated McGill Quality of Life Questionnaire, and mastery was measured using Pearlin Mastery Scale (Chau et al., 2020). Other validated assessment tools were used to measure Person-environment fit (Chau et al., 2020). The aged care residents' social support was measured using the 12-item Social Support: Multidimensional Scale of perceived social support (Chau et al. 2020). As with other studies, the results of the study by Chau et al. (2020) indicated that purpose in life, meaningful existence, and mastery are significantly associated with changes in depression scores (Chau et al. 2020). Chau et al. (2020) suggest that these psychosocial factors have the potential to inform intervention and prevention programs to manage depression in aged care residents.

Despite many studies investigating the link between autonomy, environmental mastery, and depression being cross-sectional with small non-randomised sample sizes, they consistently support a link between autonomy, environmental mastery, self-concept, and depression. Knight et al. (2011) suggest that aged care providers need to make an effort to implement interventions that promote a sense of environmental mastery and autonomy to reduce depressive symptoms in those affected. Kalaitzidis and Harrington (2018) also support this and indicate that residents should be encouraged to have direct involvement in their social and physical environment. Staff routines and facility policies, however, frequently pose a barrier in meeting the individual preferences of residents (Kalaitzidis & Harrington, 2018).

Feelings of loss of control are associated with an absence of a collaborative approach to decision-making in association with residents' care planning (Walker & Paliadelis, 2016). Preferences such as bedtimes and wake times are determined by staff routines; many residents spend up to 12 hours in bed against their choice (Luff et al., 2011). Residents most physically reliant on staff are particularly dependent on facility routines for their bedtimes (Luff, et al., 2011). Residents' choices and decision-making are usually limited to the selection of clothing each day and daily menu options (Kalaitzidis & Harrington, 2018); this includes residents with and without cognitive impairment (Fetherstonhaugh et al., 2016).

There are various suggestions as to what future studies should focus on. Knight et al. (2011) propose that future studies should consider interventions that include providing residents with opportunities to influence the timing of their care or social activities (Knight et al., 2011) and providing purposeful social activities that enhance mastery (Grace & Toukhsati, 2014). Chau et al. (2020) suggest that aged care activities should focus on the individual's perception of a meaningful existence, sense of mastery, and relationship with the aged care environment.

2.3.2 Care Staff's Knowledge of Depression

The aged care labour force consists of an estimated 60%–70% of care staff who are not registered health professionals, also known as Assistants in Nursing (AINs), Personal Care Workers (PCWs), and Personal Care Assistants (PCAs) (Martyn et al., 2022). As care staff make up a large proportion of the aged care workforce, they play a key role in the early detection and monitoring of depression (McCabe et al., 2013). However, research has indicated that care staff have limited formal training in mental health, leading to misconceptions and a critical gap in knowledge about depression (Atkins, Naismith, Luscombe, & Huickie, 2013; Davison et al., 2013).

A literature review examining the education and training of aged care workers in mental health related to older persons reinforced that the majority of staff in aged care are provided with limited formal mental health training (Moyle et al., 2010). Their primary focus is on assisting residents with activities of daily living rather than their psychosocial needs (Moyle et al., 2010). While there is evidence to suggest that mental health training can help aged care workers to understand residents' mental health disorders and treatment needs, the study proposes that there is more focus on dementia training in aged care than on other mental health issues (Moyle et al., 2010). The authors acknowledge the importance of dementia training, but suggest that with the widespread prevalence of depression, there needs to be a greater focus on depression training (Moyle et al., 2010).

Motivating aged care staff to attend training was identified as a challenge in the study by Moyle et al. (2010). Many aged care staff work part-time and are often focused on completing their routine responsibilities rather than participating in training which they may perceive as interfering with their ability to manage their existing workloads (Moyle et al., 2010). The authors conclude that while training in depression may increase staff knowledge of late-life depression, there is a lack of evidence to indicate a transfer of this knowledge into practice and improvement in resident care (Moyle et al., 2010).

Another study on aged care staff's knowledge of late-life depression further upheld that aged care staff's understanding of the condition is insufficient, and highlighted the need for targeted education and training (Davison et al., 2009). The research for the study was conducted in 30 residential and community aged care agencies in Australia, with a sample of 320 aged care staff consisting of AINs, Registered Nurses (RNs), and Care Managers (Davison et al., 2009). The staff's knowledge of symptoms, myths, and responding appropriately to depression using the Knowledge of Late-Life Depression Scale was examined. Staff responses indicated that symptom recognition was moderate, however, there was a high endorsement of myths, which included the view that depression is a normal reaction to old age (Davison et al., 2009).

Other studies also support the evidence that depression is undermanaged in aged care due to poor staff knowledge. One such study suggests that less than half of care staff in aged care have had any formal depression training, and most lack confidence in distinguishing between symptoms of depression, dementia, and anxiety (Mellor et al., 2010). Many carers and general practitioners (GPs) consider depression to be a natural part of the ageing process or a natural response to change in older age (Mellor et al., 2010). These negative attitudes toward depression are likely to be linked with undiagnosed and untreated depression, due to a lack of adequate identification and reporting of depressive signs and symptoms among residents in residential aged care facilities (Mellor et al., 2010).

Poor staff knowledge is reinforced by a further study, which proposed that at least half of aged care residents with depression are undiagnosed by GPs (Karantzas et al., 2012). The researchers suggested that the low detection rates may be attributed to the comorbidities of residents, the brief amount of time GPs spend with residents, and the reluctance of residents to express their emotions to GPs (Karantzas et al., 2012). As a result, GPs are highly reliant on aged care staff, who provide the majority of care to residents, to monitor and report depressive symptoms (Karantzas et al., 2012). However, poor aged care staff knowledge of depressive symptoms results in a lack of the skills required to report adequately to GPs for the follow-up care of residents with depression (Karantzas et al., 2012).

Similarly, in another study, depression symptom recognition by aged care staff was found to be low, estimating that only 37%–45% of residents diagnosed with depression by psychiatrists were acknowledged as depressed by staff (Abrams et al., 2017). Symptom recognition of depression can be confounded by comorbidities, communication, and cognitive deficits of residents being assessed (Abrams et al., 2017). The authors assert that low levels of depressive symptom recognition by aged care staff have been a barrier to depression management in aged care residents (Abrams et al., 2017). Targeted training is also recommended to improve the ability of staff to recognise depressive symptoms and respond appropriately (Abrams et al., 2017).

A study specifically examining aged care staff's knowledge of the link between physical health issues and depression demonstrated a gap in knowledge, particularly the link between diabetes and depression, and stroke and depression (Atkins, Naismith, Luscombe, & Hickie, 2013). The study asserted that knowledge of the relationship between health status and depression was greater in staff who had higher educational qualifications and had exposure to older persons with high care needs (Atkins et al., 2013). The authors state this highlights the importance of training and education for those who care for older persons to ensure optimal treatment for both the physical and mental needs of older persons in aged care (Atkins et al., 2013).

2.3.3 Social Isolation and Loneliness

Research indicates that loneliness and social isolation can lead to depression, and the prevalence of both these risk factors is higher in RACF residents than older persons living in the community (Franck et al., 2015). A study by Murphy et al. (2018) found that loneliness was identified as a stressor leading to 43% of suicides in Australian aged care facilities. A United Kingdom study gathered data on the prevalence of loneliness in care homes from research conducted in eight different countries; these included Hong Kong, Norway, Cyprus, the Netherlands, the United States, Taiwan, and Spain (Victor, 2012). The results of the data analysis suggested between 37% (Cyprus) and 71.6% (Spain) of older persons living in aged care facilities reported loneliness (Victor, 2012). Victor (2012) proposes that there are two types of

loneliness: social loneliness and emotional loneliness. Social loneliness is the lack of social assimilation and emotional loneliness is the absence of connectedness with others (Victor, 2012). A person living in a RACF can experience loneliness even when surrounded by other people (Victor, 2012). Despite the important association between loneliness and depression, there is a lack of research focusing on interventions addressing the issue in residential aged care facilities (Victor, 2012).

As with loneliness, social isolation has been found to be an independent risk factor for depression. Social isolation has been defined as an individual's reduced sense of belonging, limited social contact and engagement, and a deficiency of meaningful relationships (Franck et al., 2015). The relationship between depression and social isolation is not attributable to stress, social support, objective social isolation, dispositional pessimism, or variables in demographics (Franck et al., 2015). A study by Neves et al. (2019) suggests that some older persons perceive the differentiation between the two as loneliness is a choice, whereas social isolation is a circumstance that is imposed by a lack of support or relationships. Older persons with depression benefit from enriched social networks and social interaction, indicating the necessity for the development of programs that increase social engagement for this demographic (Schwarzbach et al., 2013). Making opportunities for connectedness through relationships that are meaningful is critical to reduce these issues (Neve et al., 2019).

2.4 Intervention to Manage Depression in Residential Aged Care Facilities

The ensuing section reviews literature on interventions designed to address the growing issue of depression among older persons residing in residential aged care facilities. It examines a range of strategies that have been implemented to reduce depressive symptoms in this population, including government initiatives, exercise programs, music therapy, staff education, socialisation interventions, use of technology, and pharmacological treatments. The review provides an overview of the findings of empirical studies evaluating the effectiveness of these approaches, highlighting their impact on residents' mental health and overall well-being.

2.4.1 Government Initiatives

The Australian Government has made some effort to address the prevalence of depression in Australian RACFs through funding and imposing a set of aged care standards. In 2022, a new national funding scheme, the Australian National Aged Care Classification (AN-ACC) Assessment Tool, was introduced (Department of Health Disability and Ageing, 2025b). The AN-ACC is a tool used by external assessors to determine the funding requirements based on the biological, emotional, and physical health care needs of each aged care resident (Department of Health Disability and Ageing, 2025b). The AN-ACC uses the Behavioural Resource Utilisation Assessment (BRUA) to determine funding requirements for managing behavioural issues including depression (Department of Health Disability and Ageing, 2025b). As this is a relatively new assessment tool, there is no research that could be identified that has assessed the effectiveness of the tool in implementing strategies to manage depressive symptoms.

The Australian Government also initiated new reforms in 2019 to move aged care toward a consumer-directed care model in recognition of the research endorsing the older persons' value of autonomy and independence (Department of Health, 2019). The Consumer-directed Care (CDC) principles aimed to provide aged care residents with greater independence and control over the services they received (Kosiol et al., 2024). On 1 July 2019, the Australian Aged Care Quality Agency introduced a new set of standards to which all aged care facilities were to comply (Department of Health, 2019). Principle 1 of the Aged Care Quality Standards stated that 'all adults have equal right to make decisions that affect their lives and to have those decisions respected' (Sinclair et al., 2018). Aged care providers need to adopt policies that promote resident decision-making, choice, and sense of self (Sinclair et al., 2018).

In response to the findings from the Royal Commission into Aged Care in 2021, further reforms took place in November 2025, which aim to promote resident autonomy (Department of Health and Aged Care, 2025). These include the Strengthened Aged Care Quality Standards (2025) and amendments to the *Aged Care Act, 2024* (Cth)—sometimes referred to as the New Aged Care Act—which provide a range of guidelines for consumer-directed care to promote resident autonomy.

The Strengthened Aged Care Quality Standards (2025) comprise seven principal standards (refer to Figure 1). Standard 1 provides guidelines to aged care providers for person-centred care, dignity and respect, resident autonomy, and transparency of information related to funding and services (Department of Health and Aged Care, 2025). Standard 2 outlines the requirements for the governing body to engage with residents and aged care workers to create an organisational culture of safety, inclusion, and quality for residents and aged care workers (Department of Health and Aged Care, 2025). The specifications of Standard 3 promote the provision of quality care and services through ongoing communication between the resident, staff, and other support personnel (Department of Health and Aged Care, 2025). Guidelines relating to the aged care environment are outlined in Standard 4, including environmental risks for individuals, access, and wellbeing (Department of Health and Aged Care, 2025). Standard 5 specifies the requirements relating to quality clinical care, including care from multidisciplinary team members (Department of Health and Aged Care, 2025). Procedures relating to food and nutrition are defined in Standard 6, particularly processes around the choice of where, when, and with whom residents have their meals (Department of Health and Aged Care, 2025).

Standard 7 outlines the requirements related to aged care community life, allowing the residents a choice of activities within the facility and the outside community (Department of Health and Aged Care, 2025).



Figure 1

Diagram of the Strengthened Aged Care Quality Standards (2025)

Note. From Department of Health and Aged Care

(<https://www.agedcarequality.gov.au/sites/default/files/media/strengthened-quality-standards-poster-for-older-people.pdf>). Copyright 2025 by the Department of Health.

Complementing the standards is the *Aged Care Act 2024* (Cth), which provides a rights-based framework, centring on the rights of older persons receiving care (Department of Health and Aged Care, 2025). It outlines a Statement of Rights, clarifying what older people can expect when accessing aged care (Department of Health and Aged Care, 2025). The Act advocates a model of ‘supported decision-making’ which gives older persons greater involvement, choice and control in decisions about the care they receive (Department of Health and Aged Care, 2025). The Aged Care Act 2024 and the strengthened standards provide a framework that supports improved care for residents living with depression, particularly through addressing the known risk factors of reduced autonomy, workforce capability and quality of care.

2.4.2 Exercise Programs

It has been proposed that exercise has psychosocial benefits for older persons due to social stimulation, physical fitness, and accomplishment, as well as the psychophysiological benefits experienced by those in other age groups (Conradsson et al., 2010). The effectiveness of a high-intensity functional exercise programme on depression and well-being in RACFs was measured using a cluster-randomised controlled study with 191 participants in Sweden (Conradsson et al., 2010). The participants were from nine RACFs; 52% were diagnosed with dementia (Conradsson et al., 2010). The exercise program was developed by occupational therapists and consisted of five 45-minute high-intensity sessions. Twenty-nine sessions, comprising three to nine participants, were carried out across three months (Conradsson et al., 2010). At the end of the program, depressive symptoms of participants were measured using the GDS-15 assessment tool. It was concluded that the high-intensity exercise program alone had no significant impact on depressive symptoms in older persons residing in the RACFs involved in the study (Conradsson et al., 2010).

The report by Conradsson et al. (2010) is supported by other studies where the correlation between exercise and improvement in depressive symptoms in RACFs is explored. A study examining the impact of a moderately intense exercise program had no significant impact on the depression scores of the resident participants (Underwood et al., 2013). The study by Underwood et al. (2013) was a cluster-randomised controlled trial conducted in the United Kingdom and included 891 participants from 75 RACFs. Staff in all facilities were provided with depression training (Underwood et al., 2013). In the control homes, a 45-minute moderately intense exercise program was delivered twice-weekly for 12 months by physiotherapists using resistance training and aerobic activities (Underwood et al., 2013). Depressive symptoms of residents prior to and following the trial were measured using the GDS-15 (Underwood et al., 2013). The researchers concluded there was no significant change in depression following the exercise program (Underwood et al., 2013).

Similar results were found with a whole-home exercise intervention (Ellard et al., 2014). The randomised controlled trial study included 34 residential aged care facilities in the United Kingdom. The physical intervention was conducted by a physiotherapist and consisted of moderate-intensity exercise sessions delivered twice-weekly for a year (Ellard et al., 2014). The exercise intervention was predominantly seated sessions due to participant frailty (Ellard et al., 2014). One of the findings of the study was that depressed older persons were less likely to participate in the exercise activity, which raised the question as to the suitability of the program for these residents (Ellard et al., 2014). The study concluded that residents of RACFs may be too frail to participate in an exercise program to the intensity required to have an impact on depressive symptoms and suggested that other depression management interventions need to be explored (Ellard et al., 2014).

Further related work in this area has been done. A study investigated the use of the Human Body Posturizer to reduce symptoms of depression in 20 aged care residents from two Jewish aged care facilities in Italy (Verrusio et al., 2018). The Human Body Posturizer is a fully articulated orthosis (device worn externally on the body to align and support body function) containing four elements that come into contact with varied anatomical zones and adapt themselves to each individual's physical characteristics (Verrusio et al., 2018). The study compared the depressive scores of participants exposed to physical training with the Human Body Posturizer, and participants exposed to traditional physical training (Verrusio et al., 2018). Participants were engaged in three 45-minute physical exercise sessions conducted by a physiotherapist each week for six months (Verrusio et al., 2018). The results indicated that the participants involved in physical training with the Human Body Posturizer had a greater reduction in depressive symptoms than those engaged in traditional physical training (Verrusio et al., 2018). The researchers suggested that although the participant numbers were low, the results indicate further research into the benefits of a passive exoskeleton on depressed aged care residents is warranted (Verrusio et al., 2018).

Another study reviewed the impact of combining movement to digital music on reducing depressive symptoms and anxiety, feelings of loneliness, and sleep dissatisfaction using a mixed methods study approach (Ofosu et al., 2023). Ten residential aged care facilities across Scotland and the United Kingdom participated in the study, with 33 aged care resident participants (Ofosu et al., 2023). The intervention was three movement sessions to music and one music session without movement per week for 12 weeks (Ofosu et al., 2023). The interventions were conducted by activity staff employed by the participating aged care facilities (Ofosu et al., 2023). At the completion of the study, there was a significant improvement in the depressive scores of the participants (Ofosu et al., 2023); however, the researchers acknowledged that, due to the small sample size, this result should be considered preliminary and further research should be considered (Ofosu et al., 2023).

The effectiveness of the exercise benefits of a horticultural therapy program on depressive symptoms in older persons with depression was evaluated in a systematic review by Xu et al. (2023). Twelve research articles reporting on 13 studies were analysed for the review (Xu et al., 2023). The results of the review indicated that the therapeutic effect of horticultural therapy provides more benefits in reducing depression when the older person participates in the activity rather than just observing (Xu et al., 2023). The potential gains of older persons being physically involved in the activity are the strengthening of body functions and improving physical fitness (Xu et al., 2023). Participation also gives the benefit of removing the adverse emotions of individuals enjoying the horticultural task, (Xu et al., 2023). The researchers also suggested that the benefits of the tactile sensations of horticultural therapies could increase enjoyment and thereby also impact the reduction of depressive symptoms (Xu et al., 2023). The researchers recommended that there is a need for more rigorously designed research to establish the horticultural interventions and types of environments that result in improving depression outcomes (Xu et al., 2023).

The impact of Tai Chi on the quality of life and depressive symptoms in aged care residents was examined in a recent literature review (Zhu et al., 2024). Tai chi is characterised by mild movements,

focusing on breathing and relaxing the body through gentle motions (Zhu et al., 2024). In the systematic review, six studies met the selection criteria and were analysed (Zhu et al., 2024). The results of the study suggested Tai Chi provides several physical and mental benefits as it not only focuses on physical movement, but also on mindfulness that can have a positive impact on older persons' mental well-being (Zhu et al., 2024).

Despite the positive results of Tai Chi on reducing depressive symptoms in older people, there is a lack of standardisation in the research in terms of exercise time and frequency of exercise (Zhu et al., 2024). Zhu et al. (2024) suggest that an exercise period of six months is most effective in reducing depressive symptoms; however, the intensity of the exercise required needs further research. Sample sizes of the studies in the review were also small, which limits their generalisability (Zhu et al., 2024). Further research with larger sample sizes is required, focusing on a standardised program, such as exercise period, duration, and frequency, to achieve the best mental health outcomes (Zhu et al., 2024).

The studies in this review have shown that there is limited or no significant impact of high-intensity exercise programs on reducing depressive symptoms among elderly residents in aged care facilities, with some suggesting residents may be too frail for such interventions. Verrusio et al. (2018) found preliminary evidence supporting the potential benefits of passive exoskeletons, although low participant numbers warrant further research. Zhu et al. (2024) indicate that study results imply Tai Chi also has a positive impact on reducing depressive symptoms in older persons. However, further research with larger sample sizes is required to determine the exercise period, duration, and frequency to achieve the best mental health outcomes. Similarly, Ofori et al. (2023) and Xu et al. (2023) suggest that more rigorously designed studies are required, particularly into passive and alternative interventions, such as horticultural therapy, that result in improving depression outcomes.

2.4.3 Music Therapy

There have been some recent positive outcomes from research on the effects of music therapy on depression. The effectiveness of recreational group singing versus music therapy on 117 randomly

selected depressed older persons in RACFs was evaluated by Werner et al. (2017). The results of the study suggest that interactive music therapy has a greater impact on reducing symptoms of depression in persons with and without dementia than recreational group singing (Werner et al., 2017); this was attributed to music therapy centring on individuals and social relationships (Werner et al., 2017). Recreational group singing is less effective in reducing depression as songs are initiated in a synchronised manner, requiring intense attention, which can cause stress, unlike the individual nature of music therapy (Werner et al., 2017). Some limitations to this study included that internal assessors may have inadvertently influenced the assessments due to a lack of blinding (Werner et al., 2017). The study also only included mobilising residents, so results may not be generalised to immobilised residents.

A research study examining the effects of a music therapy program in Turkey was consistent with the Werner et al. (2017) study (Uger et al., 2017). The research consisted of 64 resident participants with depression using a randomised controlled trial method (Uger et al., 2017). In the Uger et al. (2017) experiment, the music group had a music session three days per week for an eight-week period, with pre- and post-test systolic blood pressures and GDS-15 scores measured. The control group also had pre- and post-test systolic blood pressures and GDS-15 scores assessed (Uger et al., 2017). The results indicated a significant improvement in the mean pre- and post-test systolic blood pressures and GDS-15 scores in the music group compared with the control group, suggesting music has therapeutic outcomes for older persons (Uger et al., 2017).

There are some limitations to the studies by Uger et al. (2017) and Werner et al. (2017). The research by Uger et al. (2017) was conducted in a single-site residential aged care facility in Turkey and did not measure the cognitive level or functional capacity of the residents. The music selected was traditional Turkish music, which was suggested to have a particular emotional impact on Turkish residents and could not be generalised to other cultures (Uger et al., 2017). The study conducted by Werner et al. (2017) included mobilising residents only and did not include those who were bedridden. It was also

conducted over a short eight week period, so the long-term effects of music therapy could not be evaluated from this study (Werner et al., 2017).

A further investigation into the effects of music therapy on reducing depression in older persons was conducted using a randomised controlled study method (Xu et al., 2024). The study was conducted in two aged care facilities in Nigeria, with 121 residents participating (Xu et al., 2024). Two music therapists and two nurse experts in music therapy conducted the intervention, which consisted of twice-weekly group music sessions over six weeks (Xu et al., 2024). Xu et al. (2024) suggested that following exposure to the passive and active music therapy, the experimental group had significantly lower depressive scores than the control group. These results support studies conducted in the Euro-American context, which also indicate that depressive symptoms of older persons with dementia are reduced using music therapy (Xu et al., 2024).

Another study also suggests music therapy is a successful intervention in reducing depressive symptoms in aged care (Baker et al., 2022). A cluster-randomised controlled trial conducted in Australia with 20 large RACFs compared the effects of two different types of music therapy programs (Baker et al., 2022). The programs consisted of a group music therapy program and a recreational choir singing program (Baker et al., 2022). The music therapy sessions were conducted twice-weekly for three months, then weekly thereafter for three months (Baker et al., 2022). The group music therapy was facilitated by a qualified music therapist and focused on an individualised approach (Baker et al., 2022). The recreational choir singing was facilitated by community musicians with experience in leading groups and was designed for groups of 15–20 participants (Baker et al., 2022). The results indicated that both the recreational choir singing and the group music therapy were beneficial in reducing depressive symptoms (Baker et al., 2022). However, this study was conducted in one facility so the findings cannot be generalised (Baker et al., 2022). The authors also reported that the interventions increased the staff's perceived burden due to the extra workload in implementing the programs, and in an industry where staff burden is already high, it was noted that this could impede the broader implementation of the interventions (Baker et al., 2022).

The impact of music therapy on reducing depressive symptoms is further supported by the results of a study that indicated music therapy reduces depressive symptoms in older persons with mild cognitive impairment living in residential aged care (Xue et al., 2023). In this research, conducted in Wuhan, China, a receptive music therapy intervention was carried out by a registered music therapist and a nursing student as an assistant (Xue et al., 2023). The intervention consisted of musical muscle progressive relaxation training, music discussion, and music listening four times per week for eight weeks (Xue et al., 2023). The depressive symptoms in the experimental group improved significantly, whereas there was no statistically significant improvement in the depressive scores of the control group (Xue et al., 2023). The study did not assess the long-term benefits of the therapy and Xue et al. (2023) suggest that receptive music therapy intervention needs to be further researched to establish how it can improve the older person's quality of life in RACFs.

A research study investigating the impact of music therapy on depression in older persons in aged care implied that music therapy has an effect on reducing depressive symptoms, specifically with residents living with dementia (Feng et al., 2024). The quasi-experimental study was conducted in two aged care facilities in Nigeria with 126 participants (Feng et al., 2024). The group music sessions were conducted twice-weekly for one hour over a six-week period and chaired by two experienced music therapists (Feng et al., 2024). The sessions were active and passive, and music was selected based on participants' preferred music, predominantly traditional Nigerian and country music from the 1950s and 1960s (Feng et al., 2024). The study results indicated that the participants' depression levels decreased, and continued to be so for three months following the music therapy sessions (Feng et al., 2024). The authors acknowledged that their study was limited as it only included participants from two aged care facilities; however, it adds to the body of research on the use of music therapy for residents with dementia (Feng et al., 2024).

The studies in this literature review suggest that interactive music therapy is more effective than recreational group singing in reducing depressive symptoms among older adults— including those with

dementia—due to its individualised and socially engaging nature (Werner et al., 2017; Uger et al., 2017; Xu et al., 2024). Group singing may be less effective due to its structured format, which can cause stress. However, limitations of the studies, such as short study duration, exclusion of bedridden residents, and small sample sizes, highlight the need for further research into the impact of music therapy on reducing depressive symptoms in aged care residents (Werner et al., 2017; Feng et al., 2024).

2.4.4 Depression Training for Care Staff

Some positive results for RACF residents with depression have resulted from improving staff knowledge through training. To assist aged care facilities in identifying the training needs of their staff, knowledge assessment tools have been developed (Karantzas et al., 2012). Several training tools, including the Beyond Blue Training Package and face-to-face programs, have been implemented to address the knowledge deficit of aged care staff in order to improve the care of depressed RACF residents. However, research evidence indicates that training alone does not automatically convert into improved care practices for aged care residents with depression (Davison et al., 2013).

A study assessed the effectiveness of the Beyond Blue Depression Training Program on aged care staff knowledge of late-life depression (Mellor et al., 2010). The study consisted of 244 care staff participants working in community settings (n=53) and residential aged care facilities (n=151) in Australia. The participants consisted of care staff and registered nurses (Mellor et al., 2010). They assessed knowledge of late-life depression pre- and post-training and at a three-month follow-up using the Knowledge of Late Life Depression Scale Questionnaire (Mellor et al., 2010). The questionnaire contained 23 questions relating to staff knowledge of depression and their skills in managing depression (Mellor et al., 2010). Participants rated their level of agreement with each statement on a four-point Likert scale, which ranged from (1) *strongly agree* to (4) *strongly disagree*. Total scores ranged from 23 to 92 (Mellor et al., 2010). A higher score indicated a higher level of knowledge of depression in older adults (Mellor et al., 2010).

Results of the study implied that care staff and registered nurses demonstrated a significant increase in knowledge of late-life depression post-training and at the three-month follow-up (Mellor et al., 2010). Referrals for follow-up care for residents with symptoms of depression also increased following the training (Mellor et al., 2010). The authors suggested, however, that although there was a significant improvement in knowledge of depression as indicated by the scores and a slight increase in referrals, the results may not indicate a clinically meaningful transformation (Mellor et al., 2010). In conclusion, it was recommended that further research is required to determine if meaningful changes to practice occur following depression training (Mellor et al., 2010).

The effectiveness of including a routine screening and referral protocol following a depression training program was examined in a study by Davison et al. (2013). The protocol was designed to provide care staff with clear guidelines on the frequency of assessment, the procedure for referrals, and the continuing monitoring of residents (Davison et al., 2013). A cluster randomised controlled design was used to assess the effects of the protocol with 216 participants across seven RACF facilities (Davison et al., 2013).

Over a 12-month period there was an increase in referral rates, however, it was noted that only a small number of the referred residents received a change in treatment (Davison et al., 2013). Most referrals were made to general practitioners who often disregarded the referrals or continued with current treatment (Davison et al., 2013). There were three referrals to receive interventions from in-home staff and two referrals made to a psychologist (Davison et al., 2013). The study concluded that providing a well-defined protocol for screening and referrals for depression as well as training, is more effective than training alone (Davison et al., 2013). However, further research is required to explore linkages between training staff and changing clinical practices that improve outcomes for residents with depression (Davison et al., 2013).

A further study examined the impact of a three-module depression training program on staff knowledge of depression in 12 long-term care facilities in the United States using a two-arm cluster randomised study method (Abrams et al., 2017). The first module was delivered to 169 staff participants, and the second and third modules were delivered to 135 and 168 staff participants, respectively (Abrams et al., 2017). Module one was aimed at exploring common beliefs and myths about depression and providing an overview of depressive symptoms and facts related to depression (Abrams et al., 2017). Module two aimed to increase recognition of depressive symptoms and foster differentiation between dementia and depression, and Module three taught techniques for reaching out to depressed older persons and management interventions (Abrams et al., 2017).

The study results indicated a significant improvement in the pre- and post-test scores for all three modules (Abrams et al., 2017). However, some limitations were identified, including that only short-term knowledge was assessed as there was no follow-up assessment following the initial post-test. There were also challenges with staff attendance that may have resulted from the modules taking 45 minutes to deliver (Abrams et al., 2017); this is a considerable demand on time, considering staffing and the work demands in aged care (Abrams et al., 2017).

The impact of a brief depression training program on improved care outcomes for older persons in aged care with depressive symptoms was explored in another study by Atkins, Naismith, Luscombe and Huickie (2013). The study comprised of 102 staff participants, including managers and care staff from residential and community care settings (Atkins et al., 2013). The depression training involved a two-hour presentation that covered depression types, prevalence, causes, symptoms, risk factors, helping behaviours, myths, and stigma (Atkins et al., 2013).

Results suggested that staff confidence in knowing how to respond to older persons with depression was increased following the brief training program (Atkins et al., 2013). However, there were limitations to the study: just over half the participants completed the survey at baseline; a high number of

participants were lost from the sample due to high staff turnover; and data, particularly on care staff, were missing. Further research is required to establish an understanding of the relationship between knowledge and confidence and how to move staff from a theoretical understanding of depression to practically applying the knowledge to their care (Atkins et al., 2013).

A more recent study investigated the impact of providing multiple brief face-to-face training sessions on improving aged care staff's knowledge, confidence, and attitudes in delivering late-life depression care (Lee et al., 2020). This cluster-randomised trial was conducted in nine long-term aged care facilities in Taiwan; it consisted of 30 participants in the intervention group and 3 in the comparison group (Lee et al., 2020). The depression training program consisted of three 30-minute sessions, with one per week for three weeks (Lee et al., 2020). Staff used the Late-Life Depression Quiz, which has one point assigned for each correct answer, with a total score of 0 to 13 (Lee et al., 2020). Attitude toward depression was measured using the Revised Depression Attitude Questionnaire; it consisted of 22 items with a 5-point Likert scale, with total scores ranging from 22 to 110 (Lee et al., 2020).

The results of the study indicated that the program was effective in improving the staff's attitude toward depression and their knowledge of late-life depression (Lee et al., 2020). The researchers suggested that, considering the busy schedules of staff in aged care, the 30-minute training sessions implemented in their research were also practical to deliver (Lee et al., 2020). The format and content of the training not only improved the attitude of staff toward depression, but also improved their confidence in providing care and management for residents with depression (Lee et al., 2020). However, the results did not indicate the effectiveness of the training on staff knowledge over time, and their practice behaviour was not explored to determine any change in their care practices (Lee et al., 2020).

The studies in this literature review suggest that, while training can significantly improve staff knowledge of depression, this knowledge does not necessarily transfer to changes in practice and, therefore, changes in resident outcomes (Davison et al., 2013; Mellor et al., 2010). Staff referrals for

additional evaluation of residents exhibiting depressive symptoms improved when depression training was supplemented with a defined screening (Davison et al., 2013). However, further studies are required to understand how staff training translates into changes in clinical practice and improved outcomes for residents. In particular, more research is required to explore how to bridge the gap between theoretical and practical application in everyday care (Lee et al., 2020).

2.4.5 Social Therapies

There is evidence to suggest that reducing social isolation minimises the risk of depression in older persons in aged care. Interventions for decreasing social isolation and depression were examined in a systematic review by Franck et al. (2015). Interventions investigated included gender-based group reminiscence therapy, an indoor gardening program, Nintendo Wii® game participation, gender-based group interventions, and a radio broadcast program (Franck et al., 2015). In the analysis of the studies, Franck et al. (2015) suggested that the study on gender-based group reminiscence therapy did not assess whether the intervention led to a reduction in social isolation. The research of the radio broadcast program assessed the intervention's impact on social isolation, but it did not show a significant improvement in the participants' sense of social cohesion (Franck et al., 2015). The analysis of the Nintendo Wii® game intervention and the indoor gardening program indicated a significant improvement in social isolation but did not measure how this impacted depressive symptoms (Franck et al., 2015). Only the group reminiscence therapy study examined both depression and social isolation following the intervention (Franck et al., 2015). Group reminiscence therapy was found to reduce depressive symptoms and appeared to be most effective when conducted by well-trained staff. However, the study did not identify long-term benefits, costs, and sustainability of this type of therapy (Franck et al., 2015).

Another study measuring the effectiveness of an integrative group reminiscence therapy program also concluded that depression scores decreased following the intervention (Karimi et al., 2010). The mean GDS-15 depression score for the participants pre-program was 9.40 and following a six-week trial of the Integrative Reminiscence Program it was 4.70 (Karimi et al., 2010). Participants included in the study

had a Mini-Mental Status Examination (MMSE) score of 21, indicative of no cognitive impairment (Karimi et al., 2010). While the findings of the study indicated improvement in depressive symptoms, this study may be difficult to replicate in typical aged care settings due to the specialised qualifications of the facilitators (Karimi et al., 2010). The sessions were delivered by a therapist with a master's level qualification under the supervision of a clinical psychologist, roles that are not commonly available in aged care facilities (Karimi et al., 2010).

The examination of treatment of depression in residential aged care facility residents in another systematic review suggests there is some evidence that certain social activities can reduce depressive symptoms (Simning & Simons, 2017). Out of the 32 selected articles, nine specifically explored psychosocial interventions. Activities including companion birds, companion dogs, and reminiscence therapy resulted in some reduction in depressive symptoms, although recipients were not selected based on their depression status (Simning & Simons, 2017). Simning & Simons (2017) state there is a paucity of large, high-quality randomised controlled trials of social interventions to guide the management of depression in RACFs.

The benefits of gender-based group activities on reducing depression in aged care residents were explored by Gleibs et al. (2011). In the pre- and post-intervention study, 18 female and 12 male participants were recruited from across six aged care facilities in the United Kingdom (Gleibs et al., 2011). The gender-based groups were conducted over a 12-week period. The findings suggested that men particularly benefited from the programs, reporting greater levels of life satisfaction and a reduction in symptoms of anxiety and depression (Gleibs et al., 2011). Gleibs et al. (2011) acknowledged that the sample size was small and lacked cultural diversity, but argued that it supports other research on the importance of a social identity approach to well-being and health.

The impact of intergenerational playgroups on depression scores of aged care residents was examined using a mixed-method study in Australia (Skropeta et al., 2014). The study consisted of 48 aged care residents, 41 child carers, and 50 children (Skropeta et al., 2014). The intergenerational playgroup

program introduced intergenerational interaction and socialisation between the residents, child carers, and children aged 0–4 (Skropeta et al., 2014). Although there were a number of mutual benefits to the program, including creating connections, providing a new outlook for the aged care residents and the children, and increasing awareness between generations, there was no significant change in the aged care resident participants' GDS-15 scores pre- and post-interaction (Skropeta et al., 2014). The study results also indicated an increase in fatigue throughout the study (Skropeta et al., 2014).

A further study examined the effectiveness of using a Nintendo Wii® game console on improving autonomy in performing activities of daily living and its relationship with cognition and mood in aged care residents (Jahouh et al., 2021). The longitudinal study comprised 80 older-person participants living in a RACF or attending the associated day care centre (Jahouh et al., 2021). The intervention was conducted over eight weeks and consisted of 20 rehabilitation sessions with different Nintendo Wii Fit® activities (Jahouh et al., 2021). The Mini-Mental State Examination (MMSE) was used to assess changes in cognition and the GDS-15 to evaluate changes in depressive symptoms (Jahouh et al., 2021).

The results of the study indicated a decrease in depression, an increase in memory and attention levels, and a decrease in apathy, which increased the participants' autonomy in ADLs (Jahouh et al., 2021). The researchers highlighted that these findings were limited as the study consisted of a small non-randomised sample and may not be representative of the larger population (Jahouh et al., 2021). Studies are recommended with a larger randomised control design to more broadly determine the effectiveness of Nintendo Wii Fit® activities on depression and autonomy (Jahouh et al., 2021).

A more recent study aimed to identify factors that are independently correlated with the risk of depression (Sakai et al., 2024). The sample size for the cross-sectional study was 545 aged care residents. The two-item Patient Health Questionnaire was used to assess if the participants had depressive symptoms (Sakai et al., 2024). The questionnaire consists of two questions about loss of pleasure or interest in normal activities during the previous two weeks and the occurrence of low mood (Sakai et al.,

2024). Risk factors found to be associated with depression from this research included daytime sleep, pain, and reduced social connection (Sakai et al., 2024). In conclusion, the researchers suggested that greater social connection can be protective against depression (Sakai et al., 2024).

The impact of family visits on reducing social isolation and loneliness as risk factors for depression was explored in an integrative review by Tan et al. (2021), drawing on 10 international papers. The review found that although infrequent family visits are associated with higher depressive symptoms, visitation is only one of several interacting factors (Tan et al., 2023). Familial and cultural values can either diminish or strengthen the positive effects of family interaction, while residents with multiple morbidities or impaired function tend to experience benefit, with depression increasing as morbidities accumulate (Tan et al., 2023). Cultural restraints and stigma around the discussion of mental health also moderate the benefit of family visits (Tan et al., 2023).

Tan et al. (2023) concluded that daily clinical and social interactions with staff have a greater impact on reducing depressive symptoms than family visitation (Tan et al., 2023). Staff play a pivotal role in delivering leisure and social activities, and the review emphasises that these interventions are most successful when tailored to residents' individual preferences and needs (Tan et al., 2023). Ensuring that residents are involved in their own activity and care planning is therefore crucial for optimising outcomes (Tan et al., 2023).

The studies in the review were skewed towards residents from Asian cultural backgrounds, which could be a limitation of the findings. More studies from a range of countries would provide greater insight into the impact of culture on visitation from family members and its influence on depressive symptoms in aged care residents (Tan et al., 2023). Also, there were no studies that measured the impact of family visits on aged care residents with cognitive impairment (Tan et al., 2023).

The effectiveness of an 8-week volunteer-led behavioural activation program on reducing depression in aged care was explored using a single-arm pre- and post-intervention study method (Bryant et al., 2020). Behavioural activation is a psychosocial intervention including scheduling activities,

monitoring mood, and setting SMART (specific, measurable, achievable, realistic, and timely) goals (Bryant et al., 2020). In the study, 17 aged care residents with depressive symptoms and 13 volunteers from three aged care facilities participated. The intervention was found to reduce aged care residents' symptoms of anxiety and depression. The researchers of the study suggested this could be a cost-effective and mutually beneficial program for depressed residents and the volunteer interventionists (Bryant et al., 2020).

However, there were some issues with the program. Of the volunteers, 42% did not submit schedules for the resident activities and three participating residents stated they found the activities scheduled to be unhelpful (Bryant et al., 2020). To improve treatment fidelity, future studies could include active monitoring of scheduled activities, recording some activities, and providing refresher training (Bryant et al., 2020). The researchers concluded that a larger randomised trial could also be implemented to expand on the results of the study (Bryant et al., 2020).

To establish the association between improved quality of life and social interactions, a prospective observational time and motion study and a Quality-of-Life Survey, which includes depression, in a RACF was conducted (Siette et al., 2022). The social activity of 36 residents was observed in the facility's common areas between 9:30 and 17:30 from Monday to Friday (Siette et al., 2022). Observations were conducted by four researchers using the validated Work Observation Method by Activity Timing tool (Siette et al., 2022). The results of the study indicated that residents who spent larger portions of their time in the company of other residents reported a higher QOL than those less engaged with others (Siette et al., 2022).

The results also suggested that residents who spent higher proportions of time with staff indicated a lower quality of life (Siette et al., 2022); however, the researchers suggested, that this could be associated with time spent with staff performing high care needs rather than social interactions (Siette et al., 2022). Siette et al. (2022) suggested that having a higher frequency of meaningful activities during

the day, along with flexible care schedules, could promote improved social interaction and feelings of autonomy.

Increased social connection has been shown to offer protective benefits against depression in aged care residents (Sakai et al., 2024). To be effective, interventions require an individualised approach tailored to each resident's interests and needs (Tan et al., 2023). Furthermore, incorporating frequent, meaningful activities and allowing for flexible care routines can enhance social engagement and support residents' sense of autonomy (Tan et al., 2023). However, there remains a lack of large, high-quality randomised clinical trials (RCTs) to provide strong evidence to guide the use of social interventions in managing depression in residential care facilities (Simning & Simons, 2017).

2.4.6 Technology use in Reducing Depressive Symptoms

With advancements in technology, more research is being conducted into the benefits of technology on depression in aged care. A study on the impact of mobile device use on cognitive function and depressive symptoms was conducted by Lin et al. (2020). The study involved 235 older persons living in four RACF facilities in China using a cross-sectional study method. The research was conducted using a sociodemographic questionnaire, which included mobile device use such as smartphones, e-readers, personal digital assistants, portable video/music players with smart capabilities, and tablets (Lin et al., 2020). The results from the analysis of the questionnaires indicated that mobile device use is significantly associated with reducing depressive symptoms (Lin et al., 2020).

The researchers suggested that mobile devices increase meaningful social connectedness through communication with family members and friends, which may contribute to the significantly lower depression scores for participants who used mobile devices than those who did not use mobile devices (Lin et al., 2020). Lin et al. (2020) propose that the proper use of mobile devices should be encouraged to enhance social connectedness and reduce social isolation and prevent depressive symptoms. The authors recommended that future research include multi-centre studies with larger sample sizes taking into

account factors such as the older person's social network, the types of activities performed on the devices, other daily activities they engage in, and the frequency of device use (Lin et al., 2020).

Other studies have investigated the therapeutic benefits of robotics on aged care residents. The benefits of Paro, a robotic baby seal developed to promote the same benefits as animal therapy, include improving mood, promoting social interaction, and reducing challenging behaviours of residents with dementia (Birks et al., 2016). However, other studies have suggested that the benefits of Paro are context-dependent (Haltaufderheide et al., 2023). The well-being claims of Paro are dependent on individuals and the intervention type (Haltaufderheide et al., 2023). Trials of companion robots in aged care have demonstrated that residents' social isolation and loneliness have been reduced with their implementation (Shishehgar et al., 2019). Conversely, Tan et al. (2021) suggest that there is tension between the potential benefits of social robots and potential liability and ethical dilemmas.

A scrutiny of the benefits of various socially assistive devices was reported in a systematic review of 39 articles (Haltaufderheide et al., 2023). Apart from studies on Paro, other robotic devices have also been studied for their benefits on residents' emotional and psychological well-being (Haltaufderheide et al., 2023). One of these devices studies is a robot, known as Nao, which has humanoid characteristics and is equipped with a microphone and speakers, face and voice recognition, object tracking, and cameras (Haltaufderheide et al., 2023). Studies of Nao suggested that it had significant positive effects on emotional well-being and decreased depressive symptoms (Haltaufderheide et al., 2023).

Another robot studied is Guide, a 1.6 metre care robot with anthropomorphised features that interacts through a touch screen with the capacity to measure vital signs, provide video calls, and provide entertainment (Haltaufderheide et al., 2023). Similarly, another care robot, known as Hobbit, also has anthropomorphised features designed to support ageing in place. Its predominant function is to provide fall protection through the detection and picking up of potential obstructive objects (Haltaufderheide et al., 2023). Neither of these devices was shown to have a significant impact on reducing depressive symptoms (Haltaufderheide et al., 2023).

Although some of the socially assistive devices demonstrated an impact on reducing depressive symptoms, the authors argued that the studies in their data sets were dependent on participants' willingness to engage with the devices; this resulted in a tendency to include participants with a positive attitude and exclude those with a negative attitude toward the technological devices (Haltaufderheide et al., 2023). They also suggested that the data analysed came from a range of different countries with varied cultures, which could limit their comparability (Haltaufderheide et al., 2023).

While technology shows potential in reducing depressive symptoms among aged care residents, further research with larger, multisite studies are required to consider factors like social networks, other daily activity involvement, and device usage. Concerns have been highlighted around the use of social robots, particularly regarding ethical and liability issues, and noting that their effectiveness often depends on the willingness of users to engage (Tan et al., 2021).

2.4.7 Medications for Depression in Ageing

There is evidence that older persons with depression respond to antidepressant medications with continued treatment for up to 12 months (Wilkinson & Izmeth, 2016). However, the continued use of antidepressant medication in counteracting the recurrence of depression beyond a 12-month period is unclear (Wilkinson & Izmeth, 2016). Conversely, a number of risks associated with prescribing antidepressant therapy for older persons have been identified (Mark et al., 2011). Many older persons with depression are prescribed medications for comorbidities that interact with antidepressant medication (Mark et al., 2011). Analgesic medications such as Oxycodone and Tramadol account for more than 30% of medications that pose a risk for serious interaction with antidepressants (Mark et al., 2011). Older persons also metabolise medications at a slower rate, resulting in the potential for increased sensitivity to side effects (Mark et al., 2011). With the increase in side effects, particularly within the first 30 days of medication commencement, almost one-fourth of older persons prescribed antidepressants in the community cease taking the medication (Mark et al., 2011).

There is evidence to suggest an association between falls and antidepressants, specifically selective serotonin reuptake inhibitors and tricyclic antidepressants (Iaboni & Flint, 2013). The risks are similar to those associated with benzodiazepines and antipsychotics, including orthostatic blood pressure changes and memory impairment (Iaboni & Flint, 2013). Some studies have suggested that selective serotonin reuptake inhibitors are also associated with fragility fractures due to the role of serotonin in bone metabolism (Iaboni & Flint, 2013). A study on the association between antidepressants and heart rate variability implied that antidepressants are also linked with lower heart rate variability in older persons (O'Regan et al., 2015). Low heart rate variability is known to be a risk factor for cardiac mortality, arrhythmias, and myocardial infarction (O'Regan et al., 2015).

Similar results were found in a study that investigated the effects of selective serotonin reuptake inhibitors and newer atypical antidepressant drugs on arrhythmia in older people with an existing cardiovascular disease (Biffi et al., 2018). The outcome of this Italian study suggested a 37%–72% increased risk of arrhythmia development in users of serotonin reuptake inhibitors and newer atypical antidepressants who had an existing cardiovascular disease (Biffi et al., 2018). A suggested possible factor contributing to the increased risk of arrhythmias is the drug's interference with cardiac repolarisation, potentially causing prolongation of the QT interval on the electrocardiogram and cardiac ventricular arrhythmia (Biffi et al., 2018). These risks should be contemplated when long-term prescribing of antidepressant drug therapy is being considered for this risk group. Trials of a broad range of interventions, including psychological therapies, in combination with antidepressant medications, are required to ascertain the benefits of blending treatments (Wilkinson & Izmeth, 2016).

A systematic review of tricyclic antidepressant medications by Santandreu et al. (2024) suggested that the marked anticholinergic properties of the medication increase the risk of falls, fractures, and mortality in older persons. The anticholinergic activity of the drug that causes the fall risk is orthostatic hypotension and sedation (Santandreu et al., 2024), although the researchers suggest the risk of falls is lower than other antidepressant medications, such as selective serotonin reuptake inhibitors, serotonin-

norepinephrine reuptake inhibitors, and Trazodone (Santandreu et al., 2024). The recommendation from the study was that antidepressant medication be given at the lowest effective dose and for the shortest time possible to reduce the associated risk of the medication (Santandreu et al., 2024).

Another review broadly examined the risk of falls associated with antidepressant medication (van Poelgeest et al., 2021). The identified risks associated with a range of antidepressant medications include orthostatic hypotension, sedation, cardiac rhythm and conduction disorders, drug-induced movement disorders, and impaired balance (van Poelgeest et al., 2021). However, the authors argue that most evidence on fall risk associated with antidepressant use in older persons is from observational studies evaluating falls in antidepressant users compared with non-antidepressant users (van Poelgeest et al., 2021). They suggest that evidence may be biased by indication, so antidepressant prescribing should be individualised and guided by specific adverse effects associated with the type of antidepressant, and the patient's tolerance and characteristics (van Poelgeest et al., 2021). Notably, untreated depression itself can contribute to fall risk through impaired sleep/attention, fear of falling, motor retardation, and gait/balance abnormalities (van Poelgeest et al., 2021).

A detailed insight into the different antidepressant medications and their side effects that increase falls can assist clinicians in reducing the negative impacts and enhancing the outcome for the older person (van Poelgeest et al., 2021). While antidepressant medications can be beneficial in reducing symptoms of depression in older persons, there are several risk factors, including arrhythmias and an increase in falls. As suggested by van Poelgeest et al. (2021) clinicians should be well-informed about antidepressant side effects to minimise harm and improve treatment effectiveness in older adults (van Poelgeest et al., 2021).

2.4.8 Summary

The body of literature in this review highlights a complex interplay of factors that influence depression in aged care residents, with autonomy, environmental mastery, social connection, and meaningful engagement emerging as critical themes across a range of interventions. While more

traditional approaches, such as exercise programs, show some efficacy, alternative, more person-centred interventions can be beneficial. Consistent evidence suggests a strong link between autonomy, environmental mastery, and reduced depressive symptoms, despite many studies being limited by small, cross-sectional designs. However, there is a lack of research that rigorously evaluates the effectiveness of autonomy-enhancing interventions in residential care settings to address this risk factor for depression. To address this gap, it is critical for researchers to investigate interventions that aim to restore or enhance autonomy to foster a sense of agency and environmental mastery.

Social engagement is another key protective factor against depression in aged care. Unlike loneliness, which can be subjective, social isolation is an objective lack of social interaction and connection and is a well-established risk factor for depression. Interventions that promote social engagement, such as group activities, personalised social programs, can improve emotional well-being. More research is required into interventions that promote social engagement and are most effective in reducing depressive symptoms in aged care residents.

Furthermore, staff in aged care are not provided with sufficient training and support to recognise and respond to late-life depression, which can lead to care practices that unintentionally restrict residents' autonomy. Poor staff knowledge also results in limited detection of depression and therefore referral to health practitioners for treatment. Bridging the gap between knowledge and everyday practice remains a key challenge.

The research project for this thesis aimed to address the gap in the research relating to resident autonomy as a risk factor for depression through a three-pronged approach. First, there will be the implementation of a structured intervention that offers residents the choice of their bedtimes and the opportunity to participate in an evening program, directly targeting autonomy through flexible routines. Second, it will investigate whether training staff in the recognition and management of late-life depression leads to meaningful changes in care delivery, particularly in supporting resident autonomy and promoting decision-making to reducing depression symptoms. Third, an examination of the impact of the

interventions, based on interviews with residents and staff, providing a more comprehensive understanding of how autonomy-promoting practices can improve mental health outcomes in RACF settings.

2.5 Conceptualising Self-determination Theory, Person-Centred Care, Personhood and Knowledge to Action Framework in Aged Care

As the literature review has highlighted, the emotional and psychological needs of older residents in RACFs are complex, and behavioural and clinical interventions alone may not sufficiently address depression and overall mental well-being. To respond effectively to these needs, it is essential to consider the conceptual frameworks that shape and explain the experience of aged care residents. Important concepts and frameworks in this regard are Self-Determination Theory (SDT), Person-Centred Care (PCC), Personhood and Knowledge to Action (KTA).

2.5.1 Self-determination Theory

Self-determination Theory, developed by Deci and Ryan (1985; 2000), provides a framework for understanding human behaviour, motivation and well-being. Self-determination Theory asserts that to understand human motivation, the psychological need for autonomy, relatedness, and competence must be considered (Deci & Ryan, 2000). When these needs are endorsed, individuals experience greater engagement, well-being, and motivation (Deci & Ryan, 2000). However, when competence, motivation and autonomy are impeded, there is diminished engagement, lower self-worth, and motivation (Deci & Ryan, 2000). In the context of aged care, SDT offers a theoretical foundation in which to examine how institutional procedures, and relationships support or challenge residents' psychological well-being.

2.5.2 Person-Centred Care

The Person-Centred Care approach involves staff working in alignment with the values and beliefs of those they care for, being sympathetically present, actively engaging with those in care, sharing decision-making, and caring for the physical needs (McCormack & McCance, 2006). Working with the values and beliefs of the person being cared for involves placing value on developing a clear

understanding of what the person values in their life and how the person may interpret what is happening through these values (McCormack & McCance, 2006). These factors directly link to shared decision-making, in which nursing staff take into account the values of the person in their care to inform decisions (McCormack & McCance, 2006). Active engagement in PCC requires staff to have a connected relationship with the person being cared for (McCormack & McCance, 2006). Being sympathetically present requires the nurse to recognise the uniqueness of individuals and respond appropriately to cues (McCormack & McCance, 2006). In the context of aged care, PCC provides guiding principles in which to analyse facilitators and barriers to resident engagement in decision-making.

2.5.3 The Theory of Personhood

Personhood theory, as articulated by Kitwood (1997) has had an influence on the reframing of aged care delivery. Kitwood (1997) argued that ageing and dementia should not define individuals by their physical limitations or diagnoses. Rather, the personhood, the values, unique identity, relationships and history that constitute an individual should be acknowledged (Kitwood, 1997). Fundamental to this view is the recognition that older persons continue to have social and psychological needs, which when respected, contribute to their overall mental well-being (Mitchell & Agnelli, 2015).

In practice, this requires moving from task-oriented care to a person-centred approach (Mitchell & Agnelli, 2015). When staff view residents in their care through the lens of personhood, care becomes interactive rather than just a series of tasks (Mitchell & Agnelli, 2015). This interaction can profoundly influence how staff respond to signs of depression and underscores the relevance of the study of staff knowledge of depression in older persons in this thesis.

2.5.4 Knowledge to Action

To understand how aged care staff can translate knowledge into their practice, the Knowledge to Action (KTA) framework provides a structured method to facilitate practice change. The KTA process as described by Graham et al. (2006), has two interconnected concepts: knowledge creation and action. The

process is dynamic and complex, where the boundaries between the two are permeable and fluid (Graham et al., 2006). The knowledge component comes through the dissemination of ideas and concepts to inform actions or practices (Graham et al., 2006). The action part of the process involves a cycle that leads to the application of the knowledge in real-world settings (Graham et al., 2006).

In practice, for knowledge to be applied, barriers to using knowledge must be identified, knowledge use needs to be monitored, outcomes of using the knowledge needs to be evaluated, and systems must be put in place to sustain the ongoing application of knowledge (Graham et al., 2006). In the context of aged care, KTA offers a framework in which to examine how institutional procedures support staff knowledge that leads to changes in practice.

2.5.5 Relevance to the Present Study

The concept of Self-Determination Theory, Person-Centred Care, Personhood and the Knowledge to Action framework provides a focal conceptual foundation for this thesis research. The interventions implemented, resident-selected bedtimes and staff depression training, were designed not only to have an impact on the residents' depressive symptoms but also to promote more respectful and person-centred care practices. These frameworks are particularly important in the context of the aged care reforms and quality standards in Australia, where there is an increased focus on choice, psychosocial well-being, and consumer dignity (Department of Health and Aged Care, 2025). Embedding these theoretical perspectives into care practices in aged care is therefore timely and essential.

2.6 Conclusion to the Chapter

In this chapter, an overview of the literature relating to depression among residents living in RACFs has been presented. As the initial review of the literature was conducted in 2019, more recent publications have been included to ensure the review reflects current research developments in the field. The literature that is reviewed in this chapter contains those that identify risk factors for depression in aged care and interventions that have been implemented to manage depression in RACFs. Particular

focus is given to autonomy within RACFs as both a risk and protective factor for depression. This focus informed the selection of the literature reviewed, the gaps identified in the existing evidence and the research method which underpins this thesis. In the following chapter, the methods used for the resident intervention study will be presented.

Chapter 3: Theoretical Underpinning for Thesis and Methodology for the Resident Intervention Study

3.1 Introduction to the Chapter

The previous chapter presented a comprehensive review of the literature on the prevalence of depression, ameliorating factors for depression, and management strategies for depression in aged care. This review identified the key research gaps, particularly in relation to effective interventions that promote resident autonomy and environmental mastery for reducing depressive symptoms among aged care residents. These gaps form the foundation of the research conducted in this thesis.

This chapter outlines the mixed methods approach adopted in this thesis, including the rationale for its selection. It provides a detailed overview of the quasi-experimental pre- and post-test quantitative component used to evaluate the impact of the resident interventions. Additional methodological components, including the qualitative aspects of the thesis, will be presented in subsequent chapters. The structure and reporting of the chapter align with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist (Von Elm et al., 2007).

The focus of this chapter is the methodology used to investigate the effectiveness of two targeted interventions aimed at reducing depressive symptoms in aged care residents. These interventions involve: (1) offering residents the autonomy to choose their own bedtimes, and (2) providing residents with the option to attend a structured evening activity program. These strategies are designed to enhance resident autonomy and promote meaningful engagement, both of which are associated with improved mental health outcomes in aged care settings.

3.2 Background

Depression is a critical mental health concern amongst older persons, particularly in RACFs, with loss of autonomy, self-concept, and environmental mastery being identified as significant risk factors particularly for depression (Davison et al., 2012). Despite the identification of these risk factors, there is a gap in research related to interventions aimed at reducing RACF residents' loss of autonomy and

environmental mastery. Staff routines and facility policies, along with poor staff knowledge of depression, continue to frequently pose a barrier in meeting the individual preferences of residents (Kalaitzidis et al., 2018; Davison et al., 2013). Some positive outcomes for RACF residents with depression have resulted from improving staff knowledge through training. To assist aged care facilities to identify the training needs of their staff, Knowledge Assessment tools have been developed (Karantzas et al., 2012). Several training tools including the Beyond Blue Training Package and face-to-face programs have also been developed to address the knowledge deficit of aged care staff to improve the care of depressed RACF residents. However, research evidence indicates that training alone does not automatically convert into improved care practices for aged care residents with depression (Davison et al., 2013). It has been suggested that providing depression training in conjunction with care interventions could have improved outcomes for aged care residents (Davison et al., 2013).

With resident choice being a key requirement in the Australian Strengthened Aged Care Quality Standards (2025), it is critical to explore innovations that support resident decision-making (Department of Health and Aged Care, 2025). To address the gaps in research, specifically in relation to the research which examines residents' choices, including choice of bedtimes and evening activities. This research project aimed to investigate whether providing the choice of an evening activity program and choice of bedtimes following staff training would reduce depressive symptoms within a three-month period.

3.3 Mixed Methods Approach

Theory and research provide the origins for the health disciplines, including nursing. Theory provides the framework on which nursing practice and knowledge have been developed (Tappen, 2022). Qualitative and quantitative methods have been extensively used in health science research. Mixed methods research, using both quantitative and qualitative approaches, has been increasingly used to investigate the complexities that arise from multiple social, environmental, and political sources (Pat Bazeley, 2018). There is a growing trend in nursing research to use this method of collecting and integrating data from quantitative and qualitative single studies or clusters of studies (Polit & Beck, 2022).

The value of this method has been associated with its potential to advance the understanding of a phenomenon (Tappen, 2022). The combining of statistical data with personal experiences and stories can result in a better understanding of the research problem (Creswell, 2022). This viewpoint was taken in the decision to use the mixed methods methodology for this thesis. The decision was primarily based on the capability of this approach to generate a wide, and possibly new (Creswell, 2022), understanding of the area of interest in this research project, specifically, with regards to factors that can negatively impact autonomy and may increase symptoms of depression in older persons in aged care.

3.4 The Value of the Mixed Methods Approach

The combination of both the quantitative and qualitative methods has grown in popularity over the past 30 years and has been referred to as ‘the third paradigm’ (Creswell & Plano Clark, 2018). A research paradigm is defined as a set of beliefs, values, and generalisations of a community of researchers (Creswell & Plano Clark, 2018). Creswell and Plano Clark (2018) describe the paradigm of mixed methods research as a *worldview*. It provides the theoretical underpinning or a broad perspective about the nature of knowledge, reality, and how it is shaped (Harvey & Land, 2022). A paradigm, or worldview, shapes the way a research study is carried out and new knowledge is established (Harvey & Land, 2022).

Pragmatism is the principal philosophy adopted by most mixed methods researchers and is usually the worldview associated with mixed methods research (Creswell & Plano Clark, 2018). According to Creswell and Plano Clark (2018) a pragmatic worldview encompasses:

- Ontology—there are both singular and multiple realities; researchers test hypotheses and provide various perspectives;
- Epistemology—practicality of data collection looks at what will work best in the clinical environment to address the research questions;
- Axiology—multiple views that include perspectives that are biased and unbiased;

- Methodology—combines data collection from both qualitative and quantitative methods for a broader perspective; and
- Rhetoric—informal and formal writing styles.

Mixed methods research not only consists of collecting and analysing data from quantitative and qualitative studies, it also integrates the two data sets into a specific set of events (Creswell, 2022). This combining of the two approaches, or triangulation, has the capability to reinforce the overall research study if the results are substantiated using the two methods. There are several design typologies for mixed methods, including exploratory design, convergent design, and explanatory design (Polit & Beck, 2022). An explanatory design—a design where quantitative data is gathered in the first phase and qualitative data is gathered in the second phase (Polit & Beck, 2022)—was used in this thesis. The explanations of the qualitative data may help to understand the statistical results of the quantitative studies (Creswell, 2022). With an explanatory design, a subset sample of participants from the quantitative sample is selected to participate in the qualitative follow-up phase (Creswell, 2022). Questions asked of the participants in the follow-up qualitative phase are aimed at giving a detailed explanation of the quantitative results (Creswell, 2022). The advantages of a mixed methods pragmatic approach provide a compelling reason for its adoption; in this thesis research, the aged care environment is complex, and the potential of combining data offers a broader perspective in which to view the phenomenon being studied (Creswell, 2022).

The quantitative method used for the resident intervention study consisted of a quasi-experiment single-group pre-test and post-test-comparative design. This design was used to address the first research question. A quasi-experimental design does not randomise the selection or sampling of the participants like the true experimental design of a randomised control trial (RCT) (Cresswell & Cresswell, 2018). Although a quasi-experimental design is not considered as strong as RCTs, it resembles a true experiment (Roche & Bennett, 2024). As with experimental studies, it includes treatments or interventions aiming to establish a cause-and-effect correlation (Roche & Bennett, 2024). The strengths of a quasi-experiment

design include that there can be more willingness of participants to participate in an unrandomised trial (Polit & Beck, 2017), and it is effective in supporting causal inference in health research (Barnighausen, 2017). Boswell and Cannon (2023) suggest that the quasi-experimental design is a frequently used quantitative design due to randomisation often not being possible in research studies. This type of experimental design is used when the treatment or intervention being investigated is already available or when randomisation is limited due to ethical concerns (Roche & Bennett, 2024).

Random allocation was not appropriate for the resident intervention study as ethically it was not appropriate to restrict residents who did not participate in the intervention study from attending the evening programs. Furthermore, the study only included participants with minimal cognitive impairment due to the ethical limitations for gaining informed consent. Due to a high number of residents at the RACF with cognitive impairment, randomisation would have further limited the number of participants able to participate in the study. The quasi-experimental design outlined by Schmidt and Brown (2022) was used for this research—a one-group pretest-post-test design where the dependent variable of depressive symptoms is evaluated in the one participant group before and after the implementation of the interventions. The pre-test and post-test design is used quite frequently by healthcare researchers (Gray et al., 2017).

3.5 Research Question 1

The quasi-experiment resident interventions were guided by the research question outlined in Chapter 1. The question refers to residents in a RACF on the Central Coast of New South Wales, Australia—what is the effect of implementing residents’ choice of bedtimes and the opportunity to attend a daily evening activity program on reducing symptoms of depression within a three-month period?

3.6 Ethics Considerations

Ethics approval was obtained from the Avondale University Human Research Ethics Committee ETH.2019.016 (see Appendix A). The application contained details of the intended procedures of the research and information related to the participants to ensure the committee reviewed the degree of risk

for the research study participants (Cresswell & Cresswell, 2018). The National Statement on Ethical Conduct in Human Research was followed to ensure that all aspects of the research met the ethical standards to protect the safety and identity of the residents participating in the research (National Health and Medical Research Council, 2023). Principles relevant to this research project are respect, beneficence, justice, research merit, and integrity (National Health and Medical Research Council, 2023).

Before consent was gained from resident participants, written information regarding the resident intervention study was provided to potential participants (Appendix C). Adherence to section 2.2 of the National Statement on Ethical Conduct in Human Research was observed by ensuring that scope was given to the resident's capability to make their own decisions, and the choice to participate was made by the resident (National Health and Medical Research Council, 2023). Consent requirements included adequate information provided on the research and the implications for the participant, ensuring the information was understood, and consent was made voluntarily (National Health and Medical Research Council, 2023).

Storage of data and confidentiality guidelines in Section 3.1 of the National Statement on Ethical Conduct in Human Research were followed; this included removing any participant identifiers from any electronic records, electronic records being stored in a source external to the researcher's personal computer, storing data in a locked filing cabinet that only the researcher had access to, and data to be disposed of within an appropriate timeframe (National Health and Medical Research Council, 2023)

3.7 Study Setting

This resident-intervention study was conducted in a RACF in New South Wales (NSW), Australia. As detailed in Chapter 1, a RACF in Australia has been defined by the Australian Government Department of Health and Aged Care (DHAC) as accommodation providing a variety of care alternatives for older persons no longer able to live in their own home (Department of Health Disability and Ageing, 2025a). Care ranges from assistance with ADLs to 24-hour nursing care.

The resident intervention study was initially intended to be a multisite study. Two facilities in NSW, Australia, were approached in 2019 to participate in the study. One was in the Lake Macquarie region and the other on the Central Coast. Both were of a similar size; one RACF had a 118-bed capacity and the other had a 120-bed capacity, with a comparable staff mix. The researcher contacted both facilities via phone to obtain the email address for the Director of Nursing at each facility. Both Directors of Nursing were emailed with a brief outline of the study and a request to meet with the researcher in person to discuss the study in more detail. Meetings took place in late 2019, and both Directors of Nursing agreed to participate in the study.

When COVID-19 restrictions commenced in NSW in March 2020, the management of the Lake Macquarie facility expressed that they were no longer willing to participate in the study. Other facilities were approached; however, with the rigid visitation restrictions imposed on aged care providers from 2020 to 2022, no other aged care facilities were willing to participate. Given the impact of COVID-19 in the sector extending until 2022, it was not possible to engage another facility to participate in the research. The study was therefore modified to a single-site study.

The resident intervention study was conducted in a 115-bed private for-profit RACF on the Central Coast, New South Wales, Australia. For-profit RACFs represent 34% of residential aged care providers in Australia, compared with not-for-profit RACFs representing 57% and government-owned RACFs representing 9% (Australian Institute of Health and Welfare, 2022). Approximately 58% of privately operated RACFs are large, consisting of 101 or more operational places (AIHW, 2022). The facility in this study was established in 2012 as a standalone facility, consisting of all single rooms with ensuite facilities. Residents at the facility were provided with either low care, high care, or respite care. Low care is the provision of accommodation and personal care for older persons, whereas high care is the provision of accommodation and continuous nursing care for older persons with more complex health care needs (Department of Health Disability and Ageing, 2025a). Respite care is the provision of temporary accommodation and nursing care (Department of Health Disability and Ageing, 2025a).

The site was initially purposely approached and subsequently chosen for several reasons. The facility comprised a staff skill mix consistent with the national average in RACFs with approximately 15% Registered Nurses (RNs), 70% care staff, with Enrolled Nurses (ENs) comprising the remainder (Bonner, 2017). Senior management staff at the facility were willing to participate in the research study. Having the permission to carry out research by key personnel not only allows the researcher access, but they can also assist in encouraging staff to collaborate with the researcher (Holloway & Galvin, 2016). Space at the site was available for the researcher to access and review data with frequent accessibility, including on weekends and after hours. Permission was given based on information provided by the researcher, including the length of the study time, possible impacts, and the research outcomes (Creswell et al., 2018).

Key personnel were provided a copy of the proposed research and the accompanying documentation for resident and staff participants. The facility was not involved in other research studies that could potentially interfere or conflict with the study at the time this study took place, which is an important consideration when selecting study sites (Geda et al., 2020). Another significant factor was that the management staff at the facility indicated that they had enough residents who met the participant inclusion criteria.

3.8 Recruitment of the Study Site

Initially the Director of Nursing (DON) at the RACF was emailed with a copy of the proposed research and an invitation to participate in the resident intervention study. A face-to-face meeting with the DON was arranged, where the researcher gave a clear outline of the study objectives, intervention implementation process, requirements for participant eligibility, ethics approval, and timelines. The researcher also discussed the data collection requirements for resident participants, including access to residents' electronic and paper medical files. The researcher provided copies of the Letter for Resident Participants and Resident Consent Forms.

The researcher was invited to present an overview of the research project to facility board members to gain approval for the funding of staffing the evening programs. The researcher presented a short PowerPoint presentation to the board members, identifying the significance of depression in aged care, including the risk factors, and the potential implications of the research. Board members had the opportunity to ask the researcher questions that would assist in their decision-making.

With confirmation of participation in the program by the facility Board of Directors, the researcher assured the DON that all participants’ names and details were to remain anonymous, and any information gathered, including recorded interviews, would be used solely for research purposes (Roche & Bennett, 2024). Before proceeding with the implementation of the research program, a meeting with other key personnel was arranged, including the Care Manager and the Leisure and Lifestyle Manager.

Before data collection commenced, dates were scheduled for the researcher to have access to the facility to meet potential resident participants and conduct initial assessments. Data collection commenced in May 2021 when the researcher gained access to participants, and data collection ended in April 2022 after the completion of the resident interventions and resident interviews. Table 3 demonstrates an overview of the data collection phases.

Table 3

Overview of the Data Collection Phases

Dates	Study phase
May to June 2021	Resident participant recruitment - baseline phase MMSE’s and GDS-15 assessments
July to September	Pre-intervention Phase

Dates	Study phase
October and November 2021	Establishment phase GDS-15 assessments
December to March 2021/2022	Intervention phase - Evening activity program and residents' choice of bedtimes implemented
March 2022	Post intervention GDS-15 assessments
March to April 2022	Resident interviews

Note. GDS-15—Geriatric Depression Scale-15; MMSE—Mini-Mental Status Examination.

3.9 Recruitment of Resident Participants

The facility care manager identified residents who potentially met the inclusion criteria and provided a list to the researcher, Trish Eastwood.

For residents to be eligible for inclusion to participate in the research at the RACF, they needed to have a MMSE score of 24 or more, indicative of no or minimal cognitive impairment at baseline. The MMSE is a clinical screening tool used to measure a person's cognitive function for clinical purposes (Dahlke et al., 2014). It contains 11 questions, and the test takes around 5–10 minutes to complete (Appendix G). The test is scored from 0–30, with 30 being the top score. It tests verbal memory, attention, concentration, orientation, visuospatial skills, and naming (Arevalo-Rodriguez et al., 2015). The MMSE was conducted by the researcher, Trish Eastwood, in the privacy of the resident's room and without any one other than the research present.

3.9.1 Exclusion Criteria

Potential resident participants were ineligible for the study if:

- they were in the RACF for respite care only (short-term care),
- they were receiving terminal palliative care,

- they had an MMSE score below 24, as lower scores are indicative of increased cognitive impairment,
- they had a diagnosis of Dementia or Alzheimer's (according to the resident's medical records),
- they refused to participate, or
- if their physical or mental condition deteriorated during the intervention period prohibiting their participation in the intervention.

When potential participants had been established, the researcher was introduced to the potential participants by the DON and the Care Manager. Following introductions with potential participants, the researcher provided each potential participant with a brief verbal description of the research and advised that their personal information would be accessed and used for sourcing relevant data. Each potential participant was also offered a written description of the resident intervention study to be kept in their possession. As stated by Creswell et al. (2018), a key component of participation is that consent is voluntary, and participants must be provided with written instructions that make it very clear that they are active participants in the research and have the right to refuse participation in the resident intervention at any time. When the potential participant had given verbal consent, an MMSE was conducted. Residents who had an MMSE score of 24 or more were invited to participate in the resident intervention study and sign a written consent form. Residents were reassured that they had the right to refuse to participate in the study to ensure they were not pressured to participate.

When resident participants provided written consent, the Geriatric Depression Scale Short Form (GDS-15) was completed by the researcher with the resident participant. The GDS-15 is a tool used to measure depression in older adults, with participants asked to answer *yes* or *no* to questions related to mood (Appendix H). Scores range from 0 to 15, with higher scores indicative of greater symptoms of depression. Adequate time was given to allow individual participants the opportunity to thoughtfully consider each question. The process of completing the MMSE and GDS-15 took between 45 minutes and one-hour. The assessments were carried out in the privacy of the participants' room to ensure all

information provided was confidential. To minimise disruption to daily routines, assessments were conducted between 9:00 am and 4:30 pm, with a break during the residents' lunchtime between 12:00 pm and 1:00 pm.

Other useful information to consider when planning meetings with resident participants, was to make note of the times that formal activities were planned during the day and the list of likely participants. This information was obtained from the Leisure and Lifestyle staff. Calendars of the activities were also displayed in each wing of the facility, which could be easily referred to as required; this allowed the researcher to determine the times that assessments could be scheduled around activities. For some resident participants, it was also helpful to make an appointment time, however, most residents were happy to participate without prior arrangement. During one assessment, a family member dropped in to visit, so arrangements were made for the researcher to return later in the afternoon to complete the assessment. Other medical and demographic data that were required for the research were collected by either the researcher or the DON. Data was collected via the residents' electronic and paper records.

There were 21 residents who met the eligibility criteria, four of these eligible participants declined to participate. Of the residents assessed, three did not meet the eligibility criteria; one had a terminal illness, and the other two were short-stay (respite) residents. The pre-intervention phase with care as usual commenced when all eligible participants, 13 identifying as females and four identifying as males, had consented to participate in the resident intervention study.

One week after the pre-intervention phase began, the study site went into lockdown in line with the NSW Health recommended aged care lockdowns in Sydney and the Central Coast, due to the increased community transmission of COVID-19. There were some concerns by the researcher and supervisors that the imposed lockdown would have an impact on the pre-intervention GDS-15 scores. These concerns included the impact of social isolation from family and friends, restrictions on leaving the facility for outings, and social distancing on resident mental well-being. GDS-15 assessments were

conducted by the same researcher using the same methods following the three-month pre-intervention phase as scheduled, and it was noted that scores had not significantly changed, and for some participants, they had reduced. After the pre-intervention phase, and at the commencement of the intervention phase, the study site was still on restricted visitation. At the completion of the pre-intervention phase, one participant declined to participate in the intervention, one participant was deceased, and one participant was transferred to another RACF. These changes resulted in 14 participants being allocated to participate in the intervention.

3.10 Data Sources and Collection for Residents

Medical and demographic information was collected for the resident intervention study by accessing the participants' electronic medical records. The researcher was given a guest account to access the resident participants' electronic records; this included their medical history, personal details, integrated progress reports, and current medication charts. Data collected included residents' depression scores, age, current medication for depression, length of stay from admission, education, ethnicity, consultations with mental health professionals, and significant changes to residents' health status/circumstances which could have a substantial impact the residents mental health.

Anti-depressant medication

The participants' medications were reviewed for prescribed antidepressants by the facility DON from the participants' online medication records, and the results were reported to the researcher.

Gender

Gender was reported as documented in the resident participants' personal details section of their electronic medical records.

Age

The participants' age was established from their date of birth.

Admission, length of stay and ethnicity

Admission dates and ethnicity were determined from information in the admission and personal details section of participants' electronic medical records.

Level of education

The level of education that resident participants achieved was directly reported by participants.

The participants' data was recorded on a spreadsheet.

3.10.1 Mental Health Professional Consultations and Significant Changes in Health/Circumstances

The researcher reviewed the integrated progress notes in each participant's electronic medical record for the three months before each phase of the study to determine if they had been reviewed by a mental health professional or experienced any significant adverse event. A significant event included a substantial change in their health status or circumstances, such as the death of a significant other. The depression scores of the participants were assessed by the researcher using the GDS-15 assessment tool at baseline, prior to the intervention phase (pre-intervention) and at the completion of the intervention phase (post-intervention).

Two common depression screening tools used in RACFs are the Cornell Scale for Depression in Dementia (CSDD) and the GDS-15; a comparison of these tools is summarised in Table 4. The CSDD is widely used and was initially developed to assess depression in residents with impaired cognition, but is also utilised to assess residents without cognitive impairment (Snowdon et al., 2011). Snowdon et al. (2011) suggest that the CSDD is designed to increase the awareness of staff to depressive signs and symptoms and provide an impartial structure for measuring improvements in depressive symptoms. It consists of 19 questions conducted in a semi-structured interview format, answered by the care recipient and/or a caregiver based on their observations of the resident (DoH, 2017). A score of 12 or above indicates probable depression. If inconsistencies occur between the responses of the care recipient and caregiver, it is recommended the interviewer—either a registered nurse or medical practitioner—meet

with both the care recipient and caregiver for a second time and base the final depression rating on their clinical judgement (Towsley et al., 2012).

Table 4

Comparison of Depression Screening Tools used in Aged Care

Screening tool	Number of questions	Scoring	Design
Geriatric Depression Scale – 15	15	A score of 5 and above suggests depression	Questions answered by the care recipient or caregiver
Cornell Scale for Depression in Dementia	19	A score of 12 or above indicates probable depression	Best answered by the care recipient as a proxy assessment is less accurate

Self-reporting of symptoms in early stages of dementia is accepted however, in later stages, where cognitive function declines, observation by a clinician or caregiver to evaluate depression is recommended (Towsley et al., 2012). The CSDD is not flawless, as the accuracy of such reports is dependent on the informant (Towsley et al., 2012). It is proposed that the caregiver’s evaluation of the resident’s level of depression is less accurate than that of a care recipient’s self-evaluation, and nurse proxy responses are more likely to underrate depressive symptoms than residents’ self-reporting (Towsley et al., 2012). Therefore, the study concludes it is important to consider the resident’s input whenever possible, rather than entirely by proxy observation (Towsley et al., 2012).

The GDS-15 consists of 15 questions with a score above 5 suggesting depression. The GDS was originally designed with 30 simple *yes/no* questions purposely devised with minimal somatic symptoms, which might otherwise cause diagnostic issues in older persons (Mitchell et al., 2010). The 15-item shorter version was developed to improve its utility (Mitchell et al., 2010). An analysis of the GDS-15 by Mitchell

et al. (2010) determined the GDS-15, although not perfect, is an effective tool in diagnosing depression in later life and is more accurate, with a gain of 8% additional detections, than unassisted GP detection alone (Mitchell et al., 2010). However, it is suggested that the GDS-15 is less effective as a diagnostic tool when assessing older persons with cognitive impairment (Jeon et al., 2014). A proxy-based assessment using the GDS-15 is less accurate than direct responses from an older person (Jeon et al., 2014). The researcher for this study chose the GDS-15 as the assessment tool, as it is the most commonly used tool in research studies.

Data related to other variables to be analysed in the study were obtained from a range of sources, as listed in Table 5. Data collection and timeframes are presented in Table 6.

Table 5

Variables and Data Sources

Variable	Source	Data collector
Age	Resident File	Researcher
Current Medication for Depression	Medication Chart	Care Manager
Length of Stay from Admission	Resident File	Researcher
Education	Resident File	Researcher
Ethnicity	Resident File	Researcher
Consultations /Interactions with Mental Health Professionals	Progress notes and doctors' reports	Researcher
GDS-15	GDS-15 conducted by researcher	Researcher
Participants' cognition		Researcher

Variable	Source	Data collector
	MMSE conducted by researcher	
Significant recent changes to residents' health status/ circumstances	Progress notes/ GP notes	Researcher

Note. GDS-15—Geriatric Depression Scale-15; MMSE—Mini-Mental Status Examination.

Table 6

Data Collection Timeframe

Item of data	Source	Collector of data	Timeframe					
			Pre-intervention		Establishment	Intervention		
			0	3 months	6 weeks	0	3 months	

Demographics of Resident Participants

Name/Number	Resident File	Researcher	X		X	X	X
Age	Resident File	Researcher	X				
Current Medication	Medication Chart	DON	X		X	X	X
Length of Stay from Admission	Resident File	Researcher	X				
Education	Resident File	Researcher	X				
Ethnicity	Resident File	Researcher	X				

Item of data	Source	Collector of data	Timeframe					
			Pre-intervention		Establishment	Intervention		
			0	3 months	6 weeks	0	3 months	
MMSE	MMSE conducted by the researcher	Researcher	X					
Consultations/ Interactions with Mental Health Professionals	Resident Progress notes and Doctor reports	Researcher	X		X	X	X	
GDS-15	GDS-15 conducted by the researcher	Researcher	X		X		X	
Significant recent changes to residents' health status/ circumstances	Progress notes/GP notes	Researcher	X	X		X	X	

Note. GDS-15—Geriatric Depression Scale-15; MMSE—Mini-Mental Status Examination.

3.11 Resident Sample Size

The required sample size was determined based on the estimation of the baseline depression score and the estimated impact of the intervention. The researcher estimated a mean pre-test Geriatric

Depression Score of 9.4 with a standard deviation of 3.02 (Karimi et al., 2010). The researcher anticipated a 30% improvement in the depression score post-intervention, resulting in an estimated post-test score of 6. The estimated reduction in the depression score was based on outcomes from the study by Karimi et al. (2010) who implemented interventions that reduced depressive symptoms in RACF residents. The estimated sample size for this study was 34; this included an attrition rate of 20%. The sample ensured the study was adequately powered 80% to identify a 3.4 decrease in GDS-15 mean score using a significance of 0.05 (95% confidence interval). Schmidt and Brown (2022) suggest a power analysis is gold standard for defining a sample size to identify the accurate effect of a study. The effect size and significance level need to be established to conduct a power analysis (Schmidt & Brown, 2022)

3.12 Resident Intervention

The Template for Intervention Description and Replication (TIDieR) (Hoffmann et al., 2014) was used to ensure transparent reporting. The choice of bedtimes was a selected intervention, as studies have shown that older persons living in aged care facilities usually go to bed early (Harris & Grando, 2014), with many spending up to 12 hours in bed (Luff et al., 2011). Preferences such as bedtimes and getting up times are often determined by staff routines rather than by residents themselves (Luff et al., 2011). As suggested in a study by Kusmaul and Tucker (2020), the time many residents get out of bed in the morning is determined by the time of breakfast rather than a preferred time. Residents most physically reliant on staff are particularly dependent on facility routines for their bedtimes (Luff, et al., 2011). Hughes et al. (2021) suggest that prolonged time spent in bed results in poor sleep efficiency and broken sleep, which can lead to altered mood, such as depression and diminished levels of happiness.

An evening activity was chosen as an intervention for this study, as facilities do not routinely offer residents a choice of organised social activities in the evening and provide no alternative to going to bed early. As suggested by Hodgson et al. (2021), activities should be scheduled throughout the day, including the evening, based on diurnal patterns that change throughout the day. Studies have indicated that

providing residents with more opportunities to be socially engaged with each other, rather than spending time alone in their rooms, promotes a sense of purpose and well-being (Siette et al., 2022).

Prior to the commencement of the resident intervention phase, meetings were scheduled with the Director of Nursing and the Leisure and Lifestyle Manager to discuss the details of the evening activity program and finalise the intervention commencement date. The researcher attended one of the regular resident meetings conducted by the Director of Nursing and the Leisure and Lifestyle team. At the meeting, the researcher provided the residents with an overview of the proposed study. Thirty residents attended the meeting and were consulted on the type of activities they would like to have as part of the program. As suggested by McAuliffe et al. (2024), in order for residents to be able to exercise real choice in activities and for activities to be meaningful, residents need to be involved in the planning and delivery of activities. Activity suggestions from residents at the meeting included board games, movies, live music, bingo, and art/craft classes.

The three-month intervention phase commenced on 6 December 2021, with one Leisure and Lifestyle staff member employed by the facility to coordinate the evening programs. The staff member commenced the shift at 4:00 pm and worked through to 8:00 pm. The Leisure and Lifestyle staff member held a Certificate IV qualification in Leisure and Health. The role of the Leisure and Lifestyle staff is to coordinate and run leisure activities that are separate from clinical care (Scerri & Presbury, 2021). The evening programs were provided from Monday to Thursday each week for a three-month period.

The choice of bedtimes was implemented in conjunction with the evening activity program. It is important to note that 65% (n = 9) of the resident participants were low-care and quite independent with choosing their bedtimes; however, it was ensured that staff were aware that their preferred routines were to be adhered to. Throughout the resident intervention period, the participants' preferred going-to-bed and getting-out-of-bed times were documented on the residents' Nursing Care Plan.

The evening programs were conducted in the facility's activity room between 6:00 pm Monday to Thursday (after the evening meal) and 8:00 pm each week of the three-month intervention phase of the study. Due to staff leave and public holidays during the Christmas and New Year period, the program did not run for two weeks so the resident intervention phase was extended by two weeks to allow for the break.

The first evening program was a live music performance, which was well attended. The initial plan was to have a live music performer once a week, however, this proved to be unsustainable due to the cost of the performers. The facility management did not support the cost associated with external performers. Volunteers were sought, and a performer was found for one night each week for three weeks. For the remainder of the program, the word game of Scrabble was held on Monday evenings, bingo on Tuesday evenings, art class on Wednesday evenings, and movies or Scrabble on Thursday evenings. Scrabble on a Monday evening consisted of two small groups of 2–4 participants in each group. Bingo was held each Tuesday evening and conducted by the Leisure and Lifestyle staff member.

Art classes were held each Wednesday evening and were led by a Bachelor of Education student with an art major. For the first three weeks of the evening classes, the student volunteered their time. However, the student had to move interstate after the third week, so a second Bachelor of Education student with an art major was recruited, who was paid for their time. The art classes started with a demonstration of painting a simple Christmas tree, and residents were invited to follow each step. Once they had completed the Christmas tree, they were given a range of coloured glitter to decorate their tree. The second art lesson consisted of residents being invited to select an object to paint from a range of items on display, including an apple, a clock, a pear, and a vase. For the third lesson, a range of teapots was displayed, and residents attempted to paint a copy of their chosen teapot. For the fourth session, the art student had each resident do a colour wheel to give them an idea of mixing colours. The fifth session involved the residents choosing a picture from a magazine and attempting to copy the picture by blending colours. The following sessions involved a step-by-step demonstration by either the art student or an

online demonstration, showing how to do a different type of painting each session, and blending colours. In the final art class, the residents did a painting on canvas of their own choosing, applying the skills they had learnt throughout the three-month period.

The same Leisure and Lifestyle staff member facilitated each of the evening programs. Care staff supported the programs by assisting residents with impaired mobility or cognition to get to the activity area or reminding residents who were less impaired when, where, and what programs were being conducted each evening. Each evening program was included in the monthly activity planner, which was distributed to individual residents and displayed in prominent common areas within the facility. The intervention period was completed on 25 March 2022.

During the program, the Leisure and Lifestyle staff member maintained a record of resident attendance. The researcher attended some programs throughout the intervention period to make observations and ensure the evening interventions were conducted according to the study requirements. The researcher was restricted from attending the facility for two of the intervention weeks due to COVID-19 restrictions. All data was stored in secure digital files that were password-protected, and hard copies were locked in a secure cabinet that could only be accessed by the researcher.

3.13 Statistical Methods

To assess the effectiveness of the interventions on depressive scores, a 2-tailed paired t-test (two-sided) and descriptive statistics were conducted. A p -value of <0.05 was chosen to detect statistical significance using SPSS Statistics v28. A paired sample test, T-test, and p -value were used to determine gender differences in Geriatric Depression Scores. Descriptive statistics of means, standard deviations, and ranges were used to analyse the demographic data of the participants. Descriptive statistics of means, standard deviations, and range were used to compare daytime and evening activity attendance by gender. The data analysis method was reviewed through supervisory oversight.

3.14 Conclusion to the Chapter

This chapter outlined the mixed methods approach adopted in this thesis, including the rationale for its selection. A detailed overview of the resident intervention study using a quasi-experimental pre-test/post-test quantitative methodology was presented. The focus of this chapter was to present the methodology and outline the interventions used to examine the effectiveness of two targeted strategies aimed at reducing depressive symptoms in aged care residents: (1) offering residents the autonomy to choose their own bedtimes and wake times, and (2) providing the option to attend a structured evening activity program.

The following chapter will provide the results of the resident intervention study component of this mixed methods study. The quantitative data collected at baseline and during the pre-intervention and intervention phases of the resident intervention study are presented. An overview of the resident participants, analysis of the participants' Geriatric Depression scores, and participation in the evening activity program are provided. It also includes a summary of the main results of the resident intervention study.

Chapter 4: Results for the resident intervention study

4.1 Introduction to the Chapter

The previous chapter provided an overview of the methodology for this thesis and the resident intervention study, outlining the interventions used in the resident intervention study. In this chapter, the results of the resident intervention study are presented. An overview of the resident participants, analysis of the participants' Geriatric Depression scores, and participation in the evening activity program are provided. It also contains a summary of the main results of the study. Findings from the depression scores address Research Question 1 – For residents of a RACF on the Central Coast of New South Wales, Australia, using a single-group pre-test/post-test study design, what is the effect of implementing residents' choice of bedtimes and the opportunity to attend a daily evening activity program on reducing symptoms of depression within a three-month period?

4.2 Resident Participants

For this study, 24 residents were assessed for eligibility. Four residents did not meet the eligibility criteria. Twenty residents were invited to participate, and 17 consented to participate. Participants consisted of five male residents and 12 female residents. At the completion of the pre-intervention phase, one male participant was deceased, one male participant had transferred to another facility, and one female participant refused to participate. Participants who took part in the intervention phase of the study consisted of three identifying as male and 11 identifying as female. The Geriatric Depression Scale-15 for the 14 participants was assessed at the completion of the intervention phase of the study. Refer to Figure 2 for an overview of the eligibility and participation of resident participants.

Baseline demographic details are provided in Table 7. One female participant was married, one male participant was divorced, and the remaining participants were widowed. Participants' length of stay in the RACF was between three months and just over seven years. Two resident participants had been at

the facility for more than seven years, five participants between five and seven years, and seven participants for less than five years. All participants reported that they had completed between Year Eight to Nine of their secondary education, no participant reported completing a tertiary education. Demographic data indicated no participants were being treated by a psychiatrist or psychologist during the study. Three (21.4%) of the participants had been diagnosed with depression prior to admission to the RACF, and three were diagnosed with depression following admission.

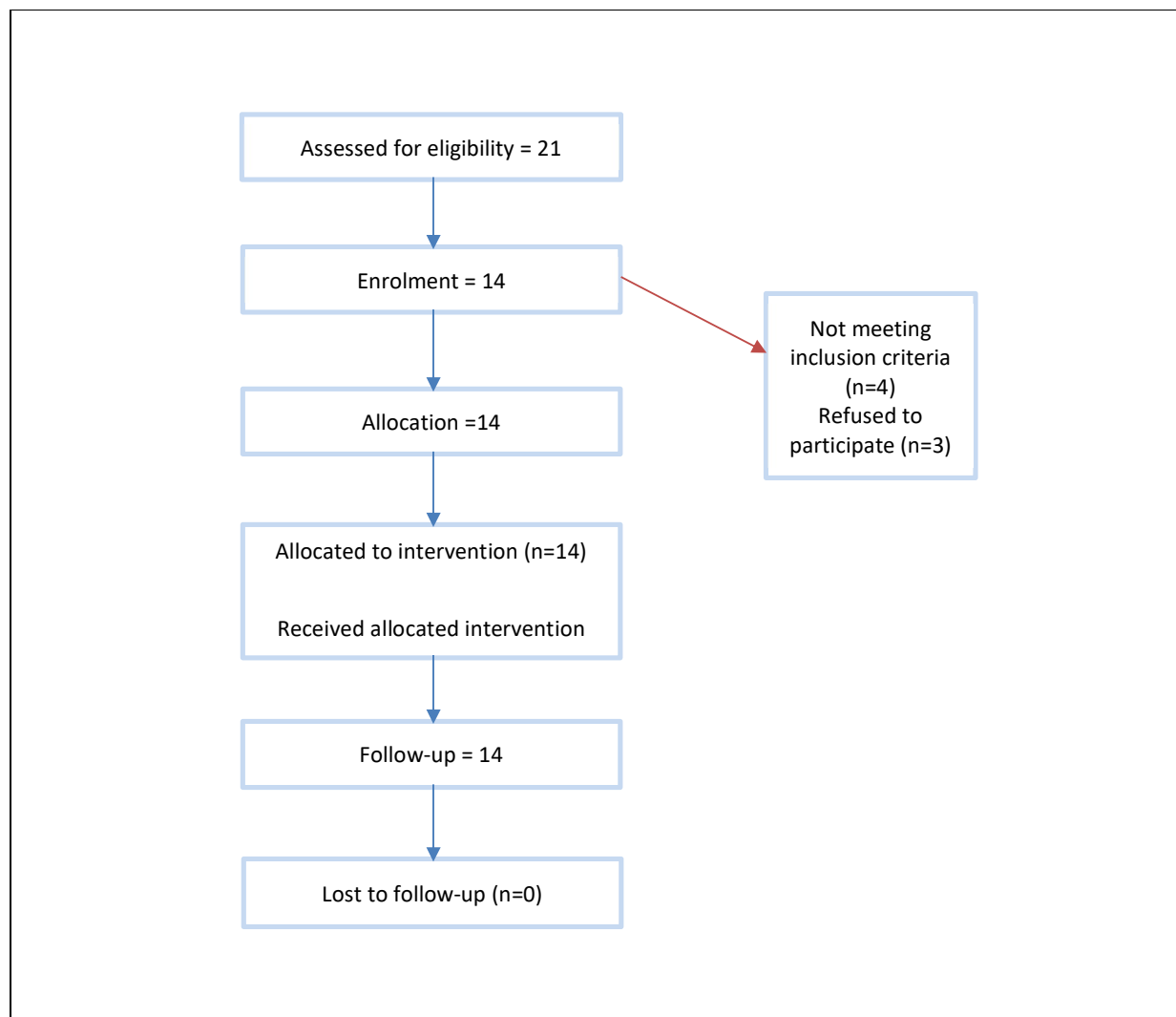


Figure 2 *Eligibility and Involvement of Participants*

Table 7*Descriptive Statistics at Baseline and Pre-intervention*

Demographic	Baseline	Pre-intervention
Age		
• Mean (SD)	90 (6.66)	90.21 (7.07)
• Range	77 – 101	77-101
Duration of residency (months)		
• Median	44.86	
• Range	3 – 88	
Gender		
• Male, n (%)	5 (29.42)	3 (21.42)
• Female, n (%)	12 (70.68)	11 (78.58)
• Other, n (%)	0	
Years of education		
• Median	8.57	
• Range	8-9	
GDS-15 scores		
• Mean (SD)	5.76 (2.63)	4.43 (2.47)
• 95%CI	4.41-7.12	3.00-5.86
• Range	0 – 10	0 - 8

Note. SD—Standard Deviation; MMSE—Mini-Mental Status Examination.

4.3 Geriatric Depression Scores

The participants' electronic records were reviewed to assess if they had a history of depression prior to the intervention. Of the 14 participants, 21.4% ($n = 3$) had a history of depression prior to admission to the facility and 21.4% ($n = 3$) of the participants had received a diagnosis of depression after admission to the facility. At the commencement and completion of the intervention, 42.9% ($n = 6$) of participants were taking antidepressant medication. Refer to Table 8 for the participants' depression scores pre-and post-intervention.

Table 8

Depression Scores Pre-intervention and Post-intervention

Geriatric Depression Scores		
	Pre-intervention $n = 14$	Post-intervention $n = 14$
GDS-15 scores		
• Mean (SD)	4.43 (2.47)	3.79 (2.54)
• 95%CI	3.00-5.86	2.31-5.26
• Range	0 - 8	2 – 9
GDS-15 by Gender T Test		
Male		
• N =	3	3
• Mean (SD)	3.67 (2.51)	4.67 (4.50)
Female		
• N =	11	11
• Mean (SD)	4.64 (4.45)	3.55 (2.01)

Note. SD—Standard Deviation; MMSE—Mini-Mental Status Examination.

Table 9*Paired Samples Test by Gender – Baseline and Pre-intervention*

	Mean	SD	95% CI of the difference	t	df	Significance (p-value)
Male GDS-15						
Baseline	-3.00	3.46	-11.60 to 5.60	2.55	2	.272
Male -GDS-15						
pre-intervention	2.66	2.51	-8.91 to 3.58	1.83	2	.208
Female – GDS-15						
Baseline	-3.81	2.48	-5.48 to -2.15	-5.10	10	<.001
Female -GDS-15						
pre-intervention	2.36	2.54	4.34 to -.93	-3.44	10	<.006

Note. SD—Standard Deviation; MMSE—Mini-Mental Status Examination.

A GDS-15 assessment was conducted for all participants at three time points: baseline, pre-intervention, and post-intervention. There was no significant difference in GDS-15 scores in relation to the participants' age, suggesting that depressive symptoms were not influenced by age across the study period. Similarly, there was also no significant difference in GDS-15 scores between male and female participants at any stage of the study. These findings are detailed in Tables 10 and 11. This data suggests that, within the sample, gender did not have a measurable impact on the presence or severity of depressive symptoms, nor did it influence the response to the interventions.

Table 10*Paired Samples Test by Gender: Pre-intervention and Post-intervention*

Gender	Mean	SD	95% CI of the difference	t	df	Significance (p-value)
Male – GDS-15 pre-intervention	-2.66	2.098	-8.89 – 3.58	1.14	2	.20
Male -GDS-15 post-intervention	-3.66	4.50	-14.86 – 7.53	-1.40	2	.29
Female – GDS-15 pre-intervention	-2.63	2.54	-4.34 -- -.93	-3.44	10	.006
Female -GDS-15 post-intervention	-1.54	2.01	-2.90 - .19	-2.54	10	.029

Note. SD—Standard Deviation; MMSE—Mini-Mental Status Examination.

The results of the statistical analysis revealed that the *p*-values for the GDS-15 scores indicated no statistically significant differences between the baseline, pre-intervention, and post-intervention mean scores (refer to Table 9). This suggests that within the timeframe and conditions of the study, the interventions implemented did not produce a measurable change in depressive symptoms as assessed by the GDS-15. While there were minor fluctuations in the mean scores across the three time points, these differences did not reach statistical significance.

Table 11*P values for Geriatric Depression Scale-15 Scores of Participants*

Gender	Baseline	Pre-	P-value	Pre-	Post-	P-value
	Mean (SD)	intervention		intervention	intervention	
		Mean (SD)		Mean (SD)	Mean (SD)	
Male	5.80 (3.49)	3.67 (2.51)	0.371	3.67 (2.51)	4.67 (2.51)	.239
Female	5.75 (2.37)	4.64 (2.54)	0.012	4.64 (2.54)	3.55 (2.01)	.048

Note. SD—Standard Deviation.

Figure 3 presents the individual GDS-15 scores for each resident intervention study participant across the three data collection phases: baseline, pre-intervention, and post-intervention. These scores provide a detailed view of changes in depressive symptomology at the individual level throughout the course of the resident intervention study. Where a score is not recorded, it indicates that the participant exhibited no symptoms of depression at that time point, corresponding to a GDS-15 score of zero. The chart reinforces the statistical finding that the interventions did not lead to a significant change in depressive scores across the group. However, individual-level data suggest that some residents had lower scores after the interventions, while others were higher, suggesting some participants may have benefited from the interventions.

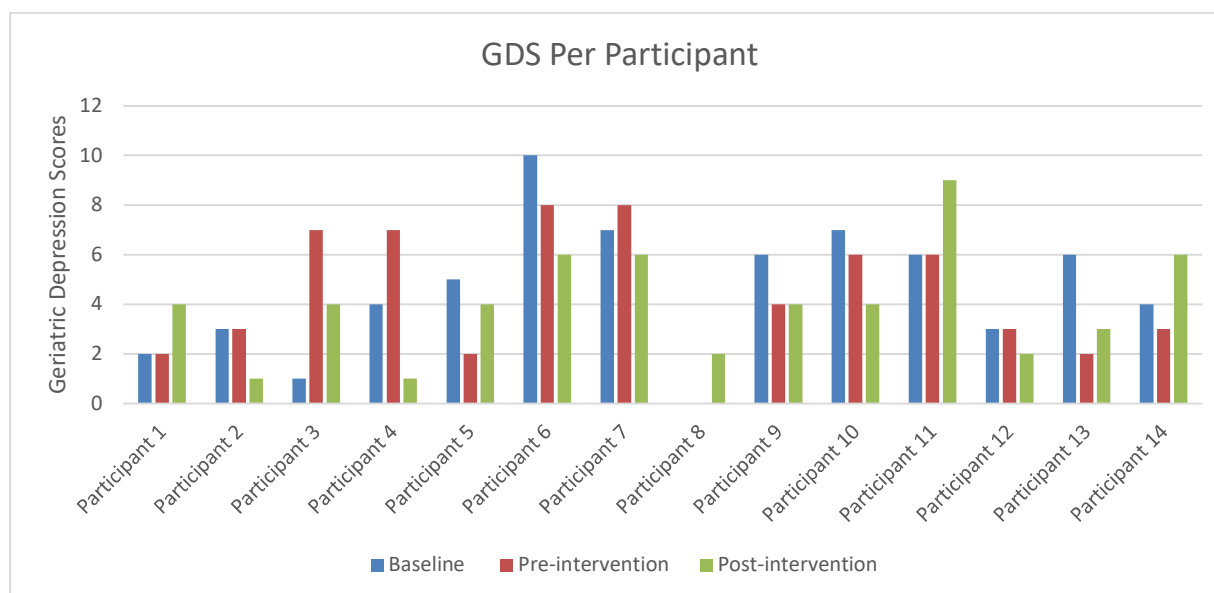


Figure 3

Comparison of GDS per Participant

Note. GDS-15—Geriatric Depression Scale-15; no baseline or pre-intervention scores = 0.

4.4 Participants Activity Attendance During the Intervention Period

Participants' overall attendance was higher for daytime activities than evening activities during the three-month intervention phase of this study. The results for this are shown in Table 12. The mean for daytime activity attendance per resident participant was 18.36 activities attended in the three-month intervention period. The mean for evening activity attendance per resident participant for the same period was 11.14. It should be noted that the evening activity program was run across four days, while the daytime activities were held twice a day for five days. Of the participants who attended some evening programs, 75% ($n = 6$) had depressive symptoms pre-intervention and 25% ($n = 2$) at post-intervention. The mean activity attendance for female participants was greater than that of male participants for both daytime and evening activities.

Table 12*Comparison of Gender for Daytime and Evening Activity Program Attendance*

Variable	Day Activity Programs	Evening Activity Program
Activity Programs attended by gender		
Male ($n = x$)	3	3
• Mean (SD)	3.33 (5.774)	1.67 (2.887)
• Range	0 - 10	0 - 5
Female ($n = x$)	11	11
• Mean (SD)	22.45 (9.070)	13.73 (15.570)
• Range	0 - 35	0 - 42
Per participant ($n = x$)		
• Mean (SD)	14	
• Range	18.36 (11.60)	11.14 (14.63)

Note. SD—Standard Deviation.

Approximately 57% ($n = 8$) of the resident participants attended 5 or more evening activity sessions. Approximately 36% ($n = 5$) only attended the evening programs during the intervention period, they did not attend any of the daytime activities. One participant did not attend any activities, daytime or evening, during the intervention period. The results for this are shown in Figure 4.

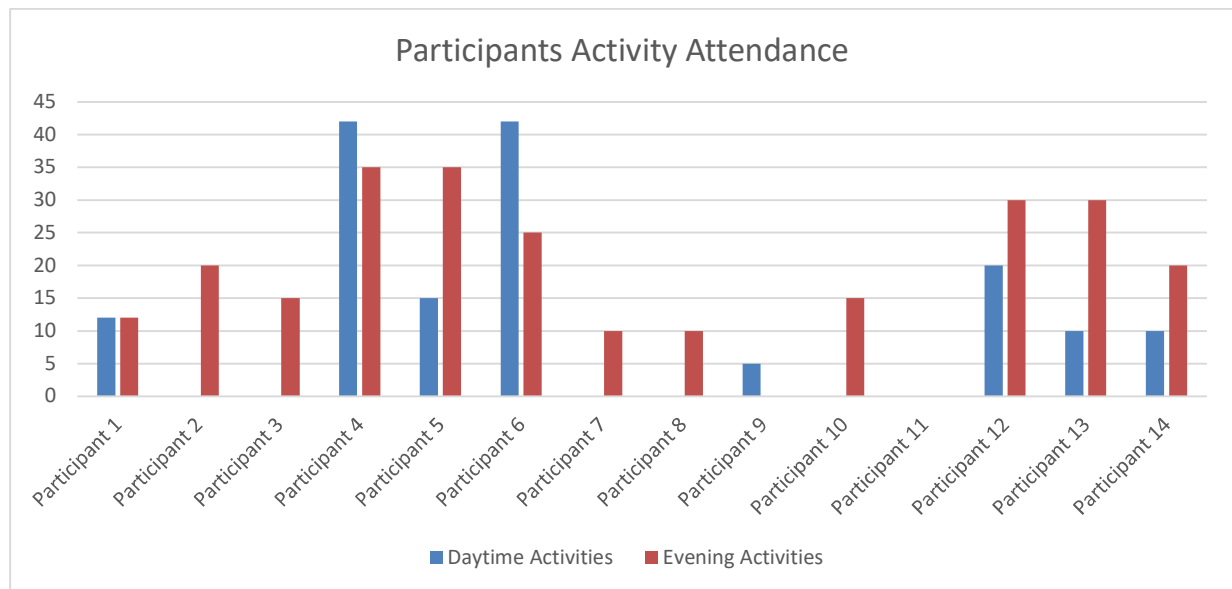


Figure 4

Comparisons Between Daytime and Evening Activity Attendance per Participant

Note. Participants with a 0 score did not attend any activities.

4.5 Main Results

The first research question posed in this thesis was: for residents of a RACF on the Central Coast of New South Wales, Australia, using a single-group pre-test/post-test study design, what is the effect of implementing residents' choice of bedtimes and the opportunity to attend a daily evening activity program on reducing symptoms of depression within a three-month period?

Findings in this chapter indicate that the implementation of an evening activity program and choice of bedtimes did not significantly reduce the Geriatric Depression Scores of the participants. There was a non-statistically significant decrease in depression scores from the pre- and-post phases. However, an interesting result is that of the participants who attended some evening programs, 75% ($n = 6$) had depressive symptoms pre-intervention and 25% ($n = 2$) at post-intervention.

These results need to be taken in the context of not meeting the required sample size due to the implications and issues related to COVID-19, as discussed in Chapter 1, Section 1.8. It is worth noting that

according to a national survey conducted in Australia from September to October in 2020, COVID-19 lockdowns had a significant impact on the mental well-being of aged care residents, including an increase in thoughts of death and suicide (Brydon et al., 2022). Therefore, a reduction in Geriatric Depression Scores during a lockdown period could suggest that if this study had been conducted in a period not impacted by a COVID-19 lockdown with a larger participant group, the results could be more substantial. It was also noted that approximately 36% of the participants only attended the evening programs, which could indicate that residents perceived a benefit in attending the programs. Data collected in this study indicated that despite a high number of participants experiencing symptoms of depression, they were not being treated by a psychiatrist or psychologist.

Other factors that were not taken into consideration in the analysis were the impact of care staff capacity to support the residents' choices during COVID-19. Staffing levels could have been compromised by staff unable to attend work due to having COVID-19 or having COVID-like symptoms. The duration of the intervention may be another consideration; results may vary if the intervention had been conducted for a longer period.

The resident participants' experience of the evening programs and the choice of bedtimes are explored in Chapter 9, which may help to illuminate some of the benefits that have not been determined in the quantitative analysis.

4.6 Conclusion to the Chapter

This chapter has provided an examination of the findings of the quasi-experiment component of the study. The quantitative data shown indicate that the Geriatric Depression Scores for the study participants were not significantly reduced with the implementation of an evening activity program and choice of bedtimes. It was noted that the interventions were conducted during a partial COVID-19 lockdown with restricted visitation, which resulted in a small sample size. In the following chapter, the methodology for the aged care staff's knowledge of late-life depression questionnaire is provided.

Chapter 5: Methodology for Aged Care Staff Knowledge of Late-life Depression Questionnaires

5.1 Introduction to the Chapter

In the previous chapter, the results of the resident intervention study were examined. In this chapter, the methodology used to investigate aged care staff knowledge of late-life depression pre- and post-depression training is presented. A discussion of the cross-sectional study with a pre-and post-questionnaire design will be included, along with the statistical methods used to analyse the data. A description of the study setting, ethics, staff participant recruitment, sample size, and data sources and collection will be provided.

5.2 Background

As outlined in Chapter 3, depression is a critical mental health concern amongst older persons, particularly in RACF, with loss of autonomy, self-concept and environmental mastery being identified as significant risk factors (Davison et al., 2012). Despite the identification of these risk factors, there is a gap in research related to interventions aimed at reducing RACF residents' loss of autonomy and environmental mastery. Staff routines and facility policies along with poor staff knowledge of depression continue to frequently pose a barrier in meeting the individual preferences of residents (Kalaitzidis et al., 2018; Davison et al., 2013). However, some positive results for RACF residents with depression have resulted from improving staff knowledge through training (Karantzas et al., 2012).

To assist aged care facilities in identifying the training needs of their staff, knowledge assessment tools have been developed (Karantzas et al., 2012). Several training tools, including the Beyond Blue Training Package and face-to-face programs, have been developed to address the knowledge deficit of aged care staff to improve the care of RACF residents with symptoms of depression. However, research indicates that training alone does not automatically convert into improved care practices for aged care residents with depression (Davison et al., 2013). It has been recommended that providing depression training in conjunction with care interventions could have improved outcomes for aged care residents (Davison et al., 2013).

5.3 Research Question 2

The study of the aged care staff's knowledge of depression was guided by research question two - how has staff knowledge of depression been impacted by the knowledge of late-life depression questionnaires study?

5.4 Study Design

As part of the mixed methods design of this study, a cross-sectional study design with a pre- and post-questionnaire was employed. A cross-sectional design involves the collection of data for a particular population at a single point in time (Polit & Beck, 2021). Cross-sectional designs can investigate comparisons and differences, correlations and relationships, or both (LoBiondo-Wood & Haber, 2022). There are strengths and limitations of using a cross-sectional design. The strengths of a cross-sectional design include that it is typically conducted faster and is less expensive than cohort, longitudinal, and prospective designs (LoBiondo-Wood & Haber, 2022). A large quantity of data is collected at a single point in time, which makes results promptly available (LoBiondo-Wood & Haber, 2022). The limitations of a cross-sectional design include the capability to determine an in-depth developmental evaluation of the associations of the variables being examined is reduced compared to some other design methods (LoBiondo-Wood & Haber, 2022).

Although a longitudinal study or prospective cohort design could be used to answer the research question for this study, a longer study period would have been required, potentially resulting in issues with attrition due to the population involved. In a prospective cohort study, a group of comparable participants is tracked over a period, often years (Thutoemang & Oppong, 2021). It was not feasible to use a prospective study design for this study due to time constraints associated with a long follow-up. In addition, the risks associated with attrition would have presented considerable challenges due to missing data. Thus, it was essentially deemed unachievable within the context of a postgraduate study to wait an extended period for the findings.

5.5 Ethics Considerations

Prior to the initiation of the proposed research, a Human Research Ethics application was submitted to the Avondale University Human Research Ethics Committee, ETH.2019.016. The application contained details of the intended procedures of the study and information related to the staff participants (see Appendix A) to ensure the committee reviewed the degree of risk for study participants (Cresswell & Cresswell, 2018). Participant Consent Forms and Participant Information Letters were included with the application. Storage of data and confidentiality processes were also provided. Avondale University Human Research Ethics Committee approved the study (ETH.2019.016—see Appendix A), and the study then commenced.

As with the resident intervention study, the current study followed the National Statement on Ethical Conduct in Human Research to ensure that all aspects of the study met the ethical standards to protect the safety and identity of the staff participating in the study (National Health and Medical Research Council, 2023). Principles relevant to this study are respect, beneficence, justice, research merit, and integrity (National Health and Medical Research Council, 2023).

Before consent was gained from staff participants, written information regarding the study was provided to potential participants (Appendix D). Adherence to section 2.2 of the National Statement on Ethical Conduct in Human Research was observed by ensuring the choice to participate was made by individual staff members without coercion from management or peers (National and Medical Research Council, 2023). Consent requirements included adequate information provided on the research and the implications for the participant, ensuring the information was understood, and consent was made voluntarily (National and Medical Research Council, 2023).

Storage of data and confidentiality guidelines in Section 3.1 of the National Statement on Ethical Conduct in Human Research were followed. Processes included removing any participant identifiers on any electronic records, electronic records stored in a source external to the researcher's personal

computer, storing relevant hard copy data in a locked filing cabinet that only the researcher had access to and data disposed of within an appropriate timeframe (National and Medical Research Council, 2023).

5.6 Study Setting

Consistent with the quasi-experiment resident intervention study undertaken as part of this thesis (covered in Chapters 3 & 4), this component of the thesis research was originally intended to be a multisite study. Two facilities in New South Wales (NSW) Australia, were approached in 2019 to participate in the study, one in the Lake Macquarie region and the other on the Central Coast. Both were of a similar size with a comparable staff mix. When COVID-19 restrictions commenced in NSW in March 2020 the management of the Lake Macquarie facility expressed that they were no longer willing to participate in the study. The concerns of management at the facility were around allowing the researcher access to the facility and residents and staff due to the increased visitation restrictions. They did not deem that access was feasible. Other facilities were contacted, however, with the rigid visitation restrictions around aged care in 2020 to 2022, no other aged care facilities were willing to participate. The study was modified to a single site study due to the difficulty in engaging another RACF.

The study was conducted in the 115-bed RACF on the Central Coast as they were willing to continue to participate in the research project. This site was initially chosen for several reasons. They had a staff skill mix consistent with the national average in RACFs of approximately 15% RNs, 70% care staff and the remainder comprising of ENs (Bonner, 2017). Senior management staff at the facility were willing to participate in the research study. Having the permission to carry out a study by key personnel not only allows the researcher access, but they can also assist in encouraging staff to collaborate with the researcher (Holloway & Galvin, 2016). Space at the site was available for the researcher of this study to access and review data with agreed accessibility, including weekends and after hours.

Permission was given based on information provided by the researcher, including the length of the study time, possible impacts, and the research outcomes (Creswell et al., 2018). Senior management

staff were provided with a copy of the proposed research and any accompanying staff participant documentation. The facility was not involved in other research studies that could potentially interfere or conflict with the study when this study was conducted, which is an important consideration when selecting study sites (Geda et al., 2020). Management staff at the facility indicated there would be several staff that would meet the participant inclusion criteria.

Before the commencement of the questionnaire and education session, the DON at the RACF was approached to discuss dates for commencement of the training and the facilities available for training, including an appropriate space for the training to take place and accessible technology. A face-to-face meeting with the facility staff education manager was arranged, and a commencement date was established.

5.7 Recruitment of Staff Participants

For staff to be eligible for inclusion to participate in this study at the residential aged care facility they needed to:

- consent to participate in the study; be employees providing direct care (care staff, RNs, ENs and Leisure & Lifestyle staff) to residents of the RACF;
- complete the 10-Item Knowledge of Late-Life Depression Scale-Revised prior to depression training session;
- attend a depression training session; and complete the 10-Item Knowledge of Late-Life Depression Scale-Revised following attendance of the depression training session.
- provide care to residents participating in the interventions in the quasi-experiment.

As the training took place during a COVID-19 lockdown, the researcher communicated with the staff education manager of the facility via email and Zoom meetings to discuss the study participant

eligibility requirements. The facility staff education manager then had the staff educator invite eligible staff via email to participate in the questionnaires and the training sessions.

Potential staff participants were ineligible for the study if:

- they did not consent to participate in the study.
- they did not participate in the pre-training questionnaire.
- they were not employees of the facility.

5.8 Sample Size

The required sample size was determined by using the estimate from a potential baseline depression knowledge score and the estimated effect of the training on depression. It was estimated a mean pre-training knowledge of depression score of 27.06 with a standard deviation of 4.57. A 7.5% improvement in depression knowledge post-training was anticipated, resulting in an estimated score of 29.08. This estimated increase in knowledge was based on outcomes from the study by Mellor et al. (2010). The estimated sample size required for this study was 20. A sample size of 35 ensured the study was adequately powered at 80% to identify a 2.02 increase in the depression knowledge mean score using an alpha of 0.05. The planned sample size included an attrition rate of 20%. This estimate was established with supervisory input.

5.9 Data Sources and Collection

Data collected for the study included staff knowledge of depression, staff roles, years of employment at the facility, gender, and age. These data fields were included on the 10-Item Knowledge of Late-Life Depression Scale-Revised questionnaire completed by the participants; see Table 14 for details.

Staff knowledge of depression was assessed using the 10-Item Knowledge of Late-Life Depression Scale-Revised questionnaire, which is a validated assessment tool (Karantzas et al., 2012). The questionnaire consists of 10 items that are designed to assess staff's knowledge of depression in older persons, particularly for education and training purposes (Karantzas et al., 2012). In a study conducted by

Karantzas et al. (2012), this tool was found to demonstrate three vigorous and internally consistent components using Confirmatory Factor Analysis and reliability analysis (Karantzas et al., 2012). These components are: myths of depression, facts of depression, and symptoms of depression (Karantzas et al., 2012).

Participants being assessed indicate the level they agree with each of the questions on a four-point Likert scale that ranges from *strongly disagree* (1) to *strongly agree* (4). See Table 13 for an outline of the 10 items in the questionnaire. Total scores range from 10 to 40, with the higher scores indicating a greater knowledge of depression. Responses to seven items are scored in reverse; for example, *strongly disagree* is awarded a score of 1 instead of 4. Three of the questions relate to the participants' knowledge of symptoms of depression, four questions relate to the participants' knowledge of facts related to depression, and three questions relate to the participants' knowledge regarding myths related to depression (Karantzas et al., 2012).

Table 13

10-Item Knowledge of Late-Life Depression Scale-Revised (Karantzas et al., 2012)

Type of Data
1. Sleep problems are a symptom of depression. (Symptom)
2. Depression is a normal reaction to a death of an older person's partner. (Myth)
3. Depression is quite common among aged care residents with dementia. (Fact)
4. Tiredness is a symptom of depression. (Symptom)
5. Depression is a normal reaction to the changes of old age. (Myth)
6. It is common for depression to go undetected among older people in Aged Care. (Fact)
7. Loss of interest in things previously enjoyed is a sign of depression. (Symptom)
8. Most older people who have to sell their home and move into residential aged care will become depressed. (Myth)

Type of Data
9. Older people with depression often report physical aches and pains rather than sadness. (Fact)
10. Late-life depression is associated with poorer recovery from physical illnesses. (Fact)

Table 14

Staff Demographics and Data Source

Type of Data	Source	Data Collector
Age	Questionnaire	Participant
Years of employment	Questionnaire	Participant
Gender	Questionnaire	Participant
Knowledge of Late-Life Depression – pre and post training	Questionnaire	Facility educator

5.10 Staff Questionnaires

The study was conducted in the establishment phase of the quasi-experiment, prior to the resident interventions being implemented (refer to Table 3 in Chapter 3). The initial plan for this section of the study was to have staff complete the 10-Item Knowledge of Late-Life Depression Scale-Revised before completing the *beyondblue* Depression Training Program. Participants would then do a follow-up 10-Item Knowledge of Late-Life Depression Scale-Revised questionnaire after the training. The *beyondblue* Depression Training Program was a free online program, consisting of four basic modules/sessions for care staff. The modules were designed to provide education in the use of consistent procedures to identify depression in older persons and the correct response to signs of depression, particularly by referring information to the RN. However, the Beyond Blue Depression Training Program was ceased three months prior to the implementation of this study.

The researcher contacted key personnel of Beyond Blue to request access to the learning modules via an alternative method. However, the researcher was advised by Beyond Blue that the program was not available via any substitute approaches. In collaboration with the study supervisors, alternative training programs were explored. There were no free depression training modules available that could be identified at this stage of the study, and management at the participating RACF was not willing to fund online depression training programs that were available for a fee. The facility management's rationale for not wanting to fund a training program was that they had already pre-committed finances for a range of annual mandatory training sessions. Facility management also stated they did not wish to impose undue pressure on staff who were already coping with significant stressors related to COVID-19 restrictions.

As an alternative, the researcher collaborated with a psychiatrist to assist with the development and endorsement of a training video. From this collaboration, a short 10-minute video was developed. The video was designed to assist aged care staff in identifying the signs and symptoms of depression, specifically in older persons, how to respond when these symptoms are noted in an older person, and who to refer the older person to for a follow-up assessment. The topics covered in the video included: depression prevalence in older persons, risk factors for depression, symptoms of depression in older persons, behaviour changes in older persons with depression, expression of thoughts and feelings, and depression in older persons with dementia.

When the training program was developed and endorsed by the psychiatrist, the researcher contacted the staff educator of the facility via email to outline how the program was to be implemented. Face-to-face meetings between the researcher and the staff educator were impeded by COVID-19 restrictions within the facility at the time. The training program was deemed feasible by management and the staff educator due to the time frame that was involved. The plan for the training program implementation was to provide two separate training sessions for staff participants. One training session was to be conducted during a morning shift and the other during an afternoon shift. The morning and

afternoon shifts were selected as staff on these shifts would be caring for the residents involved in the interventions conducted in the resident intervention study. All participants in the education sessions were to complete the 10-Item Knowledge of Late-Life Depression Scale-Revised questionnaire prior to the video education session and after the video education session to assess for changes in knowledge of depression.

Once the facility staff educator was ready to conduct the program, the staff educator invited staff participants to attend one of the two training sessions offered onsite at the RACF. Each training session commenced with the educator providing an introduction, including an explanation of the objectives of the session and the staff requirements for the session. Following the introduction, the staff were invited to complete a hard copy of the 10-Item Knowledge of Late-Life Depression Scale-Revised questionnaire and document their name, role, years of employment at the facility, gender, and age on the questionnaire. Once the questionnaires were completed, the training video was shown to the staff participants; this was then followed up with a brief discussion of the main points of the presentation. The same staff then completed another 10-Item Knowledge of Late-Life Depression Scale-Revised questionnaire and documented their name, role, years of employment at the facility, gender, and age on the questionnaire so cross-comparison of results could be determined. All 10-Item Knowledge of Late-Life Depression Scale-Revised questionnaires were collected by the staff educator at the completion of each session, ensuring they collected both the pre- and post-questionnaires from each staff participant. The staff educator placed the questionnaires into a sealed envelope for the researcher to collect.

5.11 Statistical Methods

Cross-sectional design results can be descriptive or analytical. Descriptive methods characterise the prevalence of phenomena or health consequences that are being studied (Capili & Anastasi, 2021). The design begins with distinguishing the population of concern, data is collected, and participants are classified as either having the phenomena or outcome being studied or not (Capili & Anastasi, 2021).

Prevalence is determined at one point in time or across a specific period or as a series of cross-sectional surveys (Capili & Anastasi, 2021). Prevalence is usually reported as a percentage (Capili & Anastasi, 2021).

Analytic methods include odds ratio, prevalence ratios, and logistic regression (Capili & Anastasi, 2021); (Polit & Beck, 2021). Odds ratio measures the correlation between an experience and outcome and implies the probability of an outcome occurring with a specific experience, compared to the likelihood of an outcome occurring in the non-existence of the experience (Capili & Anastasi, 2021). In this study, descriptive analysis and frequencies were used to describe dissemination of answers for the pre- and post-questionnaire along with the rates of accuracy between pre- and post-questionnaires. The paired *t*-test using SPSS was used to compare changes in scores at a significance level of 0.05.

5.12 Conclusion to the Chapter

In this chapter, an overview of the methodology employed for the collection of data and data analysis of the staff participants in the aged care staff knowledge of late-life depression questionnaires was presented. Ethics considerations were outlined, and the staff participation, recruitment, sample size, and eligibility were discussed. The descriptive analysis approach was described. In the following chapter, the results of the analysis of the data from the aged care staff knowledge of late-life depression questionnaires are provided.

Chapter 6: Results of Aged Care Staff Knowledge of Late-life Depression Questionnaires

6.1 Introduction to Chapter

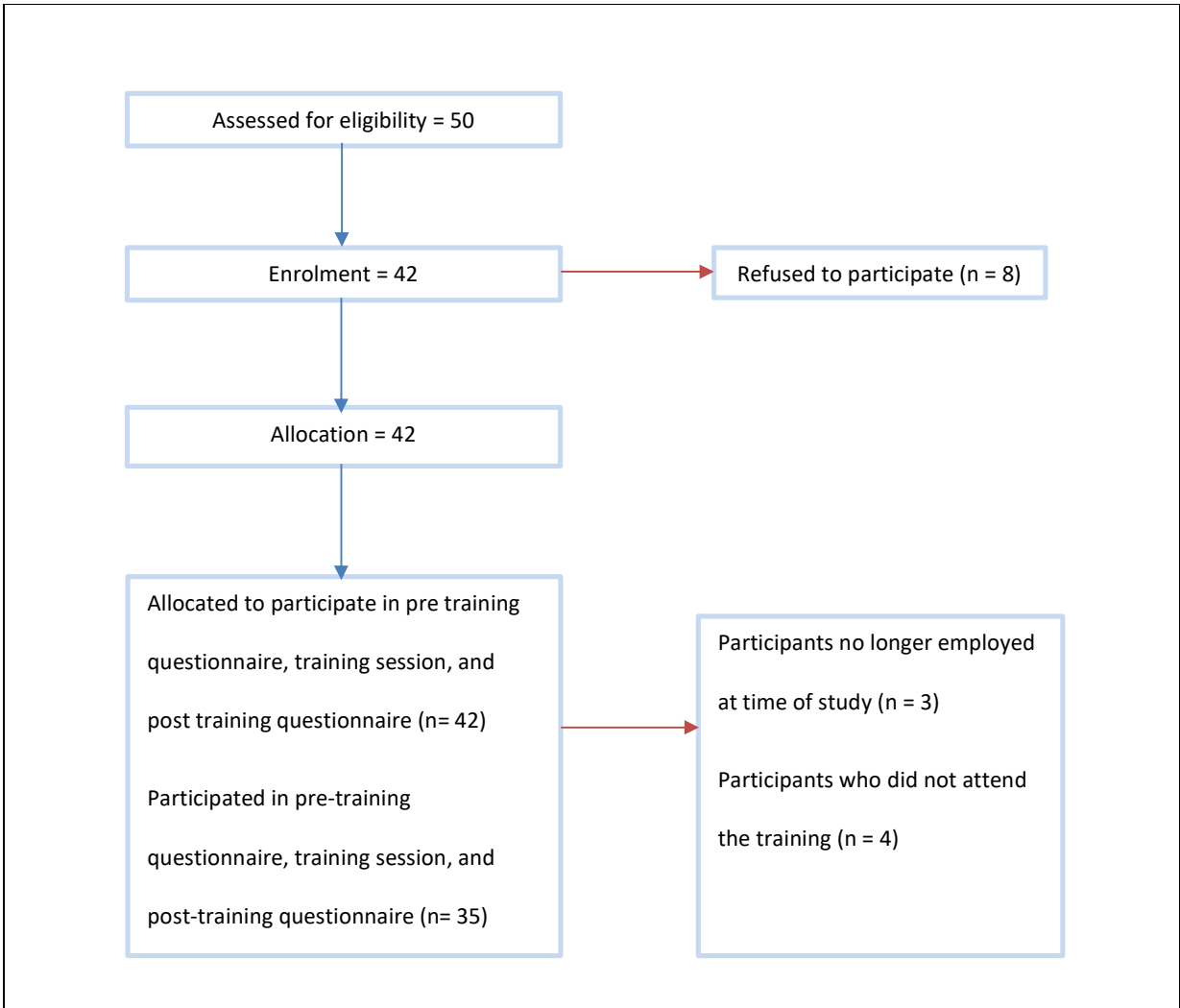
In the previous chapter, an overview of the methodology for the collection of data and data analysis of the staff participants in the aged care staff knowledge of late-life depression questionnaires was presented. In this chapter, an overview of the results of the aged care staff's knowledge of depression in older persons following the implementation of a brief education session is provided. It includes a description of the staff participants, the outcome data, and a summary of the main results from the study.

6.2 Staff Participants

Table 15 displays that 50 staff met the eligibility criteria, with eight refusing to participate. Of the 42 participants who were allocated to participate, three were no longer employed at the facility, and four did not attend when the depression training sessions were conducted. Staff participants recruited for this study included 35 aged care staff, and the cross-sectional pre- and post-training questionnaire commenced with all consenting eligible participants: 28 female staff and 7 male staff participating in the study. These individuals participated in a short training program and completed the pre- and post-training 10-Item Knowledge of Late Life Depression-Revised questionnaires. Twenty-nine of the participants had an aged care Certificate III qualification, two registered nurses had a bachelor's degree, two enrolled nurses had a diploma qualification, and two Leisure and Lifestyle staff had a Certificate III qualification. The care staff participants consisted of 21 females and 7 males. All registered nurses, enrolled nurses, and Leisure and Lifestyle staff were female.

Table 15

Participant Eligibility and Involvement



The length of time participants had been employed at the facility ranged from three months to eight years, with the mean being 3.00 years (SD = 2.01). One participant had been employed at the facility for eight years, eight participants had been employed at the facility between five and seven years, 20 participants had been employed at the facility between one and four years, and four participants had been employed at the facility for less than one year. The age of the participants ranged from 19–58 years with the mean age being 35.51 (SD = 12.30) years. Of the participants, 20% were males and 80% females.

Refer to

Table 16 for demographic data for staff participants.

Table 16

Demographics of Staff Participants

Variable	Mean and range	Percentage of participants
Age of Male participants – n = x	7	20
• Mean (SD)	28.86 (8.39)	
• Range	21 - 45	
Age of Female participants – n = x	28	80
• Mean (SD)	37.15 (12.63)	
• Range	19 - 58	
Participants' length of employment (years)		
• Mean (SD)	3.01 (2.01)	
• Range	0.4 - 7	
Care staff years of aged care experience – n = x	29	82.86
• Mean (SD)	5.76 (4.29)	
• Range	1 - 20	
Registered nurse years of aged care experience – n = x	2	5.71
• Mean (SD)	6.50 (7.77)	
• Range	1 - 12	
Leisure and Lifestyle staff years of aged care experience – n = x	2	5.71
• Mean (SD)	3.50 (2.12)	
• Range	2 - 5	

Variable	Mean and range	Percentage of participants
Age of Male participants – n = x	7	20
• Mean (SD)	28.86 (8.39)	
• Range	21 - 45	
Enrolled nurses' years of aged care experience – n = x	2	5.71
• Mean (SD)	4.00 (1.41)	
• Range	3 - 5	

Note. SD—Standard Deviation

6.3 10-Item Knowledge of Depression-Revised Questionnaire

Using frequencies to analyse the pre- and post-test results of the 10-Item Knowledge of Late Life Depression-Revised scores, there was evidence that knowledge in all the questions had improved. Refer to Table 17 for an overview of the staff participants' 10-Item Knowledge of Late Life Depression-Revised scores for each question. The participants' scores for questions relating to depressive symptoms (Q.1, Q.4, & Q.7 of the questionnaire) were high both pre- and post-training. Participants' knowledge of myths (Q.2, Q.5 & Q.8 of the questionnaire) associated with depression in older persons improved following the training, but not as substantially. Thirty-seven per cent of participants still selected the *Agree* option that depression is a normal reaction to the changes of old age post-training. Participants' knowledge scores for questions relating to facts of depression (Q.3, Q.6, Q.9 & Q.10 of the questionnaire) were overall higher post-training.

Table 17*Results of Staff Knowledge Questionnaires*

Question	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
	Strongly	Disagree	Agree	Strongly	Strongly	Disagree	Agree	Strongly
	Disagree	Pre-test	Pre-test	Agree	Disagree	Post-test	Post-test	Agree
	Pre-Test			Pre-test	Post-Test			Post-test
1. (Symptom)		-	82.9(29)	17.1(6)	-	-	62.9(22)	37.1(13)
2. (Myth)	5.7(2)	25.7(9)	57.1(20)	11.4(4)	5.7(2)	88.6(31)	5.7(2)	
3. (Fact)	5.7(2)	77.1(27)	17.1(6)			2.9(1)	82.9(29)	14.3(5)
4. (Symptom)	2.9(1)		82.9(29)	14.3(5)			74.3(26)	25.7(9)
5. (Myth)	8.6(3)	22.9(8)	48.6(17)	20.0(7)	11.4(4)	51.4(18)	37.1(13)	
6. (Fact)	8.6(3)	57.1(20)	31.4(11)	2.9(1)		11.4(4)	74.3(26)	14.3(5)
7. (Symptom)	2.9(1)	17.1(6)	42.9(15)	37.1(13)			74.3(26)	25.7(9)
8. (Myth)	2.9(1)	25.7(9)	65.7(23)	5.7(2)	2.9(1)	85.7(30)	11.4(4)	
9. (Fact)	5.7(2)	42.9(15)	48.6(17)	2.9(1)		2.9(1)	88.6(31)	8.6(3)
10(Fact)	20.0(7)		57.1(20)	22.9(8)			82.9(29)	17.1(6)

Note. Refer to Table 13 for details of the questions

Paired samples t-tests were performed to examine whether the change in mean scores of knowledge of late-life depression pre- and post-training was significant. The overall mean scores indicate that knowledge of late-life depression was improved after training. The overall mean score pre-training was 26.2(SD = 1.77) and post-training was 31.17 (SD = 1.52). There was no statistically significant difference between male and female care staff scores pre- or post-test. The most substantial change in scores was for staff with certificate III qualifications. Refer to Table 18 for the mean knowledge scores

between staff with various qualifications and genders. The data analysis method was reviewed through supervisory oversight.

Table 18

Pre-test and Post-test Means by Qualification

Staff Qualification	Pre-Training Test Mean	Post-Training Test Mean
AINs (Certificate III) n	29	29
Mean (SD)	25.72 (1.33)	32.03 (1.52)
ENs (Diploma) n	2	2
Mean (SD)	29.5 (.70)	32.5 (.70)
RNs (bachelor's degree) n	2	2
Mean (SD)	30.0 (1.0)	32 (1.41)
L & Ls (Certificate III) n	2	2
Mean (SD)	26.0	33
Male AINs n	7	7
Mean (SD)	25.86 (.37)	31.43 (1.13)
Female AINs n	23	23
Mean (SD)	26.22 (1.16)	31 (1.71)

Note: SD=Standard Deviation

6.4 Main Finding of the 10-Item Knowledge of Depression-Revised Questionnaire

The above findings seek to address Research Question 2—how has staff knowledge of depression been impacted by depression training and the knowledge of late-life depression questionnaire study? The results indicate that the implementation of a brief depression training program improved participants' overall knowledge of depression scores; this was assessed using the 10-Item Knowledge of Late Life Depression-Revised Questionnaire.

The extent of knowledge improvement varies according to the participants' level of qualification. Those who held a certificate-level qualification demonstrated the greatest improvement in their pre- and post-training scores. Staff with degree-level qualifications showed the least variation between the pre- and post-training scores, indicating minimal change following the training. This result suggests that staff with lower baseline knowledge may benefit from targeted depression training to improve their understanding and care delivery.

6.5 Conclusion to Chapter

In this chapter, the staff participants in the staff knowledge of late-life depression study were described. The outcomes identified from the study indicated that a brief training session on depression in the older person can improve the knowledge of aged care staff. There was an overall improvement in knowledge across the various qualifications of staff, but most significantly amongst staff with certificate-level qualifications.

In the following chapter, an overview of the methodology for the resident and staff interview studies is presented. It includes a background to the study and identifies the research questions for the resident and staff interviews. An overview of the philosophical framework for the qualitative approach to this mixed methods study will be presented.

Chapter 7: Methodology for Resident and Staff Interview Studies

7.1 Introduction to the Chapter

In the previous chapter, the staff participants in the staff knowledge of late-life depression study were described, and the outcomes of the study were provided. In this chapter, an overview of the methodology for the resident and staff interview studies is presented. It includes a background to the studies and identifies the research questions for the resident and staff interviews. An overview of the philosophical framework for the qualitative approach to this mixed methods study will be presented. The researcher's background is described, along with a description of the ethical considerations, the study setting, participant sampling, and data collection method. The interview questions for both the resident and staff interviews will be provided, followed by an outline of the data processing, data analysis, and demonstration of the research quality. The structure of this chapter is presented in a manner consistent with the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist.

7.2 Background to Study

The resident intervention quasi-experiment study aimed to determine if providing residents with a choice of bedtimes and attending an evening activity program would reduce depressive symptoms over a three-month period. This study intended to explore how these choices impacted the experience of residents. In addition to gaining insight into the residents' experience of the choice of bedtimes and attending an evening activity program, the study also aimed to explore the impact of the interventions on staff and their perceptions of the importance of providing residents with choices and factors that influence providing choice. Having a better understanding of the effectiveness of the interventions and the potential barriers may help aged care providers and staff to adapt more innovative methods to support residents' autonomy.

7.3 Resident Participant Research Questions

There are two research questions related to the resident participant interviews—what is the resident’s experience related to the implementation of the choice of bedtimes and an evening activity program, and what factors impact residents’ sense of autonomy?

7.4 Staff Participant Research Questions

There are also two research questions related to the staff participant interviews— what is the staff experience related to the implementation of the residents’ choice of bedtimes and an evening activity program, and what are staff perceptions of factors that impact residents’ ability to make choices?

7.5 Qualitative Approach

As discussed in Chapter 4, a mixed-method research approach provides information that neither a quantitative nor qualitative method alone is sufficient to address the intricacy of a research problem (Polit & Beck, 2021). The integration of the two methods enhances the explanation of the findings (Polit et al. 2021). The reflexive thematic analysis approach investigates the experience of residents who participated in the implementation of the resident interventions in the quasi-experiment—the choice of bedtimes and attending an evening activity program.

Building on the integrated framework of Self-Determination Theory, autonomy and personhood theory, as discussed in Chapter 2, this study adopts a qualitative interpretive approach, aiming to enter the world of participants and interpret and describe their personal experiences in the aged care setting (Polit et al., 2021). Reflexive thematic analysis is a flexible and interpretive method for identifying and understanding patterns of significance within the data (Braun & Clarke, 2019). This approach was chosen to capture the nuanced meanings that participants attribute to their care experience. Within this study, the integration of theory informing the inquiry and the interpretive lens through which the participants' descriptions of their experiences were analysed.

The six phases of Braun and Clarke's reflexive thematic analysis for guiding interpretive research are utilised in this study (Byrne, 2022). The six procedural phases are: familiarisation with the data, generating initial codes, generating themes, reviewing potential themes, defining and naming themes, and producing the report (Byrne, 2022). The reflexive thematic analysis provides a flexible interpretive methodology to the analysis of data that enables the identification of themes or patterns in a set of data (Byrne, 2022). Braun & Clark (2014) argue that the reflective thematic analysis provides a vigorous methodical structure for coding to discover patterns in the data relative to the research question. Thematic analysis is used across a range of disciplines, including those with a health focus (Braun & Clarke, 2014).

In the reflexive thematic approach, codes are understood to be representative of the researchers' elucidations of the patterns in the data (Byrne, 2022). The coding process and development of themes reflects the interpretation of the data by the researcher (Byrne, 2022). Using this approach encourages the researcher to encompass creativity, subjectivity, and reflexivity as an enhancement to knowledge-making (Braun & Clarke, 2019). The constructivist epistemology method was used for the data analysis, where the experience and meaning from the participant interviews are assembled through an interplay of intersubjective and subjective construction (Byrne, 2022).

7.6 Theoretical Underpinnings

To interpret the interview data to capture the human and practical dimensions of the resident and staff participants, the analysis draws on the complementary frameworks of Person-Centred Care (PCC), Personhood, Self Determination Theory (SDT) and Knowledge to Action (KTA) framework. These frameworks guide the coding and interpretive phases of analysis by providing concepts through which the accounts of the participants are investigated. Refer to Table 19 for a summary of the key emphasis of each theory or framework discussed in this section and how they relate to aged care.

7.6.1 Self-determination Theory

Self-determination Theory, developed by Deci and Ryan (1985), provides a framework for understanding human behaviour, motivation, and well-being. Self-determination Theory asserts that to understand human motivation, the psychological need for autonomy, relatedness, and competence must be considered (Deci & Ryan, 2000). When these needs are endorsed, individuals experience greater engagement, well-being, and motivation (Deci & Ryan, 2000). However, when competence, motivation, and autonomy are impeded, there is diminished engagement and lower self-worth (Deci & Ryan, 2000). In the context of the resident and staff interview study, SDT offers a theoretical framework to which to examine facilitators and barriers that support or challenge residents' psychological well-being.

7.6.2 Person-Centred Care

The PCC approach involves nursing staff working in alignment with the values and beliefs of those they care for, being sympathetically present, actively engaging with those in care, sharing decision-making, as well as caring for the physical needs (McCormack & McCance, 2006). Working with the values and beliefs of the person being cared for involves placing value on developing a clear understanding of what the person values in their life and how the person may interpret what is happening through these values (McCormack & McCance, 2006). This practice is directly linked to shared decision-making, in which nursing staff take into account the values of the person in their care to inform decisions (McCormack & McCance, 2006). Active engagement in PCC requires the nurse to have a connected relationship with the person being cared for (McCormack & McCance, 2006). Being sympathetically present requires the nurse to recognise the uniqueness of individuals and respond appropriately to cues (McCormack & McCance, 2006). In the context of this study, PCC provides guiding principles in which to analyse enablers and obstacles to resident engagement in decision-making.

7.6.3 The Theory of Personhood

Personhood theory, as articulated by Kitwood (1997) has had an influence on the reframing of aged care delivery. Kitwood (1997) argued that ageing and dementia should not define individuals by their physical limitations or diagnoses. Rather, their personhood should be acknowledged; this is the values, unique identity, relationships, and history that constitute an individual (Kitwood, 1997). Fundamental to this view is the recognition that older persons continue to have social and psychological needs, which, when respected, contribute to their overall mental well-being (Mitchell & Agnelli, 2015).

In practice, the application of personhood theory requires moving from task-oriented care to a person-centred approach (Mitchell & Agnelli, 2015). When staff view residents in their care through the lens of personhood, care becomes interactive rather than just a series of tasks (Mitchell & Agnelli, 2015). This shift in focus can profoundly influence how staff respond to residents in their care, particularly in the shared decision-making process.

7.6.4 Knowledge-to-Action

To understand how aged care staff can translate knowledge into their practice, the Knowledge-to-Action (KTA) framework provides a structured methodology to facilitate practice change. The Knowledge-to-Action process, as described by Graham et al. (2006) has two interconnected concepts: knowledge creation and action. The process is dynamic and complex, where the boundaries between the two are permeable and fluid (Graham et al., 2006). The knowledge component comes through the dissemination of ideas and concepts to inform actions or practices (Graham et al., 2006). The action part of the process involves a cycle that leads to the application of the knowledge in real-world settings (Graham et al., 2006).

In practice, for knowledge to be applied, barriers to using knowledge must be identified, the use of knowledge needs to be monitored, outcomes of using the knowledge need to be evaluated, and systems must be in place to sustain the ongoing application of knowledge (Graham et al., 2006). In this

study, KTA offers a framework in which to examine what institutional procedures support or diminish the application of staff knowledge to change their care practices.

Table 19

Summary of Theories and Frameworks to Explain the Experience of Aged Care Residents

Theory/Framework	Key emphasis	How it relates to aged care
Self-Determination Theory	Autonomy, competence and relatedness	Supporting residents' autonomy enhances motivation and well-being
Person-Centred Care	Prioritises the values, preferences and needs of individuals	Residents are actively involved in decision-making about their care, which enhances their quality of life
Personhood	Recognising that individuals are unique with rights and social connections	Acknowledgement of residents past life, experiences and personal identity to support well-being.
Knowledge-to-Action (KTA)	Translating knowledge to practical action by identifying the barriers and what sustains the ongoing application of knowledge	Enabling aged care staff to apply evidence-based knowledge to their practice to improve residents' mental well-being.

Note. From (Deci & Ryan, 2000; Graham et al., 2006; Kitwood, 1997; McCormack & McCance, 2006)

7.7 Researcher Background

Bradshaw et al. (2017) suggest that, along with the study of the experiences in their real context being fundamental to qualitative studies, so is the acknowledgement that the researcher cannot avoid influencing the investigated phenomenon. There can be no realism in phenomenological research without

the researcher understanding the language and recognising their own presumptions. Polit et al. (2022) state that the trustworthiness of a qualitative study is enhanced by the credibility of the researcher. The experience of the researcher should be identified to establish trust in the data.

I have worked as a registered nurse in a range of aged care facilities in a variety of capacities throughout my 38-year nursing career. My perceptions of aged care have been shaped by personal experience. From October 1997 to October 2006, I worked as a registered nurse in a RACF in Perth, Western Australia. From 2000 to 2008, I was a Clinical Facilitator of nursing students and facilitated placements with students in a wide range of aged care settings in Perth. From March 2010 to March 2011, I was employed as a Care Manager at a RACF in Tasmania. From February 2014 to April 2015, I was working as a Clinical Facilitator for Certificate III in Aged Care nursing students in a variety of aged care settings on the Central Coast of NSW.

Due to the previous experience I have had in aged care settings, I bring certain biases to the study. In my experience, I observed that care practices were very task-oriented and often rushed. Care staff offering residents choices around their daily routines, particularly bedtimes, were often limited due to staff attitudes and facility routines. I also observed that residents were usually isolated in the evenings due to a lack of organised activities. This isolation increased the residents' risk of loneliness. Residents were also in bed early, which resulted in many of them being in bed for up to 13 hours or more. I commenced this study with the perspective that providing choice, specifically individual bedtimes and choice in evening activities, could lead to decreased depressive symptoms.

7.8 Ethical Considerations

Creswell and Creswell (2023) suggest that a researcher is obliged to respect the needs, values, desires, and rights of participants in qualitative studies. To ensure this is achieved, the researcher must make the objectives of the study clear, both verbally and in writing, and receive written consent (see Appendix E) from participants (Creswell & Creswell, 2022). Transcripts should also be made available to

participants and the anonymity of the participants maintained (Creswell & Creswell, 2022). In this study, the researcher ensured that all resident participants were informed of the study objectives both verbally and in writing. Written permission was received from participants by the researcher prior to the interviews. Appointments were arranged for interview times that suited individual participants to avoid conflict with other activities and commitments. The interviews took place during the participants' work time, following approval from management. Participants were assured that they would remain anonymous, and pseudonyms would be used when reporting the data collected.

As with the resident participants in this study, the researcher ensured that all staff participants were informed of the study objectives both verbally and in writing. Written permission was received from participants by the researcher prior to the interviews. Appointments were made for interview times that suited individual staff participants to avoid conflict with work requirements and other commitments. Staff participants were assured that they would remain anonymous, and pseudonyms would be used when reporting the data collected.

As with the previous studies in this thesis, the current study followed the National Statement on Ethical Conduct in Human Research to make certain that all aspects of the study met the ethical standards to protect the safety and identity of the residents and staff participating in the study (National Health and Medical Research Council, 2023). Principles relevant to this study are respect, beneficence, justice, research merit, and integrity (National Health and Medical Research Council, 2023).

Adherence to section 2.2 of the National Statement on Ethical Conduct in Human Research was observed by ensuring the choice to participate was made by individual resident and staff participants (National and Medical Research Council, 2023). Consent requirements included adequate information provided on the research and the implications for the participant, ensuring the information was understood, and consent was made voluntarily (National and Medical Research Council, 2023). Ethics was approved by the Avondale Human Research Ethics Committee (ETH.2019.016—see Appendix A).

Storage of data and confidentiality guidelines in Section 3.1 of the National Statement on Ethical Conduct in Human Research were followed; this included removing any participant identifiers on any electronic records, electronic records stored in a source external to the researcher's personal computer, storing relevant hard copy data in a locked filing cabinet that only the researcher had access to, and data disposed of within an appropriate timeframe (National and Medical Research Council, 2023).

7.9 Study Setting

The interviews for this study were conducted in the same 115-bed private for-profit RACF, on the Central Coast, New South Wales, Australia, where the quasi-experiment resident intervention study took place, as discussed in Chapter 3. Key personnel at the facility were provided with a copy of the proposed research and the accompanying resident and staff participant documentation. The facility was not involved in other research studies that could potentially interfere or conflict with the study, which Geda et al. (2020) suggests is an important consideration when selecting study sites.

7.10 Participant Sampling

In phenomenological studies, researchers often use a purposive sampling approach where the researcher chooses the type of participants to contribute to the research (Polit & Beck, 2022). Participants are selected based on their participation in the activities the researcher is examining (Land & Harvey, 2021) and have the ability to coherently describe their lived experience (Polit & Beck, 2022). Purposive sample sizes are typically small, with 15 or fewer participants (Polit & Beck, 2022).

7.11 Sampling of Resident Participants

In this study, six resident participants were purposively selected for an interview by the researcher. Participants who had participated in the interventions implemented in the resident intervention study were chosen. Creswell (2022) states that the utilisation of the initial quantitative results can inform elements of the qualitative data analysis. The results of the depression scores and evening activity attendance from the quantitative resident intervention study were considered for the

participant selection in the qualitative study, as represented in Table 20. Selecting participants who differ in their results allows the researcher to examine the reasons behind the differences (Creswell, 2022).

Table 20

Participants' Geriatric Depression Scores Pre- and Post-Intervention and Evening Activity Attendance

Participant	Pre-Intervention GDS-15	Post-Intervention GDS-15	Number of Evening Activities Attended
Daphne	8	6	42
Narelle	2	4	15
Bertha	7	5	0
Nancy	7	2	35
Dora	2	4	0
Daisy	3	1	0

Note. Highlighted scores represent that the participants' Geriatric Depression Scale-15 were indicative of mild depression

All participants were female, as there were no male participants from the study who agreed to participate in the interviews. Of the three male participants in the resident participation study: one stated he did not feel he would bring value to the study, despite being reassured by the researcher that his experience would greatly enrich the study; another stated he had been happy to be involved in the resident intervention study but had no interest in being interviewed; the third participants health had declined and he stated he did not feel will enough to participate in an interview. The participants had a high MMSE score to ensure they could articulate their experience.

7.12 Sampling of Staff Participants

As with the sampling for resident participants, the researcher used a purposive sampling approach, where the researcher chose the type of participants to contribute to the research (Polit & Beck,

2022). Participants were selected based on their participation in the activities the researcher was examining (Land & Harvey, 2021) and their ability to coherently describe their lived experience (Polit & Beck, 2022). In this study, seven participants were purposively selected for interview by the researcher.

Staff participants had been involved in the quantitative resident intervention study. Five of the participants identified as female and two identified as male. Three of the participants were AINs, two participants were Leisure and Lifestyle staff members, one participant was in nursing management, and one participant was in general management. Their length of employment at the facility ranged from one year to seven years. Years of aged care experience ranged from two to 30 years

7.13 Data Collection Methods

In qualitative research, interviews are the principal method used to collect data (Flick, 2018). Participants are usually interviewed once individually, following preliminary contact by the interviewer who invites the participant to take part in the study (Flick, 2018). Differing from conversations, the interview is structured by the researcher to extract data from participants (Holloway & Galvin, 2016). Other forms of interviews include repeated interviews over time for longitudinal studies, group interviews, and narrative interviews (Flick, 2018). Interviews are usually recorded and then transcribed to be analysed (Flick, 2018).

Dingwall and Staniland (2020) suggest observational studies are the gold standard for qualitative research. Observational research uses the researcher's senses by placing themselves in a situation, or the field, and recording their experience in the form of notes, referred to as field notes (Dingwall & Staniland, 2020). There are various observational roles a researcher can take when doing fieldwork. The most common is the participant-as-observer role, when the researcher and the participants of the study are aware of the observation and the researcher participates in the daily life activity with the participants (Dingwall et al, 2020). Another role is the observer-as-participant, this can involve observations made by a researcher during an interview on the happenings going on around them (Dingwall & Staniland, 2020).

While this was not specifically an observational study, observation was used to enrich understanding of the participants' experience and responses. Two complementary observational roles were taken by the researcher in this study, participant-as-observer and observer-as-participant. Curtis and Keeler (2022) suggest observations are often included in qualitative studies to complement the investigation into the experience of the participants.

7.14 Resident Participants' Data collection

The participant-as-observer role was taken on by the researcher during some of the evening activity programs throughout the three-month resident intervention period; this was to not only observe the proceedings, but to ensure adherence to the study guidelines. Permission to attend and participate in the programs was granted by facility management. An information session was arranged to ensure open disclosure about the study. During observation periods and after the programs, the researcher made occasional field notes in a journal.

For resident participants, semi-structured interviews were conducted by the researcher with individual participants who participated in the quasi-experiment. Prior to the interviews, the researcher had met with each participant on at least three separate occasions during the quasi-experiment: during the baseline assessment period, at the end of the pre-intervention phase, and at the post-intervention phase. Interview questions addressed the participants' personal experience of their engagement with the interventions. The time for the interview was pre-arranged with each participant to ensure the participants were available and prepared.

Interviews were conducted in the privacy of the participant's room. When interviews are conducted in the privacy of the participant's own home, or in this instance, their own room, they are more at ease, providing the researcher with potentially richer information and giving the participant more control (Holloway & Galvin, 2016). The researcher ensured they were positioned within hearing and visual distance of the resident participant and maintained eye contact. As suggested by Holloway & Galvin

(2016), the researcher used prompts throughout the interview to search for the reasons and meaning of responses. Questions were also rephrased if the participant had difficulty understanding the question; this was to ensure the participant had a clear understanding of the question (Holloway & Galvin, 2016). As the participants were elderly, the interviews lasted 15–30 minutes, as participants were inclined to tire quickly during the interview process.

7.15 Staff Participant Data Collection

For staff participants, semi-structured interviews were conducted by the researcher with individual participants who had been involved in either the care of residents or the evening program during the resident intervention quasi-experiment (see Appendix B). Prior to the interviews, the researcher met with each participant on at least one separate occasion to discuss the interview details. The time for the interview was pre-arranged with each staff participant to ensure they were available and prepared. Interviews were conducted in privacy, in a closed room away from other staff and residents. The researcher ensured that she was within hearing and visual distance of the participant and maintained eye contact. As suggested by Holloway & Galvin (2016), the researcher used prompts throughout the interview to search for the reasons and meaning of responses. Questions were also rephrased if the participant had difficulty understanding the question; this is to ensure the participant has a clear understanding of the question (Holloway et al., 2016). As the participants were interviewed during work hours, the interviews lasted 15–30 minutes to ensure they did not interfere with their workflow.

With both resident and staff participants, permission was sought to record interviews using a tablet device. A recording contains the exact words used in the interview and allows the researcher to remain attentive and maintain eye contact (Holloway & Galvin, 2016). The researcher ensured the device was charged, and an extra battery pack was available to ensure the device's battery would last throughout the interview.

7.16 Interview Questions for Resident Participants

The interview questions for the resident interviews were developed by the researcher and the supervisory team to answer the thesis research questions related to the resident participants in the study. The connection between the thesis research questions and the interview questions can be seen in Table 21. The first four interview questions were designed to provide insights into how the residents' bedtime routines may have changed from when they were living at home and moving into the RACF, and the factors that had impacted the change. Interview questions 5 and 6 were intended to gain insight into the residents' perspective of the evening activity program, including aspects that may have impacted why they did or did not attend the programs. Interview questions 7 to 10 were intended to gain an understanding of how staff supported residents' choices in their daily activities. The participants were prompted following some of the questions to provide further clarification of their responses.

Table 21

Connection Between Thesis Research Questions and Resident Interview Questions

Thesis Research Question	Interview Question
What is the resident's experience related to the implementation of the choice of bedtimes and an evening activity program?	1. Before coming to the aged care facility did you have a regular sleep routine?
	2. Before coming to the aged care facility did you have a regular sleep routine?
	3. Before coming to the aged care facility did you get out of bed later, earlier or the same time as you do now?
	4. Since choosing your own bedtimes at the aged care facility, do you think your sleep has improved? Why/why not?

Thesis Research Question	Interview Question
What factors impact the residents' sense of autonomy?	5. Did the provided evening programs interest you?
	6. Did you have a say in what evening activities were provided?
	7. Do the staff support you with your choices?
	8. Did the staff support you to attend the evening activity program?
	9. How could the staff have better supported you?
	10. Following your participation in the research study, do you have any further recommendations for evening activity programs or choices of care?

7.17 Interview Questions for Staff Participants

The interview questions for the staff interviews were developed with the objective of answering the thesis research questions for staff participants in the study. The connection between the research questions and interview questions can be seen in Table 22. Interview questions 1 to 4 were designed to provide insights into staff knowledge of depression, and the impact the evening activity program and choice of bedtimes had on the residents as well as staff. Interview question 5 was intended to gain an understanding of how important staff believed resident choice is surrounding activities and bedtimes, and their perceptions of the challenges and barriers to providing residents with choice. The participants were prompted following some of the questions to provide further clarification of their responses.

Table 22*Correlation Between Thesis Research Questions and Staff Interview Questions*

Thesis Research Question	Interview Question
What is the staff experience related to the implementation of the residents' choice of bedtimes and an evening activity program?	1. How confident are you in recognising symptoms of depression in residents? 2. How important is providing residents with choice in their daily activities? 3. Do you think the evening activity program was beneficial to the residents? 4. How important do you think choice of bedtimes is for residents?
What are staff perceptions of factors that impact residents' ability to make choices?	5. What do you see as possible barriers to providing residents with choice?

7.18 Data Processing

A transcribing service was contracted to transcribe verbatim each of the recorded interviews. In the familiarisation phase of this study, as suggested by Byrne (2022), the researcher read and reread the transcripts of the resident interviews to become closely familiar with the content. This step is critical to enable the identification of information appropriate to the research questions relevant to the study (Byrne, 2022). The immersion into the data was enhanced by using printed copies of the manuscripts to make written notes.

7.19 Quality of Research

It is essential to demonstrate the quality of the research for all research processes (Bradshaw et al., 2017). In qualitative research, the quality of a study is demonstrated to be trustworthy through the principles of credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985).

Credibility is the degree to which the researcher has reflected the true views of participants (Grove et al., 2019). In this study, the process included the researcher establishing a rapport with participants prior to interview and developing a relationship of trust. Each resident participant had been involved in at least three prolonged meetings before the interview, which included participating in a Mini-Mental State Examination and a Geriatric Depression Score assessment. Resident participants were initially asked if they would verify the transcript from their interview, however, due to changes in health status and ability, this was only possible with half of the resident participants.

Dependability refers to the truthfulness of the study (Grove et al., 2019). Through the description of detailed procedures and processes the researcher took to analyse data, readers can determine the consistency of the processes and therefore the dependability of the findings. Transparency is accomplished through the outlining of all steps taken from the collection of data, data analysis, and the findings reported. All data has been stored securely as a record of the inquiry (Bradshaw et al., 2017).

Confirmability is the scope to which the researcher provides confidence to readers that the results they have produced are a reflection of the participants' views (Grove et al., 2019). The biases of the researcher have been reflected upon and discussed, and assumptions associated with the aims of the research have been stated. The researcher had no direct affiliation with the setting, which allowed for objectivity.

Transferability of the study explains that the findings are not generalisable, but are relevant to settings with comparable participants (Grove et al., 2019). Bradshaw et al. (2017) suggest this is achieved by purposively sampling participants and providing rich study details, so a replication of the study could occur. Participants in this study resided in a for-profit RACF. For-profit RACFs comprise 34% of aged care providers within Australia (Australian Institute of Health and Welfare, 2022). It was a 115-bed facility, which compares to 58% of privately operated facilities that consist of 101 or more operational beds (Australian Institute of Health and Welfare, 2022). The facility also comprised a staff skill mix consistent

with the national average in RACFs: approximately 15% RNs, 70% care staff, and the remainder ENs (Bonner, 2017). The resident participants' ages ranged from 88-98 years, which is representative of the largest age group represented amongst aged care residents in Australian RACFs (AIHW, 2021).

7.20 Data Analysis

The method of qualitative data analysis comprises coding, classifying, and understanding narrative into themes (Byrne, 2022). Coding consists of reading over the data to be analysed, sorting text into subparts, and assigning a code to the subparts (Gray, 2019). As data is coded, the researcher begins to discover patterns emerging as sections of text are coded in a similar way (Gray, 2019). Codes can be developed in a software program or handwritten on a printed transcription (Gray, 2019). According to Byrne (2022), coding can be deductive or inductive. Deductive coding occurs when the researcher produces codes based on a pre-specified theoretical framework (Byrne, 2022). Conversely, with inductive coding, the researcher reflects on the data content without any pre-conceived theoretical framework to best characterise the participants' intended meaning (Byrne, 2022). Codes can lead to the development of themes from the phenomena of the study (Gray, 2019).

Themes develop as codes are merged into abstract words and phrases (Gray, 2019). To ensure rigour of the study, the researcher must be rigorous in establishing links from themes to codes and codes back to the original data source (Gray, 2019). Bradshaw et al. (2017) state that reading transcriptions and listening to the recordings repeatedly allows the emergence of themes and subthemes. Initially, many themes may emerge, however, with in-depth analysis and focus on the aims of the study, the themes will be reduced in number to define the participants' experience (Bradshaw et al., 2017). The repeated revising and filtering of the themes (see Appendix I), while taking in the whole transcript, allows the researcher to stay open to what the data is saying, forming a process that is inductive of the whole data (Bradshaw et al., 2017).

In this study, all interview transcriptions were uploaded into Delve, a computer-assisted qualitative data analysis software (CAQDAS) program. The six phases for analysis described by Braun and Clark (Byrne, 2022) were used, which, as stated earlier in the chapter, are (1) familiarisation with the data, (2) generating initial codes, (3) generating themes, (4) reviewing potential themes, (5) defining and naming themes, and (6) producing the report. The first phase was to read all the transcripts of interviews and fieldnotes. Phrases and sentences were assigned a code; this occurred either handwritten on the printed version of the transcript or within the CAQDAS. The codes were cross-referenced between the printed transcripts and the CAQDAS to check for similarities or differences in the coding.

Transcripts were also reviewed while listening to the recordings to enable the transcripts to come to life, enhancing the analysis (Bradshaw et al., 2017). Individual lines were coded multiple times to categorise and compare until categories emerged (Neville & Whitehead, 2020). Tables were used to denote quotations, which resulted in rearranging and reassigning quotations to frame the findings. Each recording was also re-listened to by the researcher to note tone, pauses, and inflections by the participant and the researcher. Byrne (2022) states that this process is important for the researcher to gain a contextual appreciation of the data. This phase was very time-consuming, however, according to Byrne (2022), it is important to give equal thought to the breadth and depth of the entire data collected. Some notes were made of the researcher's own thoughts during this process.

Finally, specific sets were joined to structure abstract ideas and broader groupings to assemble and describe phenomena (Neville & Whitehead, 2020). Field notes were referred to, seeking further data that may add to the enrichment of the phenomena. Following the comparing of codes, four themes with subthemes were determined from the resident participant interviews, and three themes with subthemes from the staff participant interviews. These will be discussed further in the following two chapters.

7.21 Conclusion to the Chapter

This chapter provided an overview of the methodology employed for the collection of data and data analysis of the resident and staff participant interviews. It presented that semi-structured interviews were conducted for both staff and resident participants, along with field observations, as methods for collecting data for the resident and staff participant interview studies. It provided a discussion of how thematic analysis was used to evaluate the data. The researcher's characteristics were revealed, and an overview of the ethical considerations was presented. A discussion of the strategies to ensure the trustworthiness and quality of the data was also included.

In the following chapter, the results of the analysis of the data from the resident participants' interviews are provided. This study consists of the analysis of resident participants' transcripts from the RACF study site concerning their experience of the resident interventions, which included the choice of bedtimes and an evening program, and the autonomy and choices they have in the aged care facility.

Chapter 8: Results for Resident Interviews

8.1 Introduction to the Chapter

The previous chapter provided an overview of the methodology that was employed for the collection of data and data analysis of the resident and staff participant interviews. It presented that semi-structured interviews were conducted for both staff and resident participants, along with field observations, as methods for collecting data for the resident and staff participant interview studies. In this chapter, the study findings are presented, commencing with a depiction of resident participants' characteristics, followed by a detailed presentation of four overarching themes that were identified through thematic analysis: (1) facility routine impact choice, (2) promoting wellbeing, (3) barriers to engagement, and (4) confinement and isolation. The themes and sub-themes of the study are represented in Table 23. The meaning of each theme is demonstrated with select quotations from participants using pseudonyms combined with field observations.

8.2 Participant Characteristics

The resident participants selected for interviews in the qualitative phase of this study were purposively selected from the quasi-experimental resident interventions study. Half of the participants chosen had mild depression scores, and half of the participants had attended some of the evening activity programs. These participants were selected to help gain further insight into the resident interventions, specifically into their experience of the choice of bedtimes and the evening activity program, exploring what empowered or impeded their choices and what interested them or not in the evening programs. Nine of the interview questions were directly related to participation in the quasi-experiment resident interventions.

Six participants consented to be interviewed, all identifying as female. No males involved in the quasi-experiment resident intervention would consent to participate in the interviews. The ages of the participants ranged from 87–98 years and their length of stay in the facility ranged from one year to seven years.

8.3 Objectives

This section of the study had the following objectives:

- to interpret the experience of the aged care resident's choice of bedtimes within the facility,
- to evaluate the benefit of offering an evening activity program in an aged care facility, and
- to examine factors that impact residents' choice of activities and sense of autonomy.

An overview of how the themes relate to the research questions is presented in Table 23.

Table 23

Thesis Research Questions and Themes for the Resident Participant Study

Research question	Themes and sub-themes
Research Question 3	Theme 1
What is the resident's experience related to the implementation of the choice of bedtimes and an evening activity program?	Facility routine impacts choice: • Bedtime choice constraints • Conformity to facility routines Theme 2 Factors that promote well-being: • Building connections • Staff support of engagement • Social enrichment through technology
Research Question 4	Theme 3
What factors impact residents' sense of autonomy?	Barriers to engagement: • Adapting to cognitive diversity • Loss of meaning and purpose

Theme 4

Confinement and isolation

8.4 Theme 1: Facility Routines Impact Choice

Theme 1 encapsulates the participants' experiences of choice around bedtimes and other activities of daily living and is elucidated by two subthemes: *bedtime choice constraints* and *conformity to facility routines*.

This theme highlighted that the resident participants felt their choices, such as when to go to bed, were constrained by facility routines and the aged care organisation's limited capacity to meet the individual preferences of residents. They expressed that facility routines were necessary to ensure that residents' basic needs were met, and residents could not expect individual choices always to be considered; this included a range of other activities of daily living. Each subtheme is further detailed.

8.4.1 Bedtime Choice Constraints

A key intervention of the quasi-experiment involved giving resident participants the choice of bedtimes, including when they went to bed in the evening and when they got up in the morning. The perceptions of the resident participants uncovered in the interviews highlighted that there were complexities to residents' choice of bedtimes in the aged care facility, particularly in terms of facility routines. Although many participants reported choosing their own bedtimes, their responses suggested that facility routines largely influenced these decisions. The mealtime routines emerged to have the greatest impact on bedtime choices.

Residents articulated that during the interventions, they had to be out of bed and dressed early in the morning to be ready for breakfast. Participants who had breakfast served in their room got out of bed when the staff brought breakfast to them. The timing of this varied from day to day depending on the staff on shift. Bertha, in her seventh year at the facility stated: "They bring breakfast in when they feel like

it. Sometimes, I get it early. Other times, I get it at half past 8:00, quarter to 9:00.” This ad-hoc approach to the breakfast mealtime made it difficult for residents to determine when to get out of bed, which impacted their involvement in organised activities.

Resident participants who had breakfast in the dining room stated they were up and ready and seated in the dining room when breakfast was served at 8:00 am. Some participants expressed that when they had to get up for breakfast, it was not their preferred time to be up in the morning. As one participant stated,

‘Well, we go to breakfast at 10 to 8:00. So, we have to get up earlier. I want to get up at 9:00. Quite often of a morning, I wish I could stay in bed. I look forward to my morning tea because I don’t feel like eating breakfast.’ (Daphne)

Other residents also expressed that they needed to get up early to ensure they were in the dining room before breakfast was served. None of the participants expressed that they were given options for the time they could have breakfast. When asked if they would like to choose their own time for breakfast, they did not think this would be a reasonable thing to expect.

‘In the mornings, I need to go to breakfast so I get up at 7:30.’ (Dora)

The early serving of dinner in the evening also impacted the time participants chose to go to bed at night during the intervention. Participants suggested that they had dinner much later at home and, as a result, had gone to bed later. However, with dinner at the facility being served at 5:00 pm, they went to bed earlier to align with the routine they had at home. Other participants suggested they went to bed earlier than they preferred due to the evening medication administration routines. Daphne, a resident at the facility for five years, emphasised she went to bed earlier than she had at home because of the time she was given her night sedation.

‘If I wanted to watch a show, I’d watch to the end, but here, I don’t, because the staff bring my sleeping tablet at 8:00 o’clock.’ (Daphne)

Participants reported that medication routines not only had a significant impact on the time residents went to bed but also on their evening settling routine. Routines they had used to prepare for sleep were affected, such as watching a television program, reading a book, and using tablet devices. These activities were eliminated or impacted because of the time of the administration of night sedation.

8.4.2 Conformity to Facility Routines

During the interviews, resident participants responses to bedtime routines raised restrictions to other areas of their daily lives. However, they expressed that it was reasonable for them to conform to facility routines. They expressed that they would not expect organisational routines to be changed to support their individual choices. Participants suggested that in a facility with so many residents with a wide range of preferences and care needs, it was unjust to expect a variety of choices to be provided for individuals. There was a range of facility routines that participants implied they conformed to, for example, mealtimes and choosing to attend activities when they did not want to.

'It's hard, we're all different and we all like different things. It's like when people complain about the food or what we should have. What another person likes I might not like. I think older people like to get up a bit later. But when you've got 120 people, how can you do it? They've all got to be given breakfast. I don't think they're able to do it.' (Dora)

Responses to questions relating to choice indicated resident participants were resigned to accepting what was provided by the facility staff to avoid being a burden. They described staff going above and beyond reasonable expectations and were hesitant to make any negative comments about their care, or the choices they were given by staff concerning their care. Participants implied it was inappropriate to impose extra work on top of routine care for staff, who they perceived as already very busy. For example, participants suggested it was too much to ask of staff to assist with some of the nighttime settling routines they had used at home. These included having a warm drink or snack before bed. One resident participant stated she found a cup of tea and raisin toast helped her sleep but did not

like to ask for these to be provided by staff in the facility. Resident participants described feeling ‘*bad*’ ‘*unfair*’ and ‘*selfish*’ when asking for anything that was not routinely offered.

Participants reported that their concern over not wanting to bother staff with their needs resulted in them remaining silent; this included not using the call bell when they had needs to be attended to. Despite some participants having high-care needs, they were still disinclined to ask for assistance or make requests to meet their needs. Their choice not to speak up for their wants and needs, remaining quiet, resulted in unmet needs. They would rather tolerate pain, boredom, and discomfort than concern staff with what they required. As articulated by one participant,

‘I mean they bend over backwards to do their best for us. And I’m just so grateful for the wonderful care I get. So, I don’t ask for anymore. I don’t think it’s fair to do it. I mean, they’re only human. I’ve put up with things rather than ask about it. I could count on both hands how often I’ve rung the bell since I’ve been here.’(Bertha)

Also, not speaking up resulted in some participants assuming restrictions without checking the validity of their perceptions with staff and management. These perceived risk-based restrictions transpired into the participants’ sense of loss of control and freedom and impaired decision making. One resident expressed,

‘If we’re responsible enough, we could go down the shop and get a taxi and go to the beach or something or go into a cafe. I don’t know whether you could do that or not. I’d like to try. I’d like to have the choice to go out when I wanted to. Whether I could or not I haven’t asked them.’ (Nancy)

Many participants suggested they missed the opportunity to be able to go out and meet family and friends for coffee or a meal. When participants were asked if they would attend a café if there was one set up at the facility, the majority stated they would. Others, however, suggested that this would not replace going out of the facility, but did not feel empowered to do so. Conformity led to expressions of

overwhelming loss of autonomy over activities the participants had regularly engaged in before their admission to the RACF.

'I want to go out for lunch with some friends, all of those, just all those regular things I used to do. You miss the real things.' (Dora)

Most of the participants mentioned they missed having control over simple things, such as being able to buy their own clothes, as family and friends had taken over the purchasing of these for them. This reliance on others led to conforming to the choices made on their behalf. For many of the participants, the clothes they had chosen to wear were part of their identity, and the loss of being able to choose their clothes had a deep impact on their sense of self.

'Losing your independence is the killer...I miss deciding what I do with my money, deciding if I can go shopping, buy the clothes that I want. If I need a bra, how do I get a bra, you know.' (Dora)

'My daughter...buys all my clothes now. I'd like to go out and buy some clothes.' (Bertha)

Participants expressed confusion around rules and expectations, highlighting that the institutional routines shaped their behaviour and impacted their sense of autonomy. They described that a lack of information about the facility's rules and processes left them feeling disempowered and confused, particularly in the transitional phase into the facility. They suggested this had a significant impact on how they adjusted to life in the facility. Participants expressed that it would be helpful if the facility staff provided clearer information on how things 'worked' in the facility, such as laundry, where to sit in the dining room, how appointments were made, and how often the doctor visited. They did not know what was appropriate and acceptable. Participants also recommended that more staff follow-ups after admission, checking how residents were settling in, would assist with the transition into aged care.

'It would be nice if somebody asked you, checked up how you were, did you know how everything worked. If somebody told you how to do your washing. How things work. Or to check up maybe for a little while, are you coping? Just if you had somebody to talk to, somebody you could go to.'

So that you don't have to tell your family 'Oh gosh, I can't stand this place, this that and the other' you know. Or why you're feeling or what's making you feel. Because it's a big change in your life.'
(Dora)

Resident participants who had lived alone before admission voiced that they felt compelled to conform to join other residents in the dining room for meals. This had been daunting for them, particularly when they first moved into the facility. They did not feel they were adequately prepared for this by the staff. There was no introduction to other residents, they were left to navigate this alone. During an observational session, one resident who had lived at the facility for six months stated to the researcher that she still dreaded going to meals, and she was anxious about it constantly. No one had discussed potential variations to meal arrangements with her at any time during her stay, so she felt disempowered to make choices about where she had her meals.

Participants expressed a resigned helplessness in accepting their care and routines without questioning. They conveyed a belief that they were powerless to change their situation, which led to a sense of submission and giving up. A loss of motivation and self-deprecation were expressed, implying low self-worth. An example of this is:

'Well, they're coming in giving me pills all the time. Half the time, I don't know what they're for. They give them to me during the day. When I go to bed at night, I don't know. There's that, but no, I'm alright. I could easily let go and groan and carry on, but what good does it do? I'm probably an old pain in the neck, really.' (Nancy)

The participants had a general apathy, which denoted that they were not empowered to question their care or routines or to have a say in the services provided. There was an absence of collaboration, and a deficiency of trust between staff and participants, which prevented participants from feeling safe to speak up.

8.5 Theme 2: Factors That Promote Well-being

Findings related to this theme revealed that participants appreciated the opportunity to attend an evening program. Aspects of the programs they valued were the smaller group sizes and the choice of programs. They indicated staff were supportive of their attendance and encouraged their participation. Lifestyle activities in aged care facilities should be designed to promote individual well-being through socialisation, physical activity, and creativity. The resident participants' experience of the evening activity programs implemented during the resident intervention study, and other lifestyle activities at the study site, was explored. Questions explored the resident participants' perceptions of being provided the choice to attend an evening program. There was further examination of the variety of programs offered for residents to choose from, and whether this impacted their attendance. Resident participants also provided insight into strategies and activities they implemented to enhance their social connectedness. Staff support in enabling participants' involvement was also explored. Three sub-themes emerged under the theme of factors that promote wellbeing: (1) building connections, (2) staff support of engagement, and (3) social enrichment through technology. Each sub-theme is further detailed.

8.5.1 Building Connections

Participants who joined the evening programs highlighted the benefits of attending the programs. This group indicated that residents were often strongly encouraged to attend daytime activities with less emphasis on their choice to attend. Conversely, the evening programs were offered as a choice to residents, and they reported this made them feel they could choose to join in the activities rather than being compelled. The researcher observed that many of the daytime programs had attendees of 15 and above. In comparison, the attendee numbers for the evening programs were 6–12.

The number of attendees at the evening programs was reported by participants as being small when compared to the number of residents attending daytime activity programs. Participants reported that they chose to join the evening programs because of the smaller group sizes, which helped them to build connections with other residents. Resident participants suggested that smaller groups stimulated

more intimate conversations, which promoted a closer connection between the attendees. The researcher observed this intimacy, particularly during the art classes. Resident participants were observed to use encouraging and supportive language when critiquing each other's paintings. There were often very personal conversations between participants. Participants shared stories that they disclosed they had not shared with anyone else before. It was suggested by one of the participants that being part of a smaller activity group gave them a sense of unity, which led to feeling confident in sharing experiences.

'You become more united I think when it is a smaller group. If it's too big a group, you can't have that dimension.' (Narelle).

Other residents further suggested the intimacy of the group could be attributed to the shared vulnerability in expressing themselves through an artistic form. Narelle expressed her sense of vulnerability, *"Very vulnerable. You don't know—I mean, we've never done anything like that before, and you are almost scared to put the paintbrush on the thing."*

8.5.2 Staff Support of Engagement

Participants described their experience of staff support of resident participation in the evening activity programs, which included encouragement to attend the programs and reminders of upcoming activities. Resident participants suggested that staff would remind them of the programs at dinner time and would explain what activity was happening each evening. Staff support for engagement in nighttime activities was observed by the researcher. The Leisure and Lifestyle evening program coordinator was observed going around the facility after dinner, inviting individual residents to attend the programs. Some evenings, an announcement to remind residents of the programs and the times they were to commence was made over the Public Announcement (PA) system. The researcher also observed staff actively taking residents who required assistance to the evening programs.

'Staff ask me if I am going to go or not, you know. And yes, I think they did encourage me.'
(Nancy)

'Often S would come down and whoever staff was on and say, "Are you going to the thing tonight?"' (Narelle)

However, not all participants experienced the same support from staff. Some participants suggested they had not been advised at any time that the programs were being conducted. This sentiment seemed to be expressed by resident participants whose rooms were located furthest from the activity room. They appeared surprised that the programs had taken place, despite them knowing that this was to be one of the implementations during the experiment. One resident participant who was dependent on staff for mobility stated,

'Didn't even know they existed. I didn't know they were on or not.' (Bertha)

Responses from participants also indicated that staff support was impacted by what they perceived as high staff turnover. They expressed that newer and potentially less experienced care staff were less inclined to provide support and encourage residents to make choices and participate in activities.

'Well, we're getting a lot of new ones, that's the only thing. The younger ones, I don't think they're caught up properly yet.' (Daphne)

Participant responses inferred that staff support and encouragement were important for resident participation in the evening programs, for both those requiring assistance and those who were ambulant. Without staff support, participants were left uninformed about the activities, so they were unable to choose whether to attend the programs.

8.5.3 Social Enrichment Through Technology

During the discussion of activities in the interviews, technology emerged as a means of enhancing the participants' autonomy. Features of mobile devices assisted residents in choosing how they stayed connected with family and friends outside the facility. Participants chose Facetime to visually connect with family and suggested it was a particularly important way they chose to stay connected with

grandchildren and great-grandchildren, who were often too busy to visit. Technology gave them a sense of control over how they maintained valuable relationships. It had become significantly important during the COVID-19 pandemic lockdowns, where visitation was not allowed or limited in the aged care facility. Participants were also able to choose to connect through messaging, either via email, text messages, or Facebook Messenger. The researcher also observed that residents with impaired mobility who wanted to contact family and friends via video calls on mobile devices were being assisted by staff.

Other ways participants chose to connect with family using their mobile devices were through a variety of games. Scrabble was one game that resident participants played, not only with family members and friends, but global strangers. They expressed that the games offered them the opportunity to have online conversations with people they had never met, giving them a broader sense of connection. One participant also used her device to order food of her choosing to be delivered, which was encouraged by her family.

'I like to come back here after breakfast, catch up on my iPad, who's played scrabble with me and who sent messages to me.' (Daphne)

Participants also expressed that technology gave them a range of choices to connect more broadly with the outside world. It enabled them to make decisions around the news content they accessed. They articulated that it was a way they chose to keep up to date on the regular COVID-19 regulation changes and the latest local and global news, which helped them to feel informed and connected with what was happening in the world.

8.6 Theme 3: Barriers to Engagement

Participants discussed limitations to the choice of activities conducted in the facility. Discussions focused on the type of activities offered and how differing interests were catered for. Two sub-themes emerged under the theme of barriers to engagement: (1) adapting to cognitive diversity and (2) loss of meaning and purpose.

Findings with regard to this theme revealed that resident participants' choices to attend activities targeted at different interest groups were limited. They proposed that residents with cognitive impairment attend programs beyond their capacity, which resulted in disruption to the activity. During discussions, it was suggested that there was also a lack of residents being engaged in activities that were meaningful to individuals. Each subtheme is further detailed.

8.6.1 Adapting to Cognitive Diversity

Separate activities designed for residents with varied interests and abilities were emphasised as important to resident participants. They articulated that many of the activities were offered to all residents regardless of their cognitive abilities, which impacted the activity for others. Resident participants hesitantly expressed that attending activities with residents with cognitive impairment was particularly challenging. They suggested that some programs should be organised throughout the week for residents with cognitive impairment that target their specific needs. Other programs could then be organised separately to meet the needs of residents without cognitive impairment. These suggestions were not portrayed with malice; their hesitation and compassion indicated an underlying conflict between their moral contemplation and personal needs. As stated by Dora:

'I'm fortunate that I haven't got it (dementia) at this stage but I'm aware it could happen.'

The researcher observed regular interference and disruption from residents with cognitive impairment during the evening programs. Cognitively impaired residents who were restless in the evening were brought to some of the programs to try and settle and manage their behaviour; this took the attention of both staff and residents away from the activity. The participants in the art classes were observed to be more cohesive, engaged, and productive when the group was there to enjoy the activity, and less about occupying restless residents.

'Well, I think there was a couple of times, we had somebody down (in the evening program) that is not quite right, you know, they're almost disruptive. They don't mean to be. I noticed in the church

service this morning, and it was lovely, but there were two ones that kept wanting to get up and go out for their own certain reasons. And they have to stop and take them out. And it's disruptive to the program; but you can't stop them from wanting to go. But half the time they don't know what they are going to.' (Narelle)

Participants suggested that if the facility provided focused activities for groups with different interests, it would be beneficial to all residents; this would result in activities being more engaging and meaningful and would promote participant engagement. Focused activities could include specific activities for residents with not only cognitive differences but also physical differences. Some participants enjoyed more physical activities, such as bowls, and felt there could be more of these types of activities for residents who would benefit from them.

8.6.2 Loss of Meaning and Purpose

Questions during the interviews raised broader concerns relating to activities offered in the facility and the loss of doing things they loved and enjoyed, which dignified them. The lack of meaningful activities to choose from, particularly those that promote independence, joy, and environmental mastery, was discussed by participants. They expressed that many of the lifestyle activities were menial, non-stimulating, and lacked enjoyment and purpose. Participants reported that there was a deficiency of choice of activities that they felt were '*fun*', which was needed to dilute the sadness and despair they were surrounded by.

'The answer as far as I'm concerned is fun. The more you can have it here the better. Because you're surrounded by sadness, really. I mean, my heart feels for Jim and Sarah and, ah, you know they haven't got long to go. Myself, who knows?' (Narelle)

Bertha, who had come from a farming background, expressed that she missed activities that brought joy to her. The lack of activities that interested her led her to not get involved in organised activities and be predominantly inactive; this had a significant impact on her mental well-being.

'I enjoyed work. I'm not a person that likes sitting around doing nothing. That's all I do now. I get down on a few days, but it doesn't last. Just depends how I'm feeling within myself and my body that I get down a bit. I'm alright! You can't expect other people to make you happy. I could easily moan and groan and carry on, but what good does it do?' (Bertha)

Participants expressed a lack of resident involvement in the running of activities. One resident participant stated she missed her contribution to the church, particularly the singing. She stated she had not sung for a long time and had never been invited to participate in group singing while living at the facility. Another resident participant mentioned that she wasn't given the opportunity to spend time outside very often. She had enjoyed feeding birds when she lived at home and would like the opportunity to sit where she could enjoy watching the birds.

Some participants expressed that there was a lack of activity in general. Another participant suggested there should be more activities that promote a sense of belonging. She suggested this could be achieved by giving residents the choice to be involved in drama. She indicated that there were residents who had acting talent who would feel engaged and valued by having the opportunity to express themselves through drama. She also stated that a shared activity like this promotes a sense of belonging and of family.

'Yes. I mean, what I'd love to see is a drama group. I mean, I think there's quite talented people around, you know. And doing a play is fun. And somehow, you become a family doing it.' (Narelle)

Responses from the participants implied that they would like to join in activities that had a purpose and were meaningful, particularly activities that replicated their interests before they moved into the facility. Participants who attended the evening programs articulated that they enjoyed the difference between the activities offered in the evening compared to the activities during the daytime. The evening activities were based on residents' suggestions and included board games, movie nights, and art classes.

Participants suggested daytime activities were designed to be attended by most residents and less specialised. Such activities included exercises, sing-alongs, and simple arts and crafts.

Participants expressed they had been enriched by the more advanced concepts they were taught in the art classes, compared to the more simplistic crafts they had been involved with in the daytime activities. The participants inferred there was a calm atmosphere in the evening that was conducive to quiet creativity. There were fewer distractions than during the day, which allowed participants to be absorbed in the activity. Residents indicated that the activity provided them with a greater opportunity to learn a new skill that they had not anticipated developing in the later stages of their life.

'I didn't expect to learn how to paint at my age'. (Narelle)

They revealed they were pleased to share their artworks with family members. Participant Daphne shared that her son had taken one of her paintings to hang on his wall at home. Participant Nancy proudly shared with the researcher some of the paintings she had completed during the program. Resident participants also expressed that the art classes had inspired them to paint in their own time, enriching their time at the facility (see Appendix L for samples of participants' paintings produced during the evening programs).

'I enjoyed it (the evening program). I used to go down to the board games and craft—three nights I used to go down.' (Daphne)

Interviewed participants who chose not to attend the evening programs explained they preferred finding their own entertainment in the evenings. They favoured activities they had pursued before entering the facility, which included watching the news, reading books, or going to bed earlier. These residents did express, however, that they still appreciated having the choice to attend an activity in the evening, even if they chose not to.

8.7 Theme 4: Confinement and Isolation

In response to the questions relating to choice, discussions evolved around the aspects of the environment in the aged care facility that affected the resident participants' sense of autonomy. Many articulated that some environmental characteristics impacted them, particularly their sense of confinement and isolation.

Several aspects of the facility environment impacted the resident participants' sense of autonomy and isolation. The securing of access doorways within the facility was particularly emphasised. Resident participants described feeling locked in and confined, knowing that all doorways within the facility were always secured by swipe access or keypads.

'The feeling of being locked in and I think that's something I don't like the feel of, that I'm locked in. And I try not to think about that. But it's still there.' (Dora)

'I just feel confined. I'd like more choices in going out when I feel like it. If I wanted to ring someone up and go out, I could. I'd like to have the choice to go out when I wanted to.' (Nancy)

There was also mention of a lack of natural lighting in the facility, which increased their sense of confinement. All internal areas of the building had very few windows, resulting in artificial lighting being used day and night. This included corridors that led into residents' rooms, activity spaces, and communal sitting areas.

'We live under lights a lot, all the lights are on all the time, there is no natural lighting.' (Dora)

Also highlighted was the lack of other residents being visible within the facility as the participants walked around common areas. Participants mentioned that there were long periods of the day when most residents were in their rooms behind closed doors. The researcher observed that these times were between three and five o'clock in the afternoon and from six o'clock in the evening onwards prior to the evening programs being conducted. Participants suggested this gave them a sense of isolation and loneliness.

'I go for a walk (out of my room) and everybody's in their room. I could go out there and not see anybody.' (Dora)

One participant identified that the unnatural silence from a deficiency of external sounds made her feel isolated from the outside world and had a significant impact on her well-being.

We live inside too much...it is the silence...not even a dog barking somewhere. (Dora)

The lack of normal daily sounds left participants with a heightened longing for a normality that the facility did not provide. Their responses indicated they had a sense of detachment and exclusion from the outside world.

8.8 Conclusion to the Chapter

This chapter presented the findings of the study as they related to Research Question 1 for the resident interview component of this study. A description of the participants was provided, and the four themes were emphasised by quotations of participants and field observations: (1) impact of facility routines, (2) promoting wellbeing, (3) barriers to engagement, and (4) confinement and isolation.

Findings suggested that resident participants' choices of bedtimes were limited by facility routines. These routines were predominantly meal and medication administration times. Resident participants expressed that due to the range of needs for residents, they could not expect individual choices to be catered to. They cited concern about overloading staff they perceived to be busy providing good care and remained silent regarding their individual needs. They did not think it was reasonable to change facility routines to meet the needs of individuals.

The evening activity program had mixed reviews from the resident participants. Some resident participants preferred to do their own activities in the evening rather than attend a group activity. Resident participants who did attend the programs would have been happy for the programs to continue after the study period. They enjoyed the variety and had no suggestions for changing the activities that

were offered. They particularly appreciated the smaller group sizes that participated in the programs, expressing that it created an intimacy amongst the participants.

In the general discussions related to activities, it was revealed that some of the resident participants found it difficult to share activities with cognitively impaired residents. Although resident participants were hesitant to discuss this, they felt it was important to mention as it had an impact on their enjoyment of some of the activities. They specified that the behaviour of some of the cognitively impaired residents could be disruptive. Some of the resident participants stated they would sometimes not attend programs because they found it difficult to engage and join in conversations with cognitively impaired residents.

Many of the resident participants identified that they missed activities they had previously enjoyed. These activities included church involvement, bird feeding, meeting friends and family in a café, and shopping. One resident participant articulated that she missed control of her own money. Participants also discussed the lack of fun that could help to counteract the paramount sadness that surrounded them.

Resident participants identified that aspects of the environment affected their sense of autonomy, particularly concerning the secured doors of the facility. They felt they were locked in and unable to choose when they went out. One of the resident participants described feeling locked in and confined by the lack of natural lighting in the facility, identifying that artificial lights needed to be left on all the time. There was also mention of the silence due to the lack of normal suburban sounds such as the barking of a dog. There were suggestions that a larger outdoor area would give a greater sense of freedom.

Some of the resident participants found the transition phase into the facility had been challenging. Resident participants suggested there could be a designated support person to help residents adjust to the change of living in the facility. There was no follow-up after admission to check on the

progress of new residents with the transition and determine if they had any questions related to the processes within the facility. Others stated that they were not prepared for the shared dining room experience; this was daunting for those who had lived alone for a prolonged period.

In the following chapter, the results of the staff participant interviews are presented. This study consists of the analysis of staff participants' transcripts from the aged care facility concerning their confidence in recognising symptoms of depression, their experience of the evening activity program, and providing residents with choices.

Chapter 9: Results for Staff Interviews

9.1 Introduction to the Chapter

In the previous chapter, an analysis of the resident interviews with details of the overarching themes and subthemes was presented. This section of the study used interpretive methodology for the resident interviews. Data was collected to address the three objectives of the study. In this chapter, the study findings are provided, commencing with a description of participants' characteristics, followed by details of the overarching themes: (1) confidence in recognising depressive symptoms, (2) experience of the evening activity program for residents, and (3) catering to residents' choices. The themes of this component of the study are represented in Table 25. The implication of each theme is demonstrated with select quotations from staff interviewees using pseudonyms.

9.2 Participant Characteristics

Seven staff members participated in semi-structured interviews. Three of the participants were Assistants in Nursing (AINs), two participants were Leisure and Lifestyle (L & L) staff, one was from nursing management, and one was from services management, also in charge of the Leisure and Lifestyle team (refer to Table 24). Their length of employment at the facility ranged from one year to seven years. The staff participants years of aged care experience ranged from two to thirty years. Two of the participants identified as male, and five of the participants identified as female.

9.3 Objectives

This section of the study had the following objectives:

- to investigate staff insights into their knowledge of depression in older persons,
- to interpret the perceptions of aged care staff in providing residents with choices in their daily lives,
- to evaluate external factors that impact residents' choice, and
- to examine the impact and benefit of providing an evening activity program.

Table 24*Staff Interviewees Roles*

Facility staff roles	Number of participants	Sex	Years of experience
Nursing management	1	Male	2 years
Services management	1	Male	3 years
Leisure and Lifestyle	1	Female	7 years
	1	Female	5 years
Assistants in Nursing	1	Female	7 years
	1	Female	1 year
	1	Female	1 year

Table 25*Thesis Research Questions and Themes for Staff Participant Study*

Research question	Themes and sub-themes
Research Question 5	Theme 1
What is the staff experience related to the implementation of choice of bedtimes and an evening activity program?	Confidence in recognising depressive symptoms
	Theme 2
	- Experience of the evening program for residents and staff - A choice of activities in a calm atmosphere - Benefit versus disruption
Research Question 6	Theme 3
	Catering to residents' choices

Research question	Themes and sub-themes
Staff perceptions of factors that impact residents' ability to make choices?	• Staff time constraints • Staff knowledge and understanding • Tunnelled approach • Impacts of family involvement

9.4 Results for Theme One: Confidence Recognising Depressive Symptoms

Discussion revealed a variation in knowledge and confidence in responses to interview questions relating to the ability to recognise symptoms of depression in residents. Mixed responses were reported based on participants' prior experience and learning. Most of the staff participants stated they had attended the depression training conducted in the cross-sectional questionnaire component of the study.

Staff participants suggested that knowledge of depression and confidence in recognising symptoms of depression were impacted by the length of time they had worked in the aged care industry. Care staff participants who had one year of experience reported having limited knowledge and confidence. They tended to refer to depression as sadness, loneliness, and social withdrawal, without considering the length of time symptoms were present and the combination of factors that would indicate depression.

'So the symptoms is like when they're sad, and they feel not talking, they want only to stay in the room. Yes. And then, yes, that's the one that I recognise.' (Mandy, carer with 1-year aged care experience).

'I'm not really confident actually like a hundred per cent because this is my first year in aged care. But I have observed if they are really sad or lonely because their family is far away or no one visiting them, something like that. And I feel like – and also, even if they are in facility, but of

course, no one talk to them or limited chatting, something like that, they feel like they are alone.'

(Mary, care with 1-year aged care experience).

Most staff participants expressed that knowing the residents well assisted in recognising changes in a resident's behaviour that could indicate symptoms of depression. They described that providing continuous care to residents in a specific area of the facility increased their confidence in identifying symptoms. A care staff participant with 7 years of experience in aged care, stated,

'I wouldn't say extremely confident. I'd just say you notice. I think you just notice when they're a little bit quieter. And if you've known them for a while, that's the trick. If you know them or you'd had experience in that wing for a long time, I think I would pick up pretty quick smart that things weren't going well. So, I think I've been pretty well confident for residents that I know.' (Jane, carer)

Time constraints were also considered a factor in whether staff were able to identify changes in residents' behaviour. Having the time to build a rapport with a resident increased the likelihood of that resident opening up about their feelings and concerns with staff. Many of the staff participants stated they were time-poor and did not have the time to spend with the residents to find out how they were feeling. As stated by one of the L & L staff participants, *'How confident am I? I am pretty confident. What I'm lacking of is the time to be that person for me to consider what she's going through.'* (Ronnie). Another L & L staff participant expressed that she felt residents were more likely to open up to her about their feelings than nursing staff because she had more time to spend with the residents. She also believed that not being involved in delivering personal care was conducive to forming a friendship with residents that promoted confidence for the resident to be more open about their feelings.

'I get to spend more time with our residents in terms of this and I don't just do the care. So we're the part that they can open up to us and they're comfortable saying things that stay just between me and them. It's like a companionship'. (Sam, L & L staff participant)

Training on depression was also recognised as being important to build confidence in recognising symptoms of depression. Care staff and L & L participants acknowledged they had not received formal depression training during their qualification course. Some staff participants suggested that this lack of training resulted in a misunderstanding of the real symptoms of depression.

‘A lot of staff made a mistake, once they see the resident, they just don't want to come out and they think this resident is already depressed. But some residents, with my experience, some resident, they just prepared to be in their room and that's their comfort zone. And unlike the other residents who are really, truly diagnosed with depression.’ (Sam, L & L staff participant)

Participants who had attended the in-service training session during the staff knowledge of late-life depression questionnaire study suggested that they had a better understanding of the signs and symptoms that may indicate depression in the residents.

‘We've had training and what we need to look at and what to pick up and things like that. Yes. Yes. And there's certain signs that are there that they don't come out anymore. They're probably not eating so much, they're not just staying in their room more and all that sort of stuff. Yes. We've had training on it.’ (Jane, carer)

When care staff participants were asked if they knew what to do if a resident is depressed, most advised they would refer the resident to the registered nurse. They also recognised the importance of ongoing monitoring of symptoms and referral as required.

‘Straightaway to the RN and then make sure that always check with them to make sure they are safe.’ (Mary, carer)

9.5 Theme Two: Experience of the Evening Activity Programs for Residents and Staff

Staff participants were asked about their thoughts on the benefits of the evening program for residents. This question was designed to explore staff perceptions and their experiences of the resident intervention evening program to answer research question 3. Responses suggested that the choice of

attending an evening program had a range of benefits for residents. Two sub-themes emerged under the theme of experience of the evening activity program for the residents: (1) choice of activities in a calm atmosphere and (2) benefit versus disturbance

9.5.1 A Choice of Activities in a Calm Atmosphere

Related to this theme, staff participants reported that the evening activity programs had a positive impact on residents. They suggested it gave the residents a choice of activities in the evening when they would otherwise be alone in their rooms. Staff participants described that many residents who wanted to stay up later in the evening only had the television in their room to occupy them. There were usually no formalised activities provided to offer the residents an alternative. The evening programs not only gave them an alternative activity in the evening but also offered an opportunity for residents to socialise.

‘Because some residents don't sleep early sometimes, resident is just watching TV after dinner and then waiting until 10 o'clock to go to bed. But if they have something to do, at least they get to enjoy it as well.’ (Mary, carer)

‘What do they do after dinner time? They go to their room and watch telly and then go to bed and then it's another day again. Another choice they can have rather than sitting in their room’. (Sam, L & L staff participant)

Prior to the implementation of the evening program, staff participants stated that residents often complained that there was nothing to do in the evening. As stated by management staff participant Les, *‘They complained prior to the evening activities. There's nothing to do in the evenings.’* Staff participants expressed that even if residents chose not to attend any of the evening programs, they were still grateful to be offered the choice to attend had they wanted to.

‘If there's nothing to do, there's nothing to do and that's the one the residents jump on. They say there's nothing to do. It is great for the individual to be able to be offered to do something. The

ladies from my wing that attended were very happy with it. The ones that were interested and went along.' (Jane, carer)

'I think it has as much benefit for those who attended and those that didn't because there's a choice.' (Les, manager)

Staff participants also suggested the calmer atmosphere of the evening enhanced the residents' experience of the programs. They identified that some residents who rarely attended daytime programs chose to attend the evening programs due to the quieter nature of the activities. The evenings tended to be quieter than the daytime due to fewer service and management staff and less visitors. The success of the art classes was suggested to be attributed to the calmer evening atmosphere. One staff participant suggested that residents with cognitive impairment specifically seemed to become more engaged and focused during the evening.

'One of the things I found amazing was the art. The residents with dementia, it was stunning how focused they were. During the day they wander and are very unsettled. Disruptive to other residents. In the evening art program, they just became so focused. Maybe it's not as hustle bustle in the evenings. I can only surmise it is a lot calmer in the evenings. We've tried art classes with residents during the day and they're not as focused.' (Les, manager)

However, some participants suggested that residents with varying cognitive capacities would have benefited by being given separate activities. Participants suggested that residents with cognitive impairment had a reduced capacity for sitting through a program and would tend to start wandering, which impacted the enjoyment of the activity for other residents. The researcher of this study observed that when residents with cognitive impairment were redirected from the activity when they were restless, it was beneficial to the whole group. Specifically, unless additional staff assisted with restless residents in the art classes, it was apparent that it impacted the concentration and enjoyment of the other attendees. Resident participants were less likely to stay the full length of the program or to stay back and chat at the

end. The sessions appeared to be more valuable to all involved when additional support staff were available and assisting.

9.5.2 Benefit Versus Disruption

There were mixed opinions amongst the staff participants on the impact of the program on the staff. Some staff participants suggested that having residents occupied during the evening gave staff more time to perform their routine tasks. Staff participants also appreciated that the programs offered a diversion for residents with challenging behaviours, which were often exacerbated in the evening. These behaviours included wandering and agitation, requiring additional staff attention and support. Staff ratios on the afternoon shift were typically lower than on the day shift, so having some residents occupied in the programs allowed staff to focus on the needs of residents with high physical care needs.

'I think the staff enjoy the evening program. Because once the resident's out and they're out of their hands and give them time to do what they need to do as well.' (Ronnie, L & L staff participant)

Other staff participants inferred that the programs were disruptive to the care routines. Although they stated it was right for residents to be given a choice, they proposed it was not good to disrupt residents' routines, suggesting that this would 'unsettle' them. They indicated residents who would usually be in their rooms in bed chose to join the organised activity or connect with other residents in common areas. Participants reported that this change in resident activity brought about by evening programs, was more likely to interrupt the normal staff evening shift schedule. The researcher observed that prior to the implementation of the evening programs, there were no residents in the common areas after dinner. Most residents were in their rooms, many of them in bed by 8:00 pm. The researcher noted that while the evening programs were in progress, there was often more activity around the facility. These included residents gathering around the television in the lounge and having their evening supper together.

'On the other hand, I sort of thought, yes, it's good for the residents to actually be involved in doing something. But then that was throwing their little routines out too. Ladies would sit down in the foyer and would progress to "I'm not going back to my room. I'm allowed out here". Which is fine and they are. And they are by all means. But it more than probably unsettled them, it probably roused them a bit.' (Jane, carer)

Staff participants also highlighted the small number of residents who attended most of the evening programs. Although care and L & L staff did not see this as an issue, they indicated that management may view this as too costly and therefore unsustainable.

'But it is great for individuals to be able to be offered to do something else. But as a management thing, I would imagine, they're not going to have staff in there if there's only going to be three people. The numbers weren't running out the door to come to it. And there was a minimum of them that did.' (Jane, carer)

Management staff participants did not express that low attendance was an issue. Instead, acknowledging that the choice of attending evening activities was an important one for residents; this was particularly so as the programs were conducted during an interval of COVID-19 visitor restrictions, including a period of three weeks without any visitors being allowed in the facility.

'Only a small amount of the 120 residents attended. But then you've got to go, how many residents benefit through the daytime activities as well. But it's about choice.' (Les, manager)

Management staff participants did suggest, however, that the facility owners may view the low number of attendees to the evening programs differently from a budgeting perspective. They implied that the evening programs would not be continuing after the study due to budget constraints.

9.6 Theme Three: Catering to Residents' Choices

Staff participants were asked questions related to the importance of providing residents with choice in their daily activities and the potential barriers they perceived to providing choices. These

questions were intended to answer Research Question 6 by examining the importance that staff placed on providing residents with choice in their daily lives and the potential barriers they experienced in providing choices.

All the participants expressed that choice is very important for aged care residents but acknowledged there are barriers to providing residents with choice in their activities of daily living. Four sub-themes emerged under the theme of catering to residents' choice: (1) staff time constraints, (2) staff perceptions shaping resident choice, (3) barriers to providing choice, and (4) impact of family involvement

9.6.1 Staff Time Constraints

Time constraints, due to staffing ratios, were mentioned by all staff participants as impacting their ability to offer residents choices. Care staff and L & L staff participants expressed a genuine desire to give the residents more of their time and offer choices, but felt they were responsible for the care of too many residents to practically do this. Care staff participants felt that this was particularly so on the evening shift when staff ratios were at a minimum. They suggested that one care staff member could be responsible for the care of up to 30 residents on an evening shift. They deemed that this level of responsibility made it impossible to provide individuals with choices.

'How do you give everybody the time they want or need when there's one person on an evening shift to do all that they need? They're all fully assisted. I would love to give them the choice of when they can, or they can't do things. It's just not possible. So, if we've got the time, they can have the world. But we haven't got the time. Giving them total choice, the theory is terrific, but I don't know that it's actually practical that you would be able to give them choice.' (Jane, carer)

L & L staff participants expressed that they did not have time to provide individual choice of activities because there was an expectation that they would conduct large group activities. There was limited time allocated to individual one-on-one activities. As stated by L & L staff participant Ronnie, *'Time. We don't have the time like – how do I say? Like, individualities, like one-on-ones. It's pretty tough*

because you're running the whole facility and it's all about group activities.' L & L staff participants also acknowledged the reduced capacity of care staff to provide choice due to ratios.

Management staff participants recognised that time was an issue for staff. They expressed that staff had the time to meet the residents' physical needs, but not emotional or psychosocial needs. They suggested that residents with low care needs made their own decisions whereas the decision-making for residents with higher care needs was reliant on staff availability. Management staff participants inferred that staff ratios were determined by upper management budgetary requirements.

'From a practical perspective, resources, it's always resources. In terms of human resource, you don't have somebody who can sit with somebody for 20 minutes at a time to do whatever they might want to do. The low-care residents make their own decisions. The high care residents seem to – it's as much about staff availability as it is time.' (Don, nurse manager)

'Definitely time, staff would love to spend more time with their residents, but it's just not possible. They look after their physical needs. They don't have time really to look after their emotional or mental needs.' (Les, manager)

Participants' responses described the unfortunate reality that the primary focus for both staff and management is the physical care of the residents. Time and resources do not lend themselves to prioritising the residents' individual preferences. Staff expressed that there was a conflict between the care they wanted to provide and the care they were able to give.

9.6.2 Staff Perceptions Shaping Resident Choice

A sub-theme identified was the lack of staff knowledge and understanding that could lead to limiting residents' choices. Staff participants expressed that knowledge and understanding of residents and their capabilities specifically impacted the choices staff provided to residents. It was suggested that knowing the resident well was key to ensuring individual choices were catered for; this meant developing a relationship with individual residents and understanding their backgrounds.

'It's important that you consider the whole being. Not just what you see from the outside. You got to know their background.' (Ronnie, L & L staff participant)

'The first thing is understanding what (the residents) needs are. It's a case of identifying the resident and having a personal relationship with them.' (Les, manager)

Staff participants perceived that several residents were reluctant to express their choices because they did not want to be difficult. These residents accepted what was offered and conformed to routines to avoid being identified as problematic. As L & L staff participant Ronnie stated, *'The residents are thinking "I don't want to be a pest."'* Management participant Jan stated, *'I think the residents adjust their expectations to cope with what's available.'* Staff participants suggested that if staff took the time to develop relationships with residents, it would help build the residents' trust to feel safe in expressing their needs.

Some staff participants' responses inferred a preconception that providing choices to residents with cognitive impairment was limited. They perceived that cognitively impaired residents were incapable of making decisions for themselves and offering them choices was not necessary. These perceptions influenced how staff involved cognitively impaired residents in their daily care. Care staff participant Jane expressed that in her view, *'Some (residents) are better than others, but I don't know that it's actually practical that you would be able to give them choice.'* This perception was also reflected in the management participants' responses.

'I think (choice) is extremely important. Certainly those who are ambulant and have the capacity mentally to be able to make decisions, it's very important to offer them a variety of choices so they don't lose independence. For some of the high care residents it is not so important. What a resident might like to do and what they're capable of can be two different things.' (Les, manager)

Leisure and Lifestyle staff participants expressed that they felt care staff's perceptions of the capacity of cognitively impaired residents to make choices were a barrier to providing choices to residents

with impaired cognition. This perception resulted in residents with dementia often not being taken to organised activities.

'I think a lot of – in terms of the staff, maybe they think the residents are too confused to tell them what they want. That's one of the barriers, I think, in terms of them (staff) thinking they (residents) are cognitively incapable to decide for themselves.' (Sam, L & L staff participant)

9.6.3 Barriers to Providing Choice

The lack of staff insight and innovation in care practices was suggested as a barrier to providing residents with choice. Staff participants indicated that staff were more focused on accomplishing tasks rather than considering how they could creatively involve residents in activities that enhance their daily lives. Staff participants' responses implied that staff tended to provide a traditional model of care, concentrating on the physical care needs of residents rather than a holistic care approach.

'Probably an understanding of what they (care staff) might be able to offer in terms of thinking outside the box. A lot of the staff are tunnelled in the way they approach their work. So, it's seven o'clock or whatever it might be, it's teeth and into bed rather than saying, "Well, tonight's State of Origin, so let's stay up and watch State of Origin together," sort of thing. So yes, there's a definite, sort of, restriction on the way the staff feel what they can and can't deliver. It's their mindset really.' (Jan, nurse manager)

Staff attitudes were also a suggested barrier to offering residents the choice of activities. Staff participants inferred that some staff were less likely than others to ensure the residents they cared for were escorted to activities provided. Leisure and Lifestyle staff participant Ronnie expressed, *'We notice with our activities, we have lots of attendees with certain nurses or staff, different from another set of staff. So it's the attitude of the staff. I don't understand sometimes, they don't send them down to activities.'* Staff not assisting residents to attend activities was suggested to be from a lack of interest and care for the residents. Care staff participant Mandy stated, *'There are some staff they come here for the*

money. It's not about the care and love of the residents. From my experience, I think because some staff, they are lazy. They're only talking, they don't care.'

It was also discussed that a lack of staff respect impacted residents' choices. Staff at times disregarded residents' preferences and requests, suggesting they knew what was best for the residents. Leisure and Lifestyle staff participant Sam expressed an example of this,

This resident didn't like coloured nail polish and I saw her wearing a pink nail polish. I said to her, "Oh why are you wearing pink?" And she said, "Oh, one of the nurses put it on". "Why didn't you tell them that you didn't like that one?". 'I told them, but they said oh it's good for a change.'"

Staff participants also proposed that facility routines affected the residents' choice in their activities of daily living. It was indicated that routines were imposed on residents to suit staff and management, rather than the residents. These routines included bedtimes, bathing, lifestyle activities, and mealtimes. Routines for these daily activities were established around staff ratios, which were determined by management budgeting.

'A lot of them (the nurses) put them in pyjamas so early. And I know it works for the nurses. And it's not just in the evening but in the morning as well. They dress them up so early. Why could they not have enjoyed their normal day being in their pyjamas and eat breakfast. Why can't they have that choice? They just do it because it works for the care staff.' (Sam, L & L staff participant)

There was a suggestion from the management participants that there was an inevitability toward the institutionalisation of aged care facilities.

'We have 120 residents thereabouts, so to individualise preferences, it is a bit of a challenge. Their independence is taken away because, whether we like it or not, aged care facilities are a form of institutionalisation.' (Les, manager)

This perception by management implied that a focus on the physical care needs of the residents was fundamental to the facility's system structure, which reduced the capability of staff to offer choices to residents.

9.6.4 Impact of Family Involvement

Many of the staff participants advised that the influence of family members had both a positive and negative impact on residents' choices; this ranged from families enabling residents to make decisions to insisting that they participate in certain activities without a choice. It was indicated that families' support of choice was pivotal to empowering residents and promoting autonomy. Conversely, family members who intervened on behalf of the older person diminished their sense of autonomy.

'There are families that are very supportive. I mean, they're here every day. And they're taking them out for lunch and they're doing this and that. And then the other extreme, you get no visitors. So, they're (family) probably pivotal, I guess, in what can be achieved. The resident wants to do something and the family block that. I think that's more the case than the other way around, where the families are saying, "Do this, do that," and the resident says, "I can't." So, it's more the other way. The resident says, "I'd like to, but I can't."' (Jan, nurse manager)

'You can't just force them to do this and that. I hate it when families do that. Some families understand but some do not. They just keep pushing'. Ronnie suggested, 'We have a few cases where family would insist "mum should be doing this, mum should be doing that," interfering with the activities or care that they should be receiving, pushing their mum, 'mum should be eating this.'"' (Sam, L & L staff participant)

Staff participants reported that interference from family members was often motivated out of concern for the older person. Family members were concerned that self-imposed isolation would lead to depression and loneliness and ultimately to mental decline, without consideration for the resident's personality or living arrangements and interests before admission to the facility. They also suggested that

family members were anxious for their elderly relative to settle in and feel at home as soon as possible; this drove family members to force the older person into being involved in activities, believing that this would speed up the process. As stated by management staff participant Les, *'I've certainly heard of families becoming too involved. We have a new resident, and the family are desperate for him to feel at home and be active within the aged care facility. Our leisure and lifestyle team have come up to me and said, "They're wearing him out."*

9.7 Conclusion to the Chapter

This chapter presented the findings of the study as they related to the staff participant interviews component of this study. A description of the participants was provided, and the three themes were emphasised by quotations of participants and field observations: (1) confidence recognising depressive symptoms, (2) experience of the evening activity program for residents, and (3) catering for residents' choice.

Findings suggested that participants' perceived confidence and knowledge of depression were based on their experience and learning opportunities. Participants expressed that knowing residents well and building a rapport with them was key to recognising symptoms of depression. Staff time constraints and lack of training were identified as barriers to identifying depression in residents.

The evening activity program was perceived by participants to benefit the residents who attended. It gave residents a choice in the evening other than being alone in their room. Participants suggested there was a calmer atmosphere in the evening which attracted residents who did not attend daytime activities. Some participants recommended that offering activities for residents with varying cognitive capacities would have benefited all residents. There were mixed opinions on the impact of the evening program on staff. Some participants proposed that the programs provided diversion for residents with challenging behaviours which provided staff with more time to deliver care to residents with high physical care needs. Other participants, however, suggested the programs disrupted and disturbed staff

routines. It was highlighted that the participant numbers to the evening programs were low and could be considered financially unviable.

Discussions related to offering residents choices in their daily lives revealed participants perceived a range of barriers. Limited staff time based on staff ratios narrowed the option of choices staff could provide residents. Staff knowledge and understanding were also identified as impacting residents' choices; this included staff knowledge of residents' capacity to make decisions for themselves and a lack of understanding of individual needs which resulting in a lack of trust in staff by residents to express themselves. Furthermore, the lack of staff insight and innovation in care practices resulted in a tunnelled approach to providing residents with choice options. Family involvement was thought to impact choice, either positively or negatively, depending on their attitude.

In the following chapter, a synthesis of the quantitative and qualitative findings and their relationship to the literature will be presented. There will be an overview of the fundamental points that emerged from the mixed-method sequential explanatory study, including the quantitative findings and qualitative analysis of the resident participant interviews, the staff participant interviews, and the researcher observations. The included discussion points are factors that impact residents' choices in daily living, choice of activities, issues that influence resident engagement, and the aged care environment that affects the residents' sense of autonomy and environmental mastery.

Chapter 10: Synthesis of Findings and Relationship to Literature

10.1 Introduction to the Chapter

The previous chapter presented the findings of the staff participant interviews. In this chapter, a synthesis of the quantitative and qualitative findings and their relationship to the literature will be presented. There will be an integration of the fundamental points that emerged from the quantitative findings and qualitative analysis of the resident participant interviews, the staff participant interviews, and the researcher observations. The included discussion points are the impact of facility routines on autonomy, social transition, facility environment and processes impacting routines, and the impact of family on resident autonomy.

10.2 Synthesis of Data

The purpose of this mixed methods sequential explanatory study was to evaluate the impact of providing residents with a choice of bedtimes and attending an evening program on reducing depressive symptoms. It was also to further explore factors that may support or impede these choices and the residents' autonomy more broadly. Chapters 4, 6, 8, and 9 presented the quantitative and qualitative findings of this thesis. The following is an integration of the findings of the three studies: the resident intervention quasi-experiment, the staff knowledge of late-life depression cross-sectional questionnaires, and the resident and staff interviews.

As described in Chapter 3, a mixed methods approach combines the benefits of each method of research implemented to enhance the answer to the research questions (Schmidt et al., 2022). The explanatory sequential mixed methods design reinforces the research results by linking and building on the quantitative findings in the qualitative analysis (Schoonenboom & Johnson, 2017). Integration of data examines the relatedness that occurs between the different elements of a mixed methods study (Patricia Bazeley, 2018). Patricia Bazeley (2018) suggests that the integration of multiple data sources expands insight into the processes leading to the effectiveness, or ineffectiveness, of an intervention. The integration of the data in an explanatory sequential design is to make a connection between the

qualitative and quantitative studies, so the follow-up qualitative study can provide an effective explanation of certain results from the initial quantitative study (Creswell, 2022). Refer to Table 26 for a connection of the results for this explanatory sequential design study.

Table 26 Joint display representing connected results for the explanatory sequential design study

Study phase	Activity	Findings	Study Connections
Qualitative Study	Cross-sectional questionnaire of Staff Knowledge of late-life Depression pre- and post a short depression training session to answer the thesis research question 2	Found an increase in staff knowledge of late-life depression post a short depression training session	Increasing staff knowledge may result in increased opportunities for residents to be autonomous in the follow-up resident intervention study
Qualitative Study	Quasi-experimental resident intervention of choice of bedtimes and attending an evening activity program to answer the thesis research question 1	There was no significance in the pre- and post-intervention Geriatric Depression Scores	Identified participants (residents with mild depression and residents who did and did not participate in the evening programs) for follow-up resident interview study
Qualitative Study	Semi-structured interviews with selected resident participants to answer the thesis research questions 3 & 4	Participants described facility routines, risk-based restrictions, facility rules, helplessness, staff support, use of technology, group diversity, confinement, and leisure activities offered that impacted their sense of autonomy	Provided a greater insight into factors that impact residents' sense of autonomy
Qualitative Study	Thematic analysis	Emergent themes: facility routine impacts choice; factors that promote wellbeing; barriers to engagement; and confinement and isolation"	Provided a greater insight into factors that impact residents' sense of autonomy

Study phase Activity		Findings	Study Connections
Qualitative Study	Semi-structured interviews with selected staff participants to answer the thesis research questions 5 & 6	Participants described knowing residents helped to identify depression, and time constraints, staff perceptions and attitudes, lack of staff insight, and family involvement impacted residents' autonomy	Provided a greater insight into factors that impact residents' sense of autonomy
	Thematic analysis	Emergent themes: confidence recognising depressive symptoms; experience of the evening program for residents and staff; and catering to residents' choice"	Provided a greater insight into factors that impact residents' sense of autonomy
Integration of data	Interpretation of both datasets	Qualitative data helped to explain why the resident interventions may not have had an impact on depressive symptoms	Integrated to refine understanding

10.3 Discussion

The impetus behind completing a study to measure and explore the impact of the choice of bedtimes and an evening activity program in aged care comes from research on the significant effects of autonomy and self-determination on depressive symptoms in aged care residents (Chau et al., 2020; Knight et al., 2011). It is estimated that 49% of older persons aged 65 years and older living in Australian RACFs have symptoms of depression (Australian Institute of Health & Welfare, 2021). Late-life depression results in substantial suffering and has a high risk of recurrence (Chau et al., 2021).

As discussed in the literature review in Chapter 2, although several studies (Bostrom et al., 2014; Chau et al., 2020; Davison et al., 2012; Grace & Toukhsati, 2014; Jahouh et al., 2021; Knight et al., 2011; McCabe et al., 2021; Polacsek & Woolford, 2022) link depression with autonomy, there continues to be a gap in research relating to interventions that aim to reduce this risk factor for RACF residents. The evidence suggests that there is an absence of collaboration in decision-making with RACF residents relating to their care planning (Walker & Paliadelis, 2016). Preferences around bedtimes are dependent on facility routines, with many residents spending up to 12 hours in bed each night (Luff et al., 2011). There is also a lack of opportunities for aged care residents to influence the timing of their social activities. Therefore, it is important to have evidence of interventions that will provide a range of RACF residents with choices in their daily lives. As such, it was considered important in this study to implement a choice of bedtimes and a social activity program in the evening, to give residents more opportunities to make choices around their bedtimes and social engagement.

There is limited training of RACF care staff in identifying symptoms of depression in older persons, as described in more detail in the literature review. The evidence suggests that the critical insufficiency of care staff knowledge leads to low levels of symptom identification, which is a barrier to the effective management of depression (Lee et al., 2020). Studies examining the impact of providing depression training to aged care staff have demonstrated some positive results; however, there is a need for further research into the linkage between staff training and changes in care practices that improve the lives of

residents with depression (Davison et al., 2013). In the thesis research, staff training was provided to assess if enhancing staff understanding of depression would promote engagement in ensuring resident participants were given a choice of bedtimes and attending the evening activity programs.

10.4 Key Thesis Findings

In this section, the key findings from both the quantitative and qualitative data are examined, along with their relationship to other study findings. Findings that impact residents' choices in aged care from this study include facility routines, residents' conforming to routines, the staff and residents' experience of the evening program, staffing ratios, staff knowledge and attitudes, technology, barriers to engagement, facility environment, family involvement, and staff knowledge of late-life depression.

10.4.1 Resident Interventions

The impact of the quantitative study of resident interventions consisting of choice of bedtimes and attending an evening activity program on depression in RACF residents was measured using the Geriatric Depression Scale-15 (GDS-15) assessment tool. The residents' and staff perspectives on the impact of the interventions were later explored using semi-structured interviews. At baseline, half of the participants in the resident intervention study had mild to moderate symptoms of depression; this is a proportion similar to the average prevalence of 49% of Australian aged care residents having mild to moderate symptoms of depression in RACFs, as reported by the Australian Institute of Health and Welfare (Australian Institute of Health & Welfare, 2021).

Findings showed that the resident interventions did not significantly impact the depression scores of the participants, which may have been influenced by the small sample size, with a mean GDS-15 score of 4.43 at the control phase and 3.79 at the post-intervention phase. While the results are not statistically significant, they do highlight the potential for the interventions to support their wellbeing, as participants who attended some of the evening programs, 75% ($n = 6$) had depressive symptoms pre-intervention and 25% ($n = 2$) at post-intervention.

Other studies have demonstrated that implementing interventions promoting autonomy and opportunities for meaningful social interactions can have a significant impact on reducing depressive symptoms in residents of aged care (Bryant et al., 2020; Gleibs et al., 2011; Tan et al., 2023). Individual choice and the freedom to communicate personal preferences are key factors in the mental well-being of older persons living in aged care (Watkins et al., 2017). Choice in daily care, leisure activities, and food options is significantly related to residents' quality of life (McCabe et al., 2021).

Other important interventions promoting choice that have resulted in reducing symptoms of depression include involving residents in planning menus, lifestyle activities, environment, visiting hours, and the recruitment of new staff, and selecting new residents (Chen et al., 2007). A study on the use of Nintendo Wii® video games for the physical rehabilitation of aged care residents resulted in an increase in autonomy in activities of daily living and a reduction in the participants' symptoms of depression (Jahouh et al., 2021).

Although the sample size of the resident intervention study in this research thesis limits the generalisability of the findings, it contributes to the existing body of research by providing preliminary insights into the potential effects of resident-led interventions on depressive symptoms among aged care residents.

10.4.2 Impact of Facility Routines on Autonomy

The qualitative findings gave important context for the quantitative results. The resident and staff interviews revealed that many resident participants were not afforded a real choice of bedtimes or attendance at the evening programs during the quantitative resident intervention study. The findings indicated that staff practices and facility routines substantially influenced residents' preferences, particularly in relation to morning and evening mealtimes. There was tension between residents' preferences and their sense of obligation to conform to the organisation's routines. These findings

suggest that residents were neither consulted to determine whether their preferences were being respected nor offered alternative mealtimes or medication administration schedules.

A further constraint to residents' choice was their reluctance to voice their personal preferences. Resident participants perceived that articulating preferences was burdensome for facility staff, and such requests should neither be made nor expected. This perception fostered a sense of resigned helplessness, with residents simply accepting their care routines. Consequently, residents tended to conform to the institutional norms and facility rules rather than asserting their individual needs. Staff participants also acknowledged that residents might refrain from expressing their preferences to avoid being distinguished as difficult. Staff further noted that residents often adjusted their expectations to cope with what was available within the facility, reflecting the broader process of adaptation, where residents moderate their preferences to conform to institutional routines and limitations.

From the perspective of Self-Determination Theory (SDT), these findings illustrate how disruptions in resident-staff relatedness can inhibit the fulfilment of residents' psychological needs of connectedness and autonomy. The formation of therapeutic relationships, grounded in trust, is often impeded by staff concerns around completing care tasks (Jones & Moyle, 2016). This results in the residents' feeling disempowered to express their preferences, fearing they will be disrespected or perceived as burdensome (Moilanen et al., 2021). According to SDT, relatedness is most strongly experienced when there is a sense of understanding and connectedness within the relationship (Swinkels et al., 2025). The findings from this study, therefore, position resident-staff relatedness as a prerequisite for resident autonomy, suggesting that the routinisation of care may inadvertently undermine both trust and self-determination.

The interpretation of the findings highlights the importance of interpersonal relationships. The Person-Centred Care (PCC) framework (McCormack & McCance, 2006) offers a complementary perspective, emphasising the significance of fostering relationships to support autonomy as foundational

to well-being. Staff in this study acknowledged that residents may refrain from expressing their feelings to avoid being perceived as difficult and recognised the importance of developing trusting relationships to encourage open communication and support resident autonomy. However, institutional routinisation of care practices limited staff opportunities to develop meaningful relationships and build trust. These findings align with Standards 1 and 2 of the Strengthened Aged Care Quality Standards (2025), which require that providers use the principles of person-centred care to create professional and trusting relationships and support older people to be involved in partnership with their care (Department of Health and Aged Care, 2025).

Through this integrated theoretical approach, autonomy in aged care develops through a relational dynamic that must be actively supported by organisational structures. For residents to express their preferences and desires depends on the confidence they have that the staff will respect their choices without fear of repercussions. In this context, this study highlights that to achieve autonomy-directed care, organisational structures need to be reformed, shifting away from institutionalised models toward more flexible frameworks that facilitate and prioritise individual decision-making. Consistent with these findings, previous research similarly emphasises that individualised care is dependent on flexible organisation practices that prioritise autonomy, collaborative decision-making and individual choice over rigid institutional processes (Kosiol et al., 2024) The findings from the resident intervention study indicated there was no significant change in the resident participants' depressive symptoms following the interventions. However, findings from the interview studies of this thesis revealed that the evening programs promoted resident cohesion and built a sense of connectedness; this was attributed particularly to the smaller groups, which gave resident participants a sense of unity within the group and facilitated the establishment of a more personal relationship with co-residents. Staff participants also emphasised that there was a calmer atmosphere in the evening compared to the daytime, which enhanced the social benefits of the programs.

Viewed through SDT, these findings illustrate how the structure of lifestyle activities impacts the concept of an older person's relatedness in aged care. Self-Determination Theory suggests that aged care environments that promote relational connections enhance the well-being of the residents. When residents are supported to develop enjoyable co-resident contact and establish meaningful relationships in the activities, boredom and loneliness are reduced, promoting mental well-being (Diegelmann et al., 2018; Mail, 2022). Conversely, a lack of meaningful relationships and a deficiency of opportunities for social engagement are risk factors for depression (Mail, 2022).

The data from the resident intervention study indicated that participation in the evening programs was lower than participation in daytime activities overall. Staff participants viewed the low resident attendance at evening programs as a limitation. However, despite the modest participation in the programs, staff observed that more residents were out of their rooms in the evenings than before the programs were introduced. They noted that residents were drawn to the common areas by the activity and social atmosphere created by the events. The heightened evening activity suggests that the evening programs, although not widely attended, fostered an active and socially vibrant environment in the evenings that encouraged residents to leave their rooms and participate indirectly. The negative view of the staff participants on the low number of active participants in the programs demonstrated oversight of the potential benefit of passive participation.

The personhood theory and other research findings (Andrew & Wilson, 2014) support that any engagement in social activities, either passive or active, is as critical to residents' well-being as physical care. Participating in an activity as an active onlooker can be as important as being an active participant (Andrew & Wilson, 2014). With the long periods that aged care residents spend alone, there needs to be a focus on supporting residents to connect with peers in common areas of the facility throughout the day (Siette et al., 2022). Aged care residents desire more opportunities to interact with their peers through both organised activities and incidentally (Xiao et al., 2023).

Care staff participants reported that the evening activities disrupted established routines within the facility. Residents who would typically be in their rooms in bed were often drawn out of their rooms by the activity taking place in the activity room or common areas. Although staff acknowledged residents' autonomy to make such choices, they nevertheless perceived these deviations from routines as disruptive. This tension between maintaining order and supporting resident choice may have contributed to the low participation in evening programs. The findings here demonstrate how staff reluctance to facilitate residents' attendance reflects an institutional structure that promotes the preservation of predictable routines, highlighting the critical balance between institutional efficiency and person-centred practices. Previous research similarly demonstrates that aged care environments often give precedence to task-oriented routines, risk management and standardisation over individual choice and resident autonomy (Fazio et al., 2018)

From this integrated theoretical perspective, the development of meaningful relationships through lifestyle activities is achieved through aligning with the residents' interests and fostering cohesive and relational connections with fellow residents. The residents' ability to choose to engage with activities is dependent on the balance between organisational efficiency and person-centred practices. These findings align with the Strengthened Aged Care Quality Standards (2025), particularly Standard 7.1.1, which requires that aged care providers support and enable individuals to have social and personal relationships.

These findings affirm that to meet the residents' psychological need for relatedness and achieve person-centred care, providers are required to promote an organisational culture that places individuals' needs over routines. This may include structural reforms supporting staff autonomy and their capacity to facilitate more meaningful engagement. For example, implementing flexible routines would enable staff to respond to residents' spontaneous social and emotional needs and allocate extended time to relational care activities, which may help to reduce feelings of social isolation and loneliness, which are key risk factors for depression in RACFs. The Strengthened Aged Care Quality Standards (2025) provide essential

guidelines for entrenching this into aged care practice, highlighting the importance of enabling and supporting individuals to have meaningful social and personal relationships.

The findings of this thesis revealed how institutional routines and poor staff-to-resident ratios restrict the capacity of aged care staff to enact person-centred care. Staff participants described working under significant time constraints, when the need to complete tasks and documentation frequently displaced opportunities for meaningful engagement with residents. Although many staff expressed a genuine commitment to offering residents choice and respecting the preferences of individuals, these values were undermined by the organisation's structural constraints which favoured efficiency over autonomy. This tension between moral conviction and institutional restrictions aligns with national evidence from the Royal Commission into Aged Care Quality and Safety, which identified that time scarcity and workloads force staff to embrace task-oriented approaches at the cost of relational care (Batchelor et al., 2020; Ludlow et al., 2020).

Viewed through SDT and supported by recent findings in residential care settings (Bradshaw et al., 2023) that demonstrate how organisational environments in RACFs can inhibit the psychological needs of residents for competence, relatedness, and autonomy. When staff are given little decision-making over their workflow or timing of care, their professional agency is reduced (Connelly et al., 2025). This lack of autonomy reduces motivation and inhibits the emotional capacity for staff to support the self-determination of residents. As a result, residents' choices are mediated by the structural constraints rather than their own inclinations. As such, SDT suggests environments that promote relational connection and autonomy enhance performance and well-being; conversely, environments that are controlling perpetuate disengagement and dependency (Bradshaw et al., 2023). The findings from this thesis position staff empowerment as a prerequisite for resident autonomy, with both mutually reinforcing the dimensions of a relational care ethos.

Building on this understanding, the PCC framework (McCormack & McCance, 2006) extends the discussion by foregrounding the ethical and relational dimensions of care. Person-Centred Care emphasises fostering authentic relationships, supporting shared decision-making, and knowing the person as foundational for well-being and dignity. Staff in this qualitative study described that consistently being allocated to the same residents facilitated these relational methods. Consistency built mutual respect, trust, and familiarity which allowed staff to anticipate residents needs as well as tailor care more effectively. This mirrors McCormack and McCance's statement that person-centredness develops through relational continuity and recognition of the person beyond their limitations or diagnosis (McCormack & McCance, 2006). However, staff also recounted how organisational requirements and poor staff-to-resident ratios interrupted these relational dynamics. The pressure to complete tasks and maintain documentation requirements left little time for adaptation, reflection, or conversation, which are important in facilitating processes of PCC practice.

Leisure and lifestyle staff described further institutional barriers to person-centred care engagement. The expectation of management that activities were to be delivered to large groups rather than tailored one-on-one was reflective of a system-focused culture, where efficiency was valued over meaningful activities. Such practices threaten residents being reduced to just participants in organisational routines rather than autonomous individuals with distinctive identities. As Seah et al. (2022) suggest, the "cohort" model of activity delivery is inherently dehumanising when it overlooks personal preferences. The findings here indicate how the priorities of management can inadvertently sustain a culture of conformity, which limits both resident choice and staff creativity.

These findings align with the Strengthened Aged Care Quality Standards (2025), specifically Standards 1 and 2, requiring providers to support individuals to exercise choice and ensure that "aged-care workers are empowered to do their jobs well" (Department of Health and Aged Care, 2025, p.13). The Standards operationalise the theoretical principles of PCC and SDT, acknowledging that authentic resident autonomy is conditional on the competence and autonomy of those caring for them.

Viewed through this integrated theoretical lens, autonomy in aged care emerges not as an individual attribute, but as an organisational and relational dynamic. The residents' ability to make meaningful choices depends on an organisational culture that values staff relational engagement, judgement, and flexibility. When organisational systems support staff to act with mutual respect and discretion, the self-determination and dignity of residents are enhanced. Alternatively, when staff are restricted by managerial control or stringent routines, both staff and residents experience diminished agency, connection and satisfaction, which undermines the very foundations of person-centred practice.

In this context, this study asserts that achieving person-centred, autonomy-directed care requires structural reforms rather than the effort of individuals alone. The Strengthened Aged Care Quality Standards (2025) provide an important framework for entrenching these principles into everyday practice, accentuating that quality aged care is dependent as much on the empowerment of those providing it as on the rights of those receiving it.

The study findings indicated that staff presumptions relating to cognitive impairment contributed to the restriction of choice for residents with cognitive limitations. Staff participants held the view that residents with cognitive impairment lacked the capacity to make decisions or to determine their own preferences, thereby limiting residents' autonomy. Although staff emphasised the importance of promoting resident autonomy, this principle was inconsistently applied and often excluded from residents with cognitive impairment. Management staff participants expressed the view that institutionalisation of residents in aged care facilities is inevitable, particularly for residents with dementia, which perpetuates a model of care that places a priority on routine over person-centred care and autonomy. As decision-making is critical to residents' sense of personhood and quality of life, this exclusion from autonomy compromises the well-being of persons with cognitive impairment (Cameron et al., 2020).

Through the lens of Personhood Theory (Kitwood, 1997) and recent study findings in RACFs (Balkin et al., 2024), it was shown how staff presumptions can be perpetuated by organisational culture,

which hinders residents' sense of autonomy. This result supports the earlier findings from this study, that management priorities can inadvertently support a culture that limits the choice of residents. For the well-being of older persons with dementia, autonomy in social contact, affection, assertion of will, creativity, relaxation, and helpfulness are critical to their sense of personhood (Milte et al., 2016). The responsibility of creating a care environment that emphasises autonomy in all care practices lies with first-line managers (Moilanen et al., 2025). This closely aligns with the Strengthened Aged Care Quality Standards (2025), specifically Standard 5, which requires aged care providers to “collaborate with individuals with cognitive impairment and supporters of individuals to understand the individual and to optimise clinical care outcomes” (Department of Health and Aged Care, 2025, p.40).

Within these findings, the organisational dynamic, shaped by the management’s viewpoints and priorities regarding individual autonomy, appears to influence residents' choices. As noted earlier, an organisation’s culture and operational practices play a critical role in influencing the ability of residents to make meaningful choices. When institutional practices are normalised, residents’ autonomy becomes restricted, therefore challenging the underpinnings of personhood. Alternatively, when organisational culture actively promotes autonomy and person-centred care practices, residents are more likely to experience enhanced mental well-being and a sustained sense of self, which can help to mitigate depressive symptoms by reducing feelings of loss of control, isolation, and helplessness commonly associated with depression in RACFs (Bostrom et al., 2014; Chau et al., 2020; Polacsek & Woolford, 2022) .

This study affirms that to ensure the dignity and choice of residents with cognitive impairment are respected, structural priorities require reform. The Strengthened Aged Care Quality Standards (2025) guide upholding these principles, underscoring that all aged care residents should be afforded the right to make everyday decisions.

10.4.3 Social Transition

The study findings revealed that moving into an aged care facility constitutes a significant social transition, affecting residents' autonomy and identity. Participants further identified mealtimes as a key component in which this transition is experienced. Communal dining arrangements, while ostensibly designed to promote social interaction, reinforced feelings of loss of agency and vulnerability. The lack of a gradual integration into communal dining during the transition phase into the facility resulted in some participants experiencing weeks of anxiety as they endeavoured to navigate unfamiliar social dynamics. This finding supports Walker-Clarke et al. (2022), suggesting that merely bringing unfamiliar persons together can cause embarrassment and conflict with the older person's sense of self. Conversely, providing residents the opportunity to make decisions around their mealtimes may decrease disempowerment and assist in easing the transition into RACF life (Watkins et al., 2017). These findings align with Standard 1, Standard 6 of the Strengthened Aged Care Quality Standards (2025), which require that residents be treated with dignity and respect and the provider “partner with individuals on how to create enjoyable ... dining experiences” and ensure “individuals can exercise choice about what, when, where and how they eat” (Department of Health and Aged Care, 2025, p.44).

Viewed through SDT and supported by recent research (Walker-Clarke et al., 2022), these findings demonstrate how residents' psychological needs for relatedness and autonomy can be impeded by organisational structures and models of care. Resident participants in this study reported that their decision-making around mealtimes was undermined by routinisation. Such limitations reduce residents' sense of autonomy, which leads to diminished motivation and well-being. The PCC framework (McCormack & McCance, 2006) offers a complimentary interpretive lens. Person-Centred Care emphasises that supporting autonomy through shared decision-making and flexibility of routines is critical to fostering a sense of belonging, dignity, and engagement in RACFs.

Resident participants further expressed that the loss of dining norms, such as going to a café or restaurant for coffee or a meal, impacted their sense of autonomy and indicated a broader loss of their

social identity. Unlike many contemporary aged care facilities, the study site did not have an on-site café, which could have offered residents a flexible and familiar social environment to maintain social patterns from their previous lifestyle. The absence of this space also denied residents the opportunity to maintain a homelike hosting role when welcoming family and friends, further constraining their sense of autonomy and social identity within the facility. Andrew and Wilson (2014) assert that a café enables residents to express their individuality by conveying themselves as social beings and connecting to their uniqueness through participation in their societal roles.

From the perspective of SDT and supported by other research (Andrew & Ritchie, 2017), these findings further illustrate how the aged care environment can hinder residents' psychological need for relatedness. When familiar environments are not provided or made available, residents struggle to connect with their prior roles, sense of identity, and relationships (Andrew & Ritchie, 2017). This lack of connection can result in diminished motivation to engage with the wider community within the facility and adversely affect their mental well-being (Andrew & Ritchie, 2017). In contrast, SDT suggests that aged care settings that incorporate familiar and meaningful aspects of the residents' prior lives can enhance motivation to integrate with others in their community. Accordingly, the findings of this study position that the provision of familiar environments is a fundamental prerequisite to residents' mental well-being and successful social integration.

Participants reported that the social transition into the aged care facility was also challenged by the limited access to information and support during the initial adjustment period. Time constraints experienced by care staff, shaped by institutional routines, restricted their guidance to facility procedures and services to new residents and reduced their availability to address residents' questions. This lack of support further contributed to the distress associated with adapting to communal living and navigating the broader transition into aged care. As Kosiol et al. (2024) highlight, to make informed choices, clear communication regarding the options available to residents is critical (Kosiol et al., 2024). These findings align with Standard 1 of the Strengthened Aged Care Quality Standards (2025), which requires that

providers support residents to “feel safe, welcome, included and understood” (Department of Health and Aged Care, 2025, p.49).

The PCC principles (McCormack & McCance, 2006), offers a corresponding interpretive lens. Person-Centred Care emphasises the importance of clear communication that enables residents to not only make informed decisions, but also to feel supported, heard, and respected throughout the process. However, staff time pressures from organisational routines that prioritise task completion over engagement can limit the opportunity for staff to respond to residents' psychological needs, both informational and emotional, particularly during the critical transition into aged care.

Through this integrated theoretical lens, supporting autonomy through shared decision-making and flexibility of routines is critical to fostering a sense of belonging, dignity, and engagement in RACFs. Further, the provision of familiar environments is a fundamental prerequisite to residents' mental well-being and successful social integration in the facility, as such environments can enhance emotional security and reduce depressive symptoms by fostering the continuity of identity. The Strengthened Aged Care Quality Standards (2025) provide a framework for the application of these principles, emphasising the need to offer an environment where residents can maintain their social identity.

10.4.4 Facility Environment and Processes Impacting Autonomy

The findings of this study revealed that the restrictive practice of locked external doors impacted participants' sense of freedom and autonomy. Residents were acutely aware that external doors were locked, and while they understood that doors were secured for their safety, it gave them a sense of restriction and isolation. The tension between safety and the dignity of risk aligns with other studies that describe aged care facilities as places that are quasi-carceral, a space that sits uneasily between care and restraint (Repo, 2019). Control may be required for the safety of residents, however, it can affect their well-being (Repo, 2019).

Viewed through the lens of SDT and recent research in residential care settings (du Toit et al., 2021), findings demonstrate how the structural features of the facility can shape residents' experiences of autonomy and agency. The experience of confinement in aged care results in residents taking on an institutional identity and becoming less individually defined (Lazaris & Nazareno, 2020). Self-Determination Theory suggests that environments that promote autonomy enable residents to feel in control, enhance motivation, and promote mental well-being. Alternatively, when the environment feels confining, residents lack motivation and feel dependent (du Toit et al., 2021). These findings align with Standard 4 of the Strengthened Aged Care Quality Standards (2025), which specifies that "fences and locked doors may inhibit movement. Where it is in the interests of an older person's safety, it would be appropriate to risk assess the controls" and providers must "help consumers to move freely in the environment (including access to outdoor areas)" (Department of Health and Aged Care, 2025, p.22).

Resident participants described that the pervasive use of artificial light within the facility further contributed to a sense of confinement and restraint. All areas within the study site, including the residents' rooms, were lit with artificial lighting throughout the day. Residents reported that this had a negative impact on their mental well-being. The continuous use of artificial light can obscure the natural distinction between night and day, disrupting circadian rhythms and potentially leading to depression (Burns et al., 2021). Burns et al. (2021) argue that more time spent in outdoor light during the day is linked with fewer depressive symptoms and less use of antidepressant medications (Burns et al., 2021). The findings here highlight how the interplay of spatial design and care models can profoundly influence aged care residents' sense of autonomy and psychological well-being. These findings align with Design Principle 3 of the National Aged Care Design Principles and Guidelines, which suggest that facilities should be designed to "use daylight as much as possible. Enable residents to control lighting" as "older adults require daylight exposure to support ...sleep/circadian rhythm and wellbeing" (Seemann et al., 2024).

From a PCC perspective, foundational to autonomy is the ability of a person to make choices and participate meaningfully in their environment (Seemann et al., 2024). When environmental design, such

as lighting, impairs these opportunities, the residents' sense of agency and self-determination can be diminished; this can contribute to social withdrawal and feelings of passivity. This may contribute to reduced activity levels, isolation social withdrawal and an increased risk of depressive symptoms (Chaudhury et al., 2018)

Viewed through the integrated theoretical lens of this study, environmental factors, combined with an organisational structure that places routines over individual residents' preferences, can significantly shape the care experience in aged care. The findings here highlight how the interplay of spatial design and care models can profoundly influence aged care residents' sense of autonomy and psychological well-being.

This study's findings indicate that for residents to feel autonomous, care models must be supported not only by organisational structure reform, but also by careful consideration of environmental factors. The National Aged Care Design Principles and Guidelines and the Strengthened Aged Care Quality Standards (2025) provide essential frameworks for these principles to be embedded, highlighting that the physical environment plays a critical role in supporting residents' autonomy and promoting their mental wellbeing.

10.4.5 Impact of Family on Resident Autonomy

The findings revealed that the nature of the relationship between staff and family members impacted the residents' autonomy. Staff reported that family members play a fundamental role in resident decision-making and that their involvement can have both positive and negative effects. While family can provide valuable insights and support residents' preferences, staff also stated that family members sometimes intervene in ways that override and diminish the residents' choices. Limited staff agency and autonomy reduced their capacity to advocate effectively and ensure that residents' decisions were respected. The Royal Commission into Aged Care Quality and Safety (2021) similarly identified the

need to strengthen collaboration and communication between staff and families to promote person-centred care and uphold residents' autonomy.

Through the lens of SDT and recent research in residential care settings (Moilanen et al., 2025), these findings again demonstrate how RACFs organisational structures can constrain residents' autonomy and competence. When staff have reduced professional agency, their relatedness, or connection, with family members, results in poor collaboration (Bauer et al., 2014). From an SDT perspective, fostering an environment that promotes staff autonomy can strengthen trust and relational connections between staff and family members, thereby enhancing collaborative decision-making and promoting residents' individual autonomy (Bauer et al., 2014). These findings align with Standards 1 and 3 of the Strengthened Aged Care Quality Standards (2025), which require that "the relationship between older persons, family and carers is recognised and respected" and "carers are recognised as partners in the older persons care and involved in the coordination of care and services" by aged care providers (Department of Health and Aged Care, 2025). The Strengthened Aged Care Quality Standards (2025) operationalise the principles of SDT, acknowledging that residents' autonomy is shaped by the quality of the relationship between staff and family members.

From the perspective of SDT, the autonomy of aged care residents emerges as an organisational and relational dynamic. Residents' capacity to make meaningful decisions is contingent upon an organisational culture that values and supports staff decision-making, professional judgment and relational engagement, not only with residents, but also with their family members. When organisational structures enable staff to build trusting relationships with family members, a collaborative approach to care develops that enhances residents' dignity, self-determination, and well-being. Conversely, when staff are constrained by managerial controls and stringent routines, their professional agency and relational capacity are diminished, undermining opportunities for genuine collaboration.

In this context, the findings affirm that enhancing and respecting residents' decision-making requires structural reforms that promote staff self-determination. The framework established by the Strengthened Aged Care Quality Standards (2025) embeds these principles into practice, placing an emphasis that quality aged care depends fundamentally on the empowerment and autonomy of staff.

10.4.6 Knowledge of Late-life Depression

The findings of this study revealed that staff knowledge improved following a brief training program on late-life depression. Knowledge scores regarding symptoms of late-life depression were high pre- and post-training; however, understanding of myths and facts related to late-life depression showed notable improvement post-training. Despite this improvement in knowledge, the quantitative resident intervention results did not indicate a statistically significant change in depressive symptoms of residents following the training.

Findings suggested several factors limited the transfer of staff knowledge into practice. Staff participants reported that not knowing residents well made it difficult to recognise behavioural changes linked to depression. They also noted that time constraints reduced opportunities to build rapport with residents, which limited residents' willingness to discuss their feelings if they were depressed. The tension between staff intentions and time constraints reflects the findings from the Royal Commission into Aged Care Quality and Safety (2021), which reported that staff often lack the requisite time and knowledge to provide the level of care required.

Viewed through the lens of the Knowledge-to-Action (KTA) framework (Graham et al., 2006) and supported by research in aged care settings (Coad et al., 2019), these findings suggest that the routinisation of care can hinder the transfer of staff knowledge to practice. When staff face conflicting priorities and limited time for emotional engagement, their capacity to apply new knowledge in daily care is diminished (Coad et al., 2019). As a result, the identification of depressive symptoms among residents becomes constrained by organisational factors. The KTA framework highlights the importance of

recognising such contextual barriers, integrating targeted strategies to address them, and ensuring ongoing organisational facilitation and reinforcement to support sustained knowledge use (Coad et al., 2019). Therefore, the findings of this study, position organisational structure as a critical factor in translating staff training on late-life depression into effective care practices such as routine depression screening embedded in care, consistent staffing, and a multidisciplinary approach that reinforces the identification and management of depressive symptoms. This finding aligns with Standard 5 of the Strengthened Aged Care Quality Standards (2025), which requires aged care providers to support staff “to deliver safe, effective and evidence-based care” (Department of Health and Aged Care, 2025, p.22)

The PCC framework (McCormack & McCance, 2006) and SDT provide another lens to these findings. Person-Centred Care, as discussed earlier, reinforces the importance of relational knowing in transferring knowledge to care practices. The limited staff familiarity with residents and restricted time for engagement reflect the contextual barriers that hinder the enactment of person-centred practices. Within the KTA framework, embedding the principles of PCC could serve as a strategy to improve the application of knowledge by promoting staff-resident relationships and holistic acknowledgement of residents' well-being.

From the viewpoint of SDT, the organisational structure limits staff autonomy and relatedness, thereby reducing staff motivation to apply new knowledge to practice. With the KTA framework highlighting the contextual barriers to the use of knowledge, SDT can help to explain the underlying motivational processes that impact whether staff translate their knowledge into practice. Facilitating staff autonomy to foster relationships could improve commitment to changes in practice following training.

Through this integrated theoretical viewpoint, organisational structures impact the ability of aged care staff to apply knowledge to their care practices. The contextual barriers of time constraints impede the transfer of knowledge to clinical practice thereby impacting the outcomes on residents' mental well-

being. Organisational systems that enable staff to develop meaningful relationships with residents are therefore essential to support the effective translation of knowledge into person-centred practice.

10.5 Conclusion to the Chapter

In this chapter, the integration of the findings of the quantitative and qualitative components of the thesis has been presented. Integrated findings were identified and described through theoretical frameworks to explore how they were situated in the findings of other studies and the significance of the findings from the studies in this thesis. Key insights from the integrated findings were:

- i. For residents to express their preferences and desires depends on the confidence they have that the staff will respect their choices without fear of repercussions. In this context, this study highlights that to achieve autonomy-directed care, organisational structures need to be reformed, shifting away from institutionalised models toward more flexible frameworks that facilitate and prioritise individual decision-making.
- ii. The contextual barriers of time constraints impact the transfer of knowledge to clinical practice, thereby impacting the outcomes on residents' mental well-being. Organisational systems that enable staff to develop meaningful relationships with residents are therefore essential to support the effective translation of knowledge into person-centred practice.
- iii. The findings affirm that to meet the residents' psychological need for relatedness and achieve person-centred care, providers are required to promote an organisational culture that places individuals' needs over routines; this includes structural principles that promote staff autonomy and capacity to facilitate more meaningful social and personal relationships.
- iv. When organisational systems support staff to act with mutual respect and discretion, the self-determination and dignity of residents are enhanced. Alternatively, when staff are restricted by managerial control or stringent routines, both staff and residents experience diminished

agency, connection, and satisfaction, which undermine the very foundations of person-centred practice.

- v. This study affirms that to ensure the dignity and choice of residents with cognitive impairment are respected, structural priorities require reform. The Strengthened Aged Care Standards (2025) guide uphold these principles, underscoring that all aged care residents should be afforded the right to make everyday decisions.
- vi. Environmental factors, combined with an organisational structure that places routines over individual residents' preferences, can significantly shape the care experience in aged care. The findings of this thesis highlight how the interplay of spatial design and care models can profoundly influence aged care residents' sense of autonomy and psychological well-being.
- vii. Residents' capacity to make meaningful decisions is contingent upon an organisational culture that values and supports staff decision-making, professional judgment, and relational engagement, not only with residents, but also with their family members. When organisational structures enable staff to build trusting relationships with family members, a collaborative approach to care develops that enhances residents' dignity, self-determination and well-being.

The following chapter presents an exploration of the implications of this study. It also contains the recommendations arising from the study, including recommendations for aged care organisational structure reform, for clinical practice, aged care facility design, policy, and education. It will also provide recommendations for further research through the findings of this study.

Chapter 11: Discussion and Recommendations

11.1 Introduction

In the previous chapter, the integration of the findings of the quantitative and qualitative components of the study was presented. In this chapter, the implications of this study are explored, particularly in relation to the Royal Commission into Aged Care Quality and Safety, the Strengthened Aged Care Quality Standards, the Code of Conduct for Aged Care, and the New Aged Care Act. It contains a compilation of recommendations that arose from this study, including recommendations for aged care organisational structure reform, clinical practice, aged care facility design, policy, and education. The overall thesis and each study's strengths and limitations are identified.

11.2 Implications

The findings of this thesis are relevant in the context of the recent findings and recommendations from the Australian Royal Commission into Aged Care Quality and Safety (established in 2018), as well as the Strengthened Aged Care Quality Standards (2025), Code of Conduct for Aged Care (2022), and the *Aged Care Act 2024* (Cth). Collectively, these frameworks emphasise person-centred care approaches to care, dignity and accountability. The thesis findings highlight challenges within this context, including organisational routinisation, which reduces staff self-determination and in turn, obstructs the involvement of residents in decision-making and inhibits the transfer of staff knowledge to their care practices. These factors contribute to a decrease in resident autonomy and challenge the delivery of authentic person-centred care.

In 2019, prior to the Australian Royal Commission into Aged Care Quality and Safety findings, the Australian Aged Care Quality and Safety Commission introduced the Aged Care Quality Standards. These Standards mandated a range of requirements that all aged care providers must observe to achieve accreditation. The Aged Care Quality Standards consisted of eight standards, with Standards 1–4 relating to the residents' care, and Standards 5–8 involving facility operations. Standard 1 outlined the expectations for residents' choice and dignity, stating they had the right to informed choice and to

understand their options. Aged care organisations were required to ensure opportunities were provided for residents to express their preferences (Myagedcare). However, the Royal Commission into Aged Care Quality and Safety stated in its Final Report (Royal Commissions, 2021) that the 2019 Standards did not go far enough to provide an adequate definition of quality care. The Commission suggested that they only set out the minimum acceptable standard for aged care facilities to be accredited and required an urgent review (Royal Commissions, 2021).

Findings of the Commission implied that aged care residents have limited choices and autonomy (Royal Commissions, 2021). It was recommended that changes be made in aged care to promote resident independence. In response to the Commission's recommendation, the Aged Care Quality and Safety Commission introduced the Strengthened Aged Care Quality Standards in November 2025. Implicit in the Strengthened Aged Care Quality Standards (2025) is that aged care providers and employees must respect the individuality and choice of older persons to foster a sense of autonomy, quality of life, and inclusion (Department of Health and Aged Care, 2025). Supportive strategies that intentionally involve residents in decisions relating to their daily lives and promote autonomy and environmental mastery are essential for facilities to meet these accreditation standards.

Like the Strengthened Aged Care Quality Standards (2025), the Code of Conduct for Aged Care also has a focus on the rights of residents to make choices about how they live. The Code of Conduct for Aged Care specifies that aged care workers must ensure they respect the rights of the older person to have the freedom and autonomy to make their own decisions (Aged Care Quality and Safety Commission, 2022). This includes the activities they engage in, who they spend time with, and how they spend their money (Aged Care Quality and Safety Commission, 2022). The Code of Conduct requires care workers to offer residents options and choices in their daily care, and understand what supported decision making is and when it may be required (Aged Care Quality and Safety Commission, 2022).

Likewise, the new Aged Care Act, which came into effect from 1 November 2025, provides an outline of the rights of older persons accessing aged care services (Department of Health and Aged Care, 2025). It stipulates that older persons have the right to have control and choice, to have their choices respected, to be informed and supported to make decisions, to be able to express their preferences, and to stay connected to the community (Department of Health, 2024).

The findings from this study offer insight into potential action and strategies that could support aged care providers in working toward the principles and standards embedded within the Strengthened Aged Care Quality Standards (2025), the Code of Conduct for Aged Care (2022), and the *Aged Care Act 2024* (Cth).

Standard 1 of the Strengthened Aged Care Quality Standards (2025) specifically requires aged care providers and staff to support residents to feel safe, understood, and included (Department of Health and Aged Care, 2025). The findings of this study, integrating the principles of the Self-Determination Theory (SDT) and Person-Centred Care (PCC), highlight that to enable aged care residents to feel safe to express preferences and desires, they must have confidence that staff will respect their choices without fear of repercussions. The findings emphasise that to achieve autonomy-directed care, organisational structures need to be reformed, shifting away from institutionalised models toward more flexible frameworks that facilitate and prioritise individual decision-making.

Standard 7 of the Strengthened Aged Care Quality Standards (2025) requires aged care providers to support and enable residents to have social and personal relationships and opportunities to participate in activities that are meaningful to them (Department of Health and Aged Care, 2025). The findings of this thesis establish that to meet residents' psychological need for relatedness and achieve person-centred care, providers are required to promote an organisational culture that places individuals' needs over routines. Incorporating structural principles that promote staff autonomy and capacity to facilitate more meaningful individual activities.

Standards 1 and 2 of the Strengthened Aged Care Quality Standards (2025) require providers to “support individuals to exercise choice” and ensure that “aged-care workers are empowered to do their jobs well” (Department of Health and Aged Care, 2025, p.9). The findings from this thesis assert that residents’ ability to make meaningful choices depends on an organisational culture that values staff relational engagement, judgement, and flexibility. When organisational systems support staff to act with mutual respect and discretion, the self-determination and dignity of residents are enhanced. Achieving person-centred, autonomy-directed care requires structural reforms rather than the effort of individuals alone. Quality aged care is dependent as much on the empowerment of those providing it as on the rights of those receiving it.

Standards 1 and 3 of the Strengthened Aged Care Quality Standards (2025) require that “the relationship between older persons, family and carers is recognised and respected” (Department of Health and Aged Care, 2025, p.10) and “carers are recognised as partners in the older persons' care and involved in the coordination of care and services” by aged care providers (Department of Health and Aged Care, 2025, p. 29). The findings of this thesis position that the residents’ capacity to make meaningful decisions is contingent upon an organisational culture that values and supports staff decision-making, professional judgment and relational engagement, not only with residents, but also with their family members. When organisational structures enable staff to build trusting relationships with family members, a collaborative approach to care develops that enhances residents’ dignity, self-determination and well-being. In this context, the findings affirm that enhancing and respecting residents' decision-making requires structural reforms that promote staff self-determination.

Standard 5 of the Strengthened Aged Care Quality Standards (2025) requires aged care providers to “collaborate with individuals with cognitive impairment and supporters of individuals to understand the individual and to optimise clinical care outcomes” (Department of Health and Aged Care, 2025, p.40). The findings from this thesis highlight that when an organisation's culture actively promotes autonomy and person-centred care practices, residents are more likely to experience enhanced mental well-being

and a sustained sense of self. To ensure the dignity and choice of residents with cognitive impairment are respected, structural priorities require reform.

Standard 4 of the Strengthened Aged Care Standards (2025) specifies that “collaborate with individuals with cognitive impairment and supporters of individuals to understand the individual and to optimise clinical care outcomes” and providers must “help consumers to move freely in the environment (including access to outdoor areas)” (Department of Health and Aged Care, 2025, p.40). Findings from this thesis assert that environmental factors, combined with an organisational structure that places routines over individual residents' preferences, can significantly shape the care experience in aged care. For residents to feel autonomous, care models must be supported, not only by organisational structure reform, but also by careful consideration of environmental factors.

Standard 5 of the Strengthened Aged Care Quality Standards (2025) requires aged care providers to support staff to deliver effective and safe evidence-based care. The findings of this thesis provide insight into how the contextual barriers of time constraints impact the transfer of knowledge to clinical practice, thereby impacting the outcomes on residents' mental well-being. Organisational systems that enable staff to develop meaningful relationships with residents are therefore essential to support the effective translation of knowledge into person-centred practice.

The findings of this thesis have implications for five major areas: organisational structure, clinical practice, aged care facility design, policy and guidelines, and research. The thesis findings indicate the need to develop staff and management awareness of the importance of autonomy for residents in RACFs and strategies to promote autonomy. Doing so involves change, development, and enhancement in these areas.

11.3 Recommendations for Organisational Reforms

The findings of this thesis highlight the need for organisational reforms to promote a more person-centred care model. The following recommendations are made for organisational reforms to meet

the Strengthened Aged Care Quality Standards (2025) and comply with the Code of Conduct for Aged Care and the New Aged Care Act:

- Develop a collaborative framework for flexible care delivery by dynamically engaging nursing, care, and catering staff in its design. The framework should prioritise the individual preferences and needs of residents over rigid routines, enabling a more person-centred care model. This approach can enhance staff autonomy, foster more meaningful relationships between staff and residents, and ultimately optimise residents' autonomy and mental well-being.
- Collaboratively develop an organisational culture and system that emphasises the value of staff relational engagement, judgement, and flexibility. Systems that support staff to act with discretion and respect, the dignity and self-determination of residents are enhanced.

11.4 Recommendations for Clinical Practice

From the findings in this thesis, the following recommendations are made for clinical practice in aged care facilities to meet the Strengthened Aged Care Quality Standards (2025) and comply with the Code of Conduct for Aged Care and the new Aged Care Act:

- Collaborate with each resident to identify their individual preferences and needs, including when and where they have their meals, preferred medication schedules, and participation in chosen lifestyle activities. This person-centred approach supports residents' psychological need for relatedness and autonomy, promoting greater satisfaction and well-being.
- Ensure the transition phase of a resident entering the aged care facility is person-centred, a range of methods should be considered, including:

- i. providing a designated person to the resident and family/caregivers with clear information related to service provision and any associated costs, such as laundry processes, mealtimes (including dining room protocols and other dining options), access to a general medical practitioner, hairdressing, and podiatry services;
 - ii. ensuring new residents are introduced to other residents, particularly in the dining room;
 - iii. providing a designated person to follow up with the resident and family/caregivers on at least a weekly basis for the first six weeks following admission to ensure they are well-informed of any facility processes and can make informed decision; and
 - iv. providing opportunities for new residents to ask questions and provide feedback on whether their needs and preferences are being supported.
- Enhance the staff's support of residents' choices in their daily lives, consideration should be made for care staff to be consistently allocated the same residents. Consistency of care increases mutual understanding and nurtures person-centred care. Knowing the residents' needs and preferences allows staff to prioritise care efficiently, offering more time to provide residents with choices in care delivery. It also allows for establishing relationships that build trust, so residents feel safe to voice their preferences.
- Encourage lifestyle program managers to offer person-centred activities by:
 - i. offering smaller group activities to residents with a shared interest. The intimacy of small group activities provides residents with the opportunity to build relationships with other residents to promote a sense of connectedness;
 - ii. encouraging passive involvement in activities for residents who are reluctant to actively participate in lifestyle programs. As this study has shown, being passively

involved can be equally beneficial to residents as active participation, particularly for residents with limited capabilities;

- iii. offering an activity program in the evening. As this study demonstrates, an evening activity program provides residents with the option to socialise during a time that many residents spend alone in their room or go to bed early; and
 - iv. promoting activities that are meaningful to different individuals by offering a variety of activities for residents with varying capacities. Matching activities to residents' capabilities is more enjoyable, social, and absorbing. Involving residents in activities that are beyond their ability can result in self-judgement.
- Provide ongoing education on cognitive impairment to staff. By understanding cognitive impairment, aged care staff can devise ways to incorporate the residents' decision-making into their care practices and the residents' daily lives.
 - Encourage staff to build trusting relationships with family members through effective communication to promote positive interaction and input from the family. Family support is pivotal to resident decision-making.

Figure 5 presents a model of clinical practices that, according to the findings of this thesis, contribute to enhancing the autonomy of residents in RACFs to reduce depressive symptoms and provides a framework of building blocks that promote autonomy and environmental mastery in aged care.

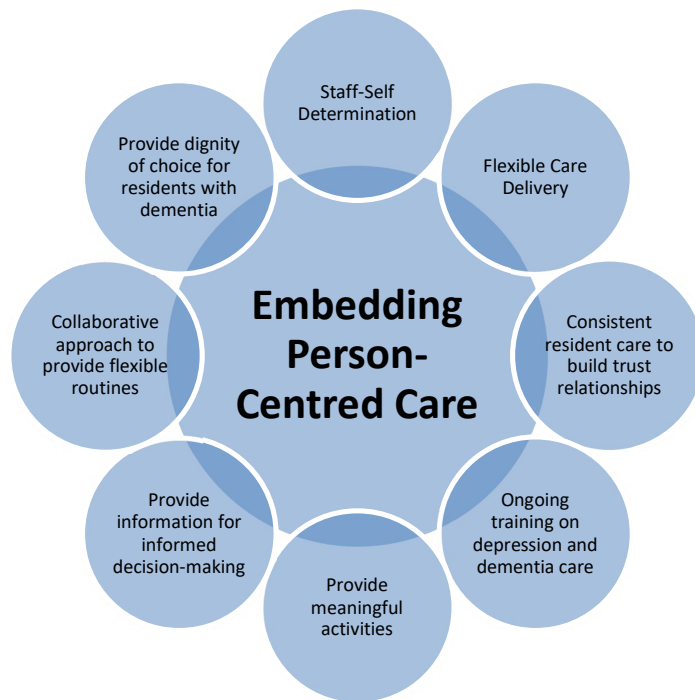


Figure 5

Representation of Recommendations for Clinical Practice to Promote Resident Autonomy

Table 26

The Building Blocks for Promoting Autonomy and Environmental Mastery With the Older Person in Aged Care

1. Transition into the aged care facility
- Following introductions, provide the new resident with information relating to the facility's services, including laundry services, cleaning times, mealtimes, physiotherapy, hairdressing, and GP. Provide written information if available i.e. facility information brochure so they can make informed decisions. - Orientate them to the facility, introducing them to other residents and staff as you go through the facility.

- Take them to the dining room for meals on their first day at the facility and introduce them to the other residents in the dining room.
- Designate a staff member to check in with them twice a week for the first six weeks. Ask questions, for example: “Do you have any concerns?” and “How are you feeling?” and “Is there anything you need more information about?”

2. Building a trust relationship

- Allocate the same staff to residents so they can get to know their needs and preferences.
- Collaborate with the resident and significant others to establish needs and preferences.

3. Meaningful activities

- Provide small group activities for residents with shared interests and capabilities.
- Offer activities throughout the day, including the evening, to promote opportunities to socialise at a preferred time of the day.
- Ensure residents have access to outdoor areas.
- Encourage the use of technology to maintain connections with family and the wider community.

4. Supporting family involvement

- Get to know family members and acknowledge their concerns.
- Discuss the residents’ expressed and observed needs and preferences, and work together to respect the residents’ choices.
- Maintain open communication with family members to build a trust relationship.

11.5 Recommendations for Residential Aged Care Facility Design

This thesis highlights some considerations for RACF architects and providers in the design of aged care facilities. The following recommendations are made for facility design to support aged care facilities in meeting the Strengthened Aged Care Quality Standards (2025). Recommendations from the thesis findings are:

- Incorporate an on-site café into the facility design. On-site cafes promote engagement with family, friends, and other residents. The café environment enables residents to express their individuality by presenting themselves as social beings through participation in their societal roles. The café environment also offers opportunities for passive engagement in observing other residents and their family/friends in the café environment.
- Investigate alternatives to locked doors to support residents' freedom to move within the facility to support their sense of autonomy. Consider implementing wearable technology or discreet sensor systems to enhance the safety of residents who require monitoring while maintaining their autonomy and dignity.
- Make provision for natural lighting, which is critical. The use of artificial lighting throughout the day increases residents' sense of confinement and affects their mood. Large windows should be installed in common areas, and consideration should be made to incorporate natural lighting throughout the facility as much as possible.

11.6 Recommendations for Education

This thesis highlights considerations for aged care providers to promote change in clinical practices that enhance the mental well-being of residents by applying the principles of the Knowledge-to-Action framework. Ongoing depression training should be offered to staff to ensure they understand depressive symptoms in the older person and the risk factors for depression. Recommendations of the findings are:

- Educate on the importance of promoting resident decision-making—enhancing staff knowledge and skills can empower nurses and care workers to actively involve residents in decisions about their care to facilitate residents in gaining power and influence over their lives.

- Educate on the recognition of depression and the risk factors, and potential interventions to reduce the risks. Education should be ongoing, and the application of knowledge monitored to improve residents' mental health outcomes.

11.7 Recommendations for Policy and Guidelines

The findings of this thesis indicate that the routinisation of meals has a significant impact on the autonomy of residents in aged care. In Australia, there is a lack of policy and practical guidelines that inform aged care providers of strategies to implement mealtime choices. Although the Strengthened Aged Care Quality and Safety Standards (2025) specify that aged care providers must allow flexibility in mealtimes, there are no specific guidelines on how this can be achieved. The lack of guidelines may result in organisations continuing to legitimise their current task-oriented mealtime structures based on resource pressures.

The Australian Department of Health, Disability and Aged Care needs to develop practical guidelines to support flexible mealtimes in RACFs. To ensure these guidelines are evidence-based and feasible, targeted funding should be allocated to research that explores the effective and practical strategies for implementing mealtime flexibility. This process should involve meaningful engagement and consultation with aged care providers, residents, and their families to understand the diverse preferences, cultural considerations, and nutritional needs related to mealtimes. In addition, pilot programs should be introduced to trial proposed initiatives, evaluate their effectiveness in real-world settings, and identify potential barriers. The insights gained from these trials can inform the refinement and successful implementation of national guidelines.

11.8 Implications for Research

The Royal Commission into Aged Care Safety and Quality recommended that research into aged care be made a priority (Royal Commissions, 2021). This exploration of autonomy in RACFs has highlighted areas for future research.

- Future research could investigate a larger multi-site study, using a randomised control trial method to evaluate the impact on depressive symptoms following the implementation of evening programs in aged care facilities; this would help to establish the broader potential benefits of this intervention on residents' mental well-being.

The findings of this thesis revealed how institutional routines and poor staff-to-resident ratios restrict the capacity of aged care staff to enact person-centred care. An initiative implemented by the Department of Health and Aged Care in October 2023, prompted by the Royal Commission into Aged Care Quality and Safety, was the introduction of mandatory care minutes in residential aged care. The mandate requires that each aged care resident receive 200 minutes of direct care per day, including 40 minutes of care from a registered nurse (Department of Health and Aged Care, 2023) .

- Future research could investigate the impact of the mandated care minutes on aged care staff's ability to implement person-centred care into their practice, and how this influences the residents' mental health outcomes.

The thesis findings highlighted how the interplay of spatial design and care models can profoundly influence aged care residents' sense of autonomy and psychological well-being. The findings suggest that excessive artificial lighting may contribute to a heightened sense of confinement among residents, potentially reinforcing feelings of institutionalisation.

- Future research could investigate the effect of artificial light on the depression scores of residents to establish if there is a significant link between artificial lighting and depression in aged care residents.

11.9 Strengths and Limitations of This Thesis

11.9.1 Strengths

The resident intervention quasi-experiment explored the impact of residents choosing their bedtimes and the opportunity to attend an evening activity program on reducing symptoms of

depression. To the researcher's knowledge, a strength of this investigation is that it was the first study conducted to examine the impacts of an evening activity program in a RACF. A further strength of the study is that the same participants were compared at all stages of the experiment. A key strength is the use of a mixed methods design, which allowed for both the statistical measurement and in-depth exploration of the residents' experience of the interventions.

The integration of the quantitative data (participants' depression scores) with the qualitative insights from the resident and staff interviews provided a more comprehensive and nuanced understanding of organisational influences that impact resident choice. The integrated findings were identified and described through the theoretical frameworks of Self-Determination Theory, Person-Centred Care, and Personhood, which revealed the underlying facilitators and barriers that impacted resident autonomy. Particularly, autonomy in aged care emerges not as an individual attribute, but as an organisational and relational dynamic. The residents' ability to make meaningful choices depends on an organisational culture that values staff relational engagement, judgement and flexibility. When organisational systems support staff to act with mutual respect and discretion, the self-determination and dignity of residents are enhanced.

There are, however, a number of limitations to the study outcomes. There is the potential risk for interpretive bias due to the data analysis being conducted by a single researcher, despite mitigation strategies being employed. The findings also cannot be generalised beyond the study context as the sample size has some limitations on the strength of the inferences. The absence of family perspectives is another limitation as family interviews could have provided valuable insights.

The staff's knowledge of late-life depression study explored the impact of a short depression education session on staff knowledge using a pre-post cross-sectional study method. The strength of this study was that the same participants completed both the pre-and post-questionnaires to provide a true comparison of the results. This method is specifically useful for assessing the current levels of staff

knowledge. The cross-sectional method also allowed for the inclusion of participants with varied roles, levels of experience, and qualifications, which enhances the insight into staff knowledge of late-life depression across the workforce. The integrated findings using a theoretical approach of the Knowledge to Action framework and Self-Determination Theory highlighted the contextual barriers to the use of knowledge and helped to explain the underlying motivational processes that impact whether staff translate their knowledge into practice. Facilitating staff autonomy to foster relationships could improve commitment to changes in practice following training.

The overall strength of this thesis comes through its mixed methods approach. The mixed methods approach enhanced the reliability and validity of findings through triangulation, converging the results of the different methods through the lens of theoretical frameworks. In addition, it provided the flexibility to address a broader range of research questions. By incorporating both qualitative and quantitative data, the study was able to explore a selection of factors that impacted the study results.

11.9.2 Limitations

There are several study limitations to be considered. Firstly, the data was collected from a single RACF. Due to COVID-19, what was intended to be a multi-site study was limited to a single-site study; this resulted in a reduced number of participants who took part in the interventions. The sample size was relatively small, which may have reduced the statistical power to detect a significant difference in depression scores. To acquire the required statistical power, there would need to be a larger sample size as well as the use of a random sampling technique to select participants, as opposed to the convenience approach used in this study.

The qualitative method used in this study also has some limitations, including a small sample size from one study site, which was non-randomly selected; this can limit the generalisability of the findings. However, it can be argued that the results could be transferable as they are relevant to settings with comparable participants (Grove et al., 2019). Transferability is achieved by purposeful sampling of

participants and providing rich study details, so a replication of the study could occur (Bradshaw, 2017). The qualitative approach also has the risk for interpretive bias due to the data analysis being conducted by a single researcher, despite the mitigation strategies of applying the principles of credibility, dependability and confirmability as discussed in Chapter 7. The absence of family perspectives is another limitation, as family interviews could have provided valuable insights.

A limitation of the cross-sectional design is that it does not have the capacity to determine any in-depth evaluation of the variables being examined. The results are from a single point in time and do not demonstrate whether knowledge of late-life depression is retained over time. Also, this method does not capture the participants' application of knowledge, as it does not reflect how the participants have applied this knowledge in their practice. A further limitation of the cross-sectional study in this thesis is the potential response and social desirability bias of staff participants, who completed the questionnaires using paper-based tools in the presence of others. Another limitation was the use of a brief educational intervention that was not formally validated for effectiveness. However, COVID-19 restrictions in the aged care setting at the time of the study created significant barriers to implementing more extensive education programs and formal validation procedures.

11.10 Conclusion to the Chapter

This chapter consisted of recommendations from the integrated findings of this thesis, particularly in relation to the Royal Commission into Aged Care Quality and Safety, the Strengthened Aged Care Quality Standards (2025), and the new Aged Care Act. It contained a compilation of recommendations that arose from this study, including recommendations for organisational reforms, clinical practice, policy, research and education. The study's strengths and limitations were identified.

The following chapter will include a summary of the chapters contained in this thesis. The purpose of the study is restated, and the significance of the study within the context of residential aged care is highlighted. The chapter also incorporates a reflection on the research process, including the

challenges and adaptations required due to the impacts of COVID-19. Additionally, the research questions are revisited, and a comprehensive summary of the study's key findings and contributions is offered.

Chapter 12: Conclusion

12.1 Introduction to the Chapter

The previous chapter consisted of recommendations from the integrated findings of this thesis, particularly relating to the Royal Commission into Aged Care Quality and Safety, the Strengthened Aged Care Quality Standards (2025), and the new Aged Care Act. It comprised a compilation of recommendations that arose from this study. The study's strengths and limitations were identified.

This chapter will contain a summary of the chapters encompassed in this thesis. The purpose of the research in this thesis is restated, and the significance of the findings within the context of residential aged care is highlighted. The chapter also incorporates a reflection on the research process, addressing the challenges and adaptations necessitated by the impacts of COVID-19. Additionally, the research questions are revisited, and a comprehensive summary of the study's key findings and contributions is offered.

12.2 Summary of Previous Chapters

In Chapter 1, the background of the global prevalence of depression in older persons living in RACFs was presented. The critical need to evaluate interventions to reduce the risks for depression amongst this cohort was highlighted. The study objectives of examining the impact of the resident interventions on depressive symptoms were declared. Further objectives of the study were to evaluate changes to aged care staff knowledge of late-life depression after training and to explore the residents' and staff's experiences of the interventions.

In Chapter 2, an integrative review of the literature was conducted to determine the risk factors associated with depression in older persons living in RACFs and examined interventions that have been trialled to reduce the risks. Results from this review suggested that, despite the strong link between loss of autonomy and depression in residents of RACFs, there is a gap in research related to interventions

aimed at reducing RACF residents' loss of autonomy. It also outlines conceptual frameworks that underpin the studies in this thesis.

In Chapter 3, an outline of the methodology for the resident intervention study was provided, arguing that a mixed methods design was appropriate to examine the impact of the interventions on the resident participants' depressive symptoms. A description of the ethical considerations for the study, the study setting, recruitment of the study site and resident participants, and data sources and collection methods was provided. A comprehensive overview of the resident interventions and the statistical analysis methods of the study was also given.

In Chapter 4, an analysis of the results of the resident intervention quasi-experiment study was presented. The quasi-experimental approach was used to collect data over a six-month period in a single RACF, with a three-month control phase and a three-month intervention phase. The participant sample comprised 17 residents at baseline and 14 residents at control, who consented to participate in the interventions of their choice of bedtimes and an evening activity program. The participants' Geriatric Depression Scale-15 scores were measured at the baseline, pre-intervention, and post-intervention phases of the study. The findings of the study suggested that depression scores of the participants were not significantly impacted by the study interventions.

In Chapter 5, the methodology for the aged care staff's knowledge of late-life depression questionnaires was outlined, providing details on the reasoning for a cross-sectional research method being selected for this study. A description of the ethical considerations for the study, the study setting, recruitment of the study site and staff participants, and data sources and collection methods was reported. A comprehensive overview of the staff questionnaires and the statistical analysis methods of the study was also provided.

In Chapter 6, the analysis of the results of aged care staff's knowledge of late-life depression questionnaires using a cross-sectional method was reported. The study sample consisted of 35 aged care

staff, including registered nurses, enrolled nurses, care staff and leisure and Lifestyle staff, from a single aged care facility. Participants consented to participate in completing the 10-Item Knowledge of Late-Life Depression-Revised questionnaire pre- and post a brief training session on late-life depression. The findings of the study suggested knowledge of late-life depression was significantly improved following the brief late-life depression training session.

In Chapter 7, the methodology for the resident and staff interview studies was specified. A qualitative approach was used to collect data at a single aged care facility. The study sample consisted of six resident participants who had participated in the resident intervention study and seven staff participants who had provided care or were involved in the resident intervention study. The participants consented to a semi-structured interview. Data was also collected through the researcher's observations during the resident intervention study and the resident and staff interview studies.

In Chapter 8, the objectives of the resident interviews and the resident participants' characteristics were outlined. The key findings for the resident interviews study, organised into four themes and subsequent sub-themes which matched the study objectives, were provided. The themes were (1) facility routines impact choice, (2) factors that promote well-being, (3) barriers to engagement, and (4) confinement and isolation. The participants' characteristics were also described.

In Chapter 9, the objectives of the staff interviews and the staff participants' characteristics were outlined. The key findings for the staff interviews study, organised into three themes and subsequent sub-themes which matched the study objectives, were provided. The themes were (1) confidence recognising depressive symptoms, (2) experience of the evening program for residents and staff, and (3) catering to residents' choices.

In Chapter 10, an integrated synthesis of the findings from the quantitative and qualitative studies was provided. It offered an overview of the fundamental points that emerged from the quantitative findings and qualitative analysis of the resident participant interviews, the staff participant interviews,

and the researcher observations. The findings of this study, integrating the principles of the Self-Determination Theory and Person-Centred Care, highlight that to enable aged care residents to feel safe to express preferences and desires, they must have confidence that staff will respect their choices without fear of repercussions. The findings emphasise that to achieve autonomy-directed care, organisational structures need to be reformed, shifting away from institutionalised models toward more flexible frameworks that facilitate and prioritise individual decision-making.

In Chapter 11, an exploration of the implications of the study was provided, particularly in the context of the Royal Commission into Aged Care Quality and Safety, the draft Strengthened Aged Care Quality Standards, the Code of Conduct for Aged Care, and the new Aged Care Act. It included recommendations for organisational reforms, clinical practice, aged care facility design, education, research and policy and guidelines. It explored the implications for future research and provided consideration of the strengths and limitations of the mixed methods approach to the study.

12.3 Purpose of Thesis

As presented in the introduction chapter to this thesis, the study aimed to deepen understanding of factors that both promote and impede autonomy in residential aged care, while exploring strategies to improve resident outcomes and reduce depressive symptoms. Despite numerous studies on depression in aged care over several decades, its prevalence remains significantly high. A lack of autonomy and environmental mastery has been identified as a significant risk factor for depression in this population. This study sought to provide insight into the impact on depressive symptoms when residents in aged care are offered choices regarding their bedtimes and participation in an evening activity program. Additionally, the research aimed to extend an understanding of how aged care staff facilitate autonomy for residents within these settings.

Research questions guiding this study were:

1. For residents of a RACF on the Central Coast of New South Wales, Australia, using a single-group pre-test/post-test study design, what is the effect of implementing residents' choice of bedtimes and the opportunity to attend a daily evening activity program on reducing symptoms of depression within a three-month period?
2. How has staff knowledge of depression been impacted by the knowledge of late-life depression questionnaires study?
3. What is the resident's experience related to the implementation of the choice of bedtimes and an evening activity program?
4. What factors impact residents' sense of autonomy?
5. What is the staff experience related to the implementation of the residents' choice of bedtimes and an evening activity program?
6. What are staff perceptions of factors that impact residents' ability to make choices?

12.4 Significance of the Study

The findings of this study are significant in the context of the recommendations of the recent Australian Royal Commission into Aged Care, the Strengthened Aged Care Quality Standards (2025), and the new Aged Care Act, both implemented in November 2025. Implicit in the recommendations from the Royal Commission and the Strengthened Aged Care Quality Standards (2025) is the need for aged care providers and employees to respect the individuality and choice of older persons to foster quality of life, a sense of autonomy, and inclusion (Department of Health and Aged Care, 2025). Supportive strategies to intentionally involve residents in decision-making in their daily lives, promoting autonomy and environmental mastery, are essential.

This mixed methods study provides a timely and meaningful contribution to aged care research through its exploration of interventions that promote autonomy. The significance of this study lies in its aim to identify some of the facilitators and barriers to residents' choice in aged care. It addresses a gap in

the research regarding strategies that promote autonomy, which influences mental health outcomes, including depression, for older persons in aged care.

12.5 Reflection on the Impacts of COVID-19

The initial plan for this study was to commence the resident baseline data collection for the resident intervention quasi-experiment in February 2020 in two aged care facilities in NSW, Australia. The researcher began the resident baseline data collection at one RACF as planned in February 2020. However, when the COVID-19 lockdowns were announced in March 2020 by the NSW Health State Government, the researcher and PhD supervisors determined that the study would best be deferred due to the likely strict visitation restrictions in residential aged care, given the vulnerability of older persons to COVID-19. In April 2021, the study was recommenced as there had been no further statewide restrictions since mid-2020. However, the second RACF that had initially agreed to take part in the study withdrew its permission to participate.

Resident baseline data collection recommenced in May/June 2021 in one RACF facility. On 25 June 2021, just after the baseline data had been collected, another COVID-19 stay-at-home order was imposed. It was decided at this time to continue the study regardless of the restrictions, in the hope that there would be minimal impacts. The COVID-19 restrictions were eased on 11 October 2021, which enabled the researcher to collect the pre-intervention data for the resident intervention study. Although aged care visitation was still restricted at this time, the RACF management at the study site allowed the researcher access, conditional to mask-wearing at all times whilst in the facility and having a pre-entry rapid antigen test. The resident interventions commenced in early December 2021. There were two further facility lockdowns during the resident intervention phase, which resulted in some restricted access for the researcher during the interventions.

While challenges are often experienced during studies and experiments, the additional restrictions that took place during the resident interventions impacted the study, particularly the reduced

number of expected participants. The challenges posed by COVID-19 were not unique to this study. Alam et al. (2021) suggested that COVID-19 had a significant negative impact on research output during the pandemic, including the completion of many PhD candidates’ research projects, derived from social distancing measures and lockdowns.

12.6 Reflections on the Research Process

Reflection is a crucial component of the research process. Using the pragmatic perspective, reflection consists of considering how the findings of the research were constructed and if and how the research method may be improved (Mortari, 2015). My personal reflection, as represented in Table 27, was informed by Hesse-Biber (2010) who provided guidelines for reflecting on a mixed methods approach.

Table 27

Reflections on Thesis Research

Reflective approach	Approach used in this research
Consider personal skills for undertaking a mixed methods approach	At the commencement of this study, I had limited experience in quantitative analysis. I completed a small quantitative research project as an undergraduate Bachelor of Psychology student, which was my only actual experience. I had no experience with qualitative or mixed methods research. As a result of this study, I have expanded my knowledge and skills in the three methods used in the study. Quantitative research skills Through this PhD research study, my quantitative analysis skills were expanded in linking data, descriptive statistics, means, and proportions. I had issues initially with setting up my data sets in SPSS and figuring out how to use the software. Even with a small number of participants, the

Reflective approach	Approach used in this research
	process was challenging. I also struggled to plan how to document the data, which data was best represented in a table, and what should be described. I felt that the quantitative data collection and analysis I completed in this study improved my understanding of the processes involved. Qualitative data collection skills During the stage of gathering data for the qualitative component of the study, I was able to build on some of my existing skills. From my prior experience working as a registered nurse in aged care, I was readily able to build a rapport with the participants, which is a characteristic required for qualitative research (Grove, 2019). Evidence of this: • When participants were first invited to take part in the research, many were self-deprecating, saying they were ‘old and boring’ and they had nothing of value to contribute. I was able to assure them that their voice was extremely valuable, and their contribution could provide information to improve the experience of many others living in aged care. This reassurance encouraged them to relax and speak more openly about their feelings. • Participants disclosed information about themselves that they had not mentioned to anyone in a long time. One participant spoke of a baby she had lost at birth, stating she had not even spoken about this to her other children or her husband since the baby’s death. The participant seemed relieved to be able to talk to someone about her baby and to finally speak the baby’s name. Other

Reflective approach	Approach used in this research
	participants spoke of incidents from their past that they had not disclosed to staff, and at times, family members. Although confidentiality relating to these disclosures was maintained, the researcher ensured that there was a follow-up well-being check from staff following these interactions. Qualitative data analysis skills I commenced the data analysis using the coding software Delve and manually coding. I also reread each transcript several times, making notes, and relistened to the recordings multiple times for missed innuendos. In the initial analysis, I found myself describing what the participants had said, rather than interpreting. Under the guidance of my supervisors, I had to review the data more extensively to gain a deeper understanding of what was being said to enable me to interpret the participants' experiences and develop the themes. Through the interpretive reflexive thematic approach as discussed in Chapter 7, my qualitative data analysis skills have developed. Mixed methods research skills From the experience I have gained through this study, I have developed an appreciation for the strengths of the mixed methods approach. During the initial development of my methodology for this study, my understanding of the process was simplistic, in that I did not fully appreciate the importance of the integration of the two methods. Through this study, I have a greater understanding of the need for the data from both studies to be connected and integrated.

Reflective approach	Approach used in this research
Consider approaches for future research in aged care	Explanatory sequential mixed methods approach I found the explanatory sequential mixed methods a fitting approach for this study. Having the qualitative follow-up to the quantitative interventions gave some insight into the barriers that may have affected the implementation of the interventions. It stimulated questions I might not have thought to ask and explore if I had just used a qualitative method. The quantitative data alone would not have revealed some of the barriers in place that potentially impacted the effectiveness of the interventions on reducing resident participants' symptoms of depression. I enjoyed the data collection for both methods and would be interested in being involved in further explanatory sequential mixed methods studies in the future, particularly related to aged care.

12.7 Thesis Conclusion

As presented in this thesis, depression among the ageing population is a significant public health concern, with residents of RACFs presenting the highest risk group. Multiple risk factors contribute to depression, particularly loss of autonomy and environmental mastery, which in turn lead to reduced self-esteem and a diminished sense of self. Addressing the ongoing prevalence of depression in RACFs through targeted interventions is therefore of critical importance.

This mixed methods study aimed to deepen understanding of the factors that promote or hinder autonomy in residential aged care and explore strategies for improving resident outcomes and reducing depressive symptoms. The quantitative component of the thesis involved a resident intervention designed to assess whether allowing residents to choose their own bedtimes and to participate in an evening activity program would reduce symptoms of depression. The findings revealed that these

interventions did not result in a statistically significant reduction in the participants' depressive symptoms.

The qualitative component, which included semi-structured interviews with residents and staff, identified several barriers and facilitators influencing resident autonomy. The findings from integrating the studies provide a framework of reforms for aged care providers to achieve the principles and standards outlined in the Strengthened Aged Care Quality Standards (2025), the Code of Conduct for Aged Care (2022), and the *Aged Care Act* (2024) (Cth). Standard 1 of the Strengthened Aged Care Quality Standards (2025) specifically requires aged care providers and staff to support residents to feel safe, understood, and included (Department of Health and Aged Care, 2025). The findings of this study, integrating the principles of the Self-Determination Theory and Person-Centred Care, highlight that to enable aged care residents to feel safe to express preferences and desires, they must have confidence that staff will respect their choices without fear of repercussions. The findings emphasise that to achieve autonomy-directed care, organisational structures need to be reformed, shifting away from institutionalised models toward more flexible frameworks that facilitate and prioritise individual decision-making.

Key recommendations arising from this study include:

- Aged care providers to develop a collaborative framework for flexible care delivery by dynamically engaging nursing, care, and catering staff in its design. This framework should prioritise the individual residents' preferences and needs over rigid routines, enabling a more person-centred care model. This approach can strengthen staff autonomy, foster more meaningful relationships between staff, residents and families, and ultimately optimise residents' autonomy and mental well-being.
- Aged care providers to co-create an organisational culture and system that emphasises the value of staff relational engagement, judgement, and flexibility. Establishing systems that

support staff to act with discretion and respect, the dignity and self-determination of residents are enhanced.

Ultimately, supporting resident autonomy in residential aged care has the potential to significantly improve resident well-being and contribute to reducing the prevalence of depression among older adults in residential care settings.

References

- Abdoli, N., Salari, N., Darvishi, N., Jafarpour, S., Solaymani, M., Mohammadi, M., & Shohaimi, S. (2022). The global prevalence of major depressive disorder (MDD) among the elderly: A systematic review and meta-analysis. *Neuroscience & Biobehavioral Reviews*, 132, 1067-1073.
- Abrams, R. C., Nathanson, M., Silver, S., Ramirez, M., Toner, J. A., & Teresi, J. A. (2017). A training program to enhance recognition of depression in nursing homes, assisted living, and other long-term care settings: Description and evaluation. *Gerontology & geriatrics education*, 38(3), 325-345.
- Aged Care Quality and Safety Commission. (2022). *Code of conduct for aged care* <https://www.agedcarequality.gov.au/sites/default/files/media/code-of-conduct-for-aged-care-worker-guidance.pdf>
- Alam, A., Rampes, S., & Ma, D. (2021). The impact of the COVID-19 pandemic on research. *Translational Perioperative and Pain Medicine*, 8(1), 312-314.
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders*.
- Andrew, A., & Ritchie, L. (2017). Culture change in aged-care facilities: A café's contribution to transforming the physical and social environment. *Journal of Housing for the Elderly*, 31(1), 34-46.
- Andrew, A., & Wilson, L. H. (2014). A café on the premises of an aged care facility: more than just froth? *Scandinavian Journal of Occupational Therapy*, 21(3), 219-226.
- Arevalo-Rodriguez, I., Smailagic, N., i Figuls, M. R., Ciapponi, A., Sanchez-Perez, E., Giannakou, A., Pedraza, O. L., Cosp, X. B., & Cullum, S. (2015). Mini-Mental State Examination (MMSE) for the detection of Alzheimer's disease and other dementias in people with mild cognitive impairment (MCI). *Cochrane database of systematic reviews*(3).
- Atkins, J., Naismith, S., Luscombe, G. M., & Huickie, I. B. (2013). More age-care staff report helping care recipients following a brief depression awareness raising intervention. *BioMed Central Nursing*, 12(10), 1-7.
- Atkins, J., Naismith, S. L., Luscombe, G. M., & Hickie, I. B. (2013). A preliminary study of aged care facility staff indicates limitations in awareness of the link between depression and physical morbidity. *BMC Geriatrics*, 13, 1-9.
- Australian Institute of Health & Welfare. (2013). *Australia's welfare 2013*. <https://www.aihw.gov.au/getmedia/f55c1302-a0aa-451f-89ba-ec286ff1d7e1/15448-chapter6.pdf.aspx>
- Australian Institute of Health & Welfare. (2024). *Mental Health in Aged Care*. Australian Government. Retrieved 15/01/2025 from https://www.aihw.gov.au/reports/aged-care/mental-health-in-aged-care/contents/summary?_cf_chl tk=0pnU7ma BWVTIYj2nhZNs.JI3UVgHVB6issuzK9Uu3U-1736920224-1.0.1.1-DRyYoFqAd mFGpJ4v4 wXlclA7TD8JNg8UNV11ag0Ro
- Australian Institute of Health & Welfare. (2025). *Providers, services and places in aged care*. Australian Government. <https://www.gen-agedcaredata.gov.au/topics/providers,-services-and-places-in-aged-care>
- Australian Institute of Health & Welfare. (2015). *Australia's welfare 2015. Australia's welfare series no. 12. Cat. No. AUS 189*.
- Australian Institute of Health & Welfare. (2021). *Older Australians*. Australian Government. Retrieved 28 March 2023 from [aihw.gov.au](https://www.aihw.gov.au)

- Australian Institute of Health and Welfare. (2022). *Providers, services and places in aged care*. Retrieved April 20 2023 from <https://www.gen-agedcaredata.gov.au/Topics/Providers,-services-and-places-in-aged-care#Providers,%20services,%20and%20places%20in%20Australia>
- Baker, F. A., Lee, Y.-E. C., Sousa, T. V., Stretton-Smith, P. A., Tamplin, J., Sveinsdottir, V., Geretsegger, M., Wake, J. D., Assmus, J., & Gold, C. (2022). Clinical effectiveness of music interventions for dementia and depression in elderly care (MIDDEL): Australian cohort of an international pragmatic cluster-randomised controlled trial. *The Lancet Healthy Longevity*, 3(3), e153-e165.
- Balkin, E. J., Kymre, I. G., Kollerup, M. G., Martinsen, B., & Grønkjær, M. (2024). Ambiguous personhood: Paradoxes of social belonging in Danish nursing home care. *Journal of Aging Studies*, 68, 101214.
- Barnighausen, T. (2017). Quasi-experiments in public health and health systems research. *European Journal of Public Health*, 27(3). <https://doi.org/doi.org/10.1093/eurpub/ckx187.817>
- Batchelor, F., Savvas, S., Dang, C., Goh, A., Levinger, P., Peck, A., Katz, I., & Dow, B. (2020). *Inside the system: aged care residents' perspectives*. Royal Commission into Aged Care Quality and Safety.
- Bauer, M., Fetherstonhaugh, D., Tarzia, L., & Chenco, C. (2014). Staff–family relationships in residential aged care facilities: The views of residents' family members and care staff. *Journal of Applied Gerontology*, 33(5), 564-585.
- Bazeley, P. (2018). *Integrating Analyses in Mixed Methods Research*. SAGE Publications Ltd. <https://doi.org/10.4135/9781526417190>
- Bazeley, P. (2018). Integrating analyses in mixed methods research.
- Biella, M. M., Borges, M. K., Strauss, J., Mauer, S., Martinelli, J. E., & Aprahamian, I. (2019). Subthreshold depression needs a prime time in old age psychiatry? A narrative review of current evidence. *Neuropsychiatric disease and treatment*, 2763-2772.
- Biffi, A., Rea, F., Scotti, L., Mugelli, A., Luccenteforte, E., Bettiol, A., Chinellato, A., Onder, G., Vitale, C., Agabiti, N., Trifiro, G., & Roberto, G. (2018). Antidepressants and the risk of arrhythmia in elderly affected by a previous cardiovascular disease: a real-life investigation from Italy. *European Journal of Clinical Pharmacology*, 74, 119-129. <https://doi.org/doi.org/10.1007/s00228-017-2352-x>
- Birks, M., Bodak, M., Barlas, J., Harwood, J., & Pether, M. (2016). Robotic seals as therapeutic tools in an aged care facility: a qualitative study. *Journal of aging research*, 2016(1), 8569602.
- Bonner, R. (2017). ANMF's aged care staffing and skill mix project. *Australian Nursing and Midwifery Journal*, 24(9), 28-33.
- Bostrom, G., Conradsson, M., Rosendahl, E., Nordstrom, P., Gustafson, Y., & Littbrand, H. (2014). Functional capacity and dependency in transfer and dressing are associated with depressive symptoms in older people. *Clinical Interventions in Aging*, 9, 249-256. <https://doi.org/10.2147/CIA.S57535>
- Boswell, C., & Cannon, S. (2023). *Introduction to nursing research: Incorporating evidence-based practice*. Jones & Bartlett Learning.
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global qualitative nursing research*, 4, 2333393617742282.

- Bradshaw, E. L., Anderson, J. R., Banday, M. A., Basarkod, G., Daliri-Ngametua, R., Ferber, K. A., Henry, D., & Ryan, R. M. (2023). A quantitative meta-analysis and qualitative meta-synthesis of aged care residents' experiences of autonomy, being controlled, and optimal functioning. *The Gerontologist*, 64(5), gnad135.
- Braun, V., & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers? In (Vol. 9, pp. 26152): Taylor & Francis.
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 11(4), 589-597.
- Bryant, C., Brown, L., Polacsek, M., Batchelor, F., Capon, H., & Dow, B. (2020). Volunteer-led behavioural activation to reduce depression in residential care: a feasibility study. *Pilot and Feasibility Studies*, 6, 1-10.
- Brydon, A., Bhar, S., Doyle, C., Batchelor, F., Lovelock, H., Almond, H., Mitchell, L., Nedeljkovic, M., Savvas, S., & Wuthrich, V. (2022). National survey on the impact of COVID-19 on the mental health of Australian residential aged care residents and staff. *Clinical Gerontologist*, 45(1), 58-70.
- Burns, A. C., Saxena, R., Vetter, C., Phillips, A. J., Lane, J. M., & Cain, S. W. (2021). Time spent in outdoor light is associated with mood, sleep, and circadian rhythm-related outcomes: a cross-sectional and longitudinal study in over 400,000 UK Biobank participants. *Journal of Affective Disorders*, 295, 347-352.
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & quantity*, 56(3), 1391-1412.
- Cameron, N., Fetherstonhaugh, D., Bauer, M., & Tarzia, L. (2020). How do care staff in residential aged care facilities conceptualise their non-verbal interactions with residents with dementia and what relevance has this for how residents' preferences and capacity for decision-making are understood? *Dementia*, 19(5), 1364-1380.
- Capili, B., & Anastasi, J. K. (2021). Overview: Cohort Study Designs. *The American journal of nursing*, 121(12), 45.
- Castro-Costa, E., Dewey, M., Stewart, R., Banerjee, S., Huppert, F., Mendonca-Lima, C., Bula, C., Wancata, J., Ritchie, K., Tsolaki, R., Mateos, R. & Prince, M. . (2007). Prevalence of depressive symptoms and syndromes in later life in ten European countries. *British Journal of Psychiatry*, 191, 393-401.
- Chau, R., Kissane, D. W., & Davison, T. E. (2020). Risk indicators for depression in aged care: The contribution of a meaningful life, mastery and environmental fit. *Australasian Journal on Ageing*, 39(3), e368-e374.
- Chau, R., Kissane, D. W., & Davison, T. E. (2021). Risk factors for depression in long-term care: a prospective observational cohort study. *Clinical Gerontologist*, 44(2), 112-125.
- Chaudhury, H., Cooke, H. A., Cowie, H., & Razaghi, L. (2018). The influence of the physical environment on residents with dementia in long-term care settings: A review of the empirical literature. *The Gerontologist*, 58(5), e325-e337.
- Chen, C. K., Zimmerman, S., Sloane, P. D., & Barrick, A. L. (2007). Assisted living policies promoting autonomy and their relationship to resident depressive symptoms. *The American Journal of Geriatric Psychiatry*, 15(2), 122-129.
- Cherubini, A., Nistico, G., Rozzini, R., Liperoti, R., Di Bari, M., Zampi, E., Ferrannini, L., Aguglia, E., Pani, L., & Bernabei, R. (2012). Subthreshold depression in older subjects: an unmet therapeutic need. *The Journal of nutrition, health and aging*, 16(10), 909-913.

- Coad, A. (2012). Depression in children. In N. Wrycraft (Ed.), *Mental Health Nursing Case Book*. McGraw-Hill Education.
- Coad, J., Aine, J., Christopher, H., Beer, E., Ellis, A., & Marie, A. (2019). Evaluation of care staff knowledge, confidence, motivation and opportunity for preventing falls in residential aged care settings: A cross-sectional survey,(November 2018), 1–11. In.
- Connelly, S. G., Millear, P., & Tulloch, K. (2025). A qualitative exploration of staff satisfaction in innovative Australian aged care. *Australasian Journal on Ageing*, 44(3), e70090.
- Conradsson, M., Littbrand, H., Lindelof, N., Gustafson, Y., & Rosendahl, E. (2010). Effects of a high-intensity functional exercise programme on depressive symptoms and psychological well-being among older people living in residential care facilities: A cluster-randomized controlled trial. *Aging & Mental Health*, 14(5), 565-576.
<https://doi.org/10.1080/13607860903483078>
- Cresswell, J. W., & Cresswell, J. D. (2018). *Research Design: qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications Ltd.
- Creswell, J. W. (2022). *A concise introduction to mixed methods research*. SAGE publications.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design : qualitative, quantitative, and mixed methods approaches* (Sixth ed.). SAGE.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (Third ed.). Sage publications.
- Curtis, A. C., & Keeler, C. (2022). Interpretive methodologies in qualitative nursing research. *American Journal of Nursing*, 122(10), 45-49.
- Dahlke, A. R., Curtis, L. M., Federman, A. D., & Wolf, M. S. (2014). The Mini Status Exam as a surrogate measure of health literacy. *Journal of General Internal Medicine*, 29(4), 615-620. <https://doi.org/10.1007/s116606-01-2712-x>
- Davison, T. E., Karantzas, G., Mellor, D., McCabe, M. P., & Mrkic, D. (2013). Staff-focused interventions to increase referrals for depression in aged care facilities: a cluster randomized controlled trial. *Aging & Mental Health*, 17(4), 449-455.
<https://doi.org/10.1080/13607863.2012.738412>
- Davison, T. E., McCabe, M. P., Knight, T., & Mellor, D. (2012). Biopsychosocial factors related to depression in aged care residents. *Journal of Affective Disorders*, 142(1-3), 290-296.
<https://doi.org/10.1016/j.jad.2012.05.019>
- Davison, T. E., McCabe, M. P., Mellor, D., Karantzas, G., & George, K. (2009). Knowledge of late-life depression: an empirical investigation of aged care staff. *Aging & Mental Health*, 13(4), 577-586.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, 11(4), 227-268.
- Department of Health. (2019). *Aged Care Quality Standards*. Australian Government.
https://www.health.gov.au/resources/publications/guide-to-aged-care-law/chapter-1-introduction/aged-care-quality-standards?utm_source=chatgpt.com
- Department of Health and Aged Care. (2023). *Care minutes in residential aged care*. Australian Government. Retrieved March 17 from <https://www.health.gov.au/our-work/care-minutes-registered-nurses-aged-care/care-minutes>
- Department of Health and Aged Care. (2025). *Strengthened Aged Care Quality Standards*. Australian Government. <https://www.health.gov.au/sites/default/files/2025-08/strengthened-aged-care-quality-standards-august-2025.pdf>.

- Department of Health, D. a. A. (2024). *New Aged Care Act*. <https://www.health.gov.au/our-work/aged-care-act>
- Department of Health Disability and Ageing. (2025a). *About residential aged care*. Australian Government. Retrieved July 2 2025 from <https://www.health.gov.au/our-work/residential-aged-care/about-residential-aged-care>
- Department of Health Disability and Ageing. (2025b). *About the Australian National Aged Care Classification funding model*. Australian Government. <https://www.health.gov.au/our-work/AN-ACC/about?language=en#about-anacc>
- Diegelmann, M., Wahl, H.-W., Schilling, O. K., Jansen, C.-P., Schnabel, E.-L., & Hauer, K. (2018). Understanding depressive symptoms in nursing home residents: The role of frequency and enjoyability of different expanded everyday activities relevant to the nursing home setting. *European Journal of Ageing*, 15, 339-348.
- Dingwall, R., & Staniland, K. (2020). *Qualitative research methods for nurses*. Sage.
- Dozeman, W., van Marwijk, H. W. J., van Shaik, D. J. F., Smit, F., Stek, M. L., van der Horst, E., Bolmeijer, E. T., & Beekman, A. t. F. (2012). Contradictory effects for prevention of depression and anxiety in residents in homes for the elderly: a pragmatic randomized controlled trial. *International Psychogeriatrics*, 28(8), 1242-1251. <https://doi.org/doi:10.1017/S1041610212000178>
- du Toit, S. H., Fitch, S. J., Jessup, G. M., & Low, L. F. (2021). The residential environment impact scale: Benefits and barriers to implementation in the Australian residential aged care facility context. *Australian Occupational Therapy Journal*, 68(6), 477-489.
- Efron, S. E., & Ravid, R. (2018). Writing the literature review: A practical guide.
- El-Den, S., Chen, T. F., Gan, Y., Wong, E., & O'Reilly, C. (2018). The psychometric properties of depression screening tools in primary healthcare settings: a systematic review. *Journal of Affective Disorders*, 225, 503-522.
- Ellard, D., Thorogood, M., Underwood, M., Seale, C., & Taylor, S. (2014). Whole home exercise intervention for depression in older care home residents (the OPERA study): a process evaluation. *BioMed Central*, 12(1), 1-11.
- Fazio, S., Pace, D., Flinner, J., & Kallmyer, B. (2018). The fundamentals of person-centered care for individuals with dementia. *The Gerontologist*, 58(suppl_1), S10-S19.
- Feng, X., Dang, W., & Apuke, O. D. (2024). How does group music therapy help in combating the anxiety and depression of dementia patients? A quasi-experimental investigation. *Archives of Psychiatric Nursing*, 52, 83-88.
- Fetherstonhaugh, D., Tarzia, L., Bauer, M., Nay, R., & Beattie, E. (2016). "The red dress or the blue?" how do staff perceive that they support decision making for people with dementia living in residential aged care facilities? *Journal of Applied Gerontology*, 32(2), 209-226. <https://doi.org/DOI:10.1177?0733464814531089>
- Flick, U. (2018). Designing qualitative research. *Designing Qualitative Research*, 1-200.
- Franck, L., Molyneux, N., & Parkinson, L. (2015). Systematic review of interventions addressing social isolation and depression in aged care clients. *Quality of Life Research*, 25(6), 1395-1407. <https://doi.org/10.1007/s11136-015-1197-y>
- Geda, M., George, S. Z., Burgess, D. J., Scarton, D. V., Roddy, W. T., Gordon, K. S., Pasquina, P. F., Brandt, C. A., Kerns, R. D., & Peduzzi, P. (2020). Strategy for addressing research-site overlap in pragmatic clinical trials: lessons learned from the NIH-DOD-VA Pain Management Collaboratory (PMC). *Trials*, 21(1), 1021.

- Gleibs, I. H., Haslam, C., Jones, J. M., Alexander Haslam, S., McNeill, J., & Connolly, H. (2011). No country for old men? The role of a 'Gentlemen's Club' in promoting social engagement and psychological well-being in residential care. *Aging & Mental Health*, 15(4), 456-466.
- Grace, N., & Toukhsati, S. R. (2014). Psychosocial functioning in the elderly: an assessment of self-concept and depression. *International Journal of Psychological Research*, 7(1), 12-18.
- Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., & Robinson, N. (2006). Lost in knowledge translation: time for a map? *Journal of continuing education in the health professions*, 26(1), 13-24.
- Gray, J. R. (2019). Introduction to qualitative research. In G. S.K & G. J.R (Eds.), *Understanding nursing research building an evidence-based practice* (7th ed.). Elsevier.
- Gray, J. R., Grove, S. K., & Sutherland, S. (2017). *Burns and grove's the practice of nursing research: Appraisal, synthesis, and generation of evidence*. Elsevier Health Sciences.
- Grove, S. K., Gray, J. R., & Faan, P. R. (2019). *Understanding Nursing Research: First South Asia Edition, E-Book: Building an Evidence-Based Practice*. Elsevier India.
- Guerra, M., Prina, A. M., Ferri, C. P., Acosta, D., Gallardo, S., Huang, Y., Jacob, K. S., Jimenez-Velazquez, I. Z., Llibre Rodriguez, J. J., Liu, Z., Salas, A., Sosa, A. L., Williams, J. D., Uwakwe, R., & Prince, M. (2016). A comparative cross-sectional study of the prevalence of late life depression in low and middle income countries. *Journal of Affective Disorders*, 190, 362-368.
- Haltaufderheide, J., Lucht, A., Strünck, C., & Vollmann, J. (2023). Increasing efficiency and well-being? a systematic review of the empirical claims of the double-benefit argument in socially assistive devices. *BMC Medical Ethics*, 24(1), 106.
- Harris, M., & Grando, V. (2014). When is nighttime? A description of bedtime in persons with dementia in the nursing home. *Geriatric Nursing*, 35(6), 474-478.
<https://doi.org/doi.org/10.1016/j.gerinurse.2014.06.012>
- Harvey, M., & Land, L. (2022). *Research methods for nurses and midwives: theory and practice*. SAGE Publications Ltd.
- Hesse-Biber, S. N. (2010). *Mixed methods research: Merging theory with practice*. Guilford Press.
- Hetrick, S. E., McKenzie, J. E., Bailey, A. P., Sharma, V., Moller, C. I., Badcock, P. B., Cox, G. R., Merry, S. N., & Meader, N. (2021). New generation antidepressants for depression in children and adolescents: a network meta-analysis. *Cochrane database of systematic reviews*(5).
- Hodgson, N. A., Gooneratne, N., Perez, A., Talwar, S., & Huang, L. (2021). A timed activity protocol to address sleep-wake disorders in home dwelling persons living with dementia: the healthy patterns clinical trial. *BMC Geriatrics*, 21(451).
<https://doi.org/https://doi.org/10.1186/s12877-021-02397-2>
- Hoffmann, T. C., Glasziou, P. P., Boutron, I., Milne, R., Perera, R., Moher, D., Altman, D. G., Barbour, V., Macdonald, H., & Johnston, M. (2014). Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide. *Bmj*, 348.
- Holloway, I., & Galvin, K. (2016). *Qualitative Research in Nursing and Healthcare* (4th ed.). John Wiley & Sons, Incorporated.
- Hughes, M., Chalk, A., Sharma, P., Dahiya, S., & Galloway, J. (2021). A cross-sectional study of sleep and depression in a rheumatoid arthritis population. *Clinical Rheumatology*, 40, 1299-1305. <https://doi.org/doi:org/10.1007/s10067-020-05414-8>

- laboni, A., & Flint, A. (2013). The complex interplay of depression and falls in older adults: a clinical review. *The American Journal of Geriatric Psychiatry*, 21(5), 484-492.
- Independent Health and Aged Care Pricing Authority. (2025). *ICD-10-AM/ACHI/ACS*. Canberra: Commonwealth of Australia Retrieved from <https://www.ihacpa.gov.au/health-care/classification/icd-10-amachiacs>
- Jahouh, M., González-Bernal, J. J., González-Santos, J., Fernández-Lázaro, D., Soto-Cámara, R., & Mielgo-Ayuso, J. (2021). Impact of an intervention with Wii video games on the autonomy of activities of daily living and psychological–cognitive components in the institutionalized elderly. *International Journal of Environmental Research and Public Health*, 18(4), 1570.
- Jeon, Y., Li, Z., Low, L., Chenoweth, L., O'Connor, D., Brodaty, H., & Beattie, E. (2014). Validity of the Geriatric Depression Scale and the Collateral Source Version of the Geriatric Depression Scale in Residential Aged Care. *Alzheimer's & Dementia*, 10(4). <https://doi.org/10.1016/j.jalz.2014.04.090>
- Jones, C., & Moyle, W. (2016). Staff perspectives of relationships in aged care: A qualitative approach. *Australasian Journal on Ageing*, 35(3), 198-203.
- Kalaitzidis, E., & Harrington, A. (2018). Resident decision-making in the context of residential aged care. *Collegian*, 25, 509-515.
- Karantzas, G. C., Davison, T. E., McCabe, M. P., Mellor, D., & Beaton, P. (2012). Measuring carers' knowledge of depression in aged care settings: the Knowledge of Late Life Depression Scale-Revised. *Journal of Affective Disorders*, 138(3), 417-424. <https://doi.org/10.1016/j.jad.2012.01.002>
- Karimi, H., Dolatshaee, B., Momeni, K., Khodabakhshi, A., Rezaei, M., & Kamrani, A. A. (2010). Effectiveness of integrative and instrumental reminiscence therapies on depression symptoms reduction in institutionalized older adults: an empirical study. *Aging & Mental Health*, 14(7), 881-887. <https://doi.org/10.1080/13607861003801037>
- Kitwood, T. (1997). *Dementia considered: the person comes first*. Open University Press, Buckingham.
- Knight, T., Davison, T. E., McCabe, M. P., & Mellor, D. (2011). Environmental mastery and depression in older adults in residential care. *Ageing and Society*, 31(05), 870-884. <https://doi.org/10.1017/s0144686x1000142x>
- Kosiol, J., Olley, R., Lloyd, S., Fraser, L., Cooper, H., & Waid, D. (2024). My Voice, My Choice: A systematic review of the literature relating to consumer-directed care in Australia. *Asia Pacific Journal of Health Management*.
- Kusmaul, N., & Tucker, G. G. (2020). Person-centred care in nursing homes: many stakeholders, many perspectives. *Journal of Gerontological Nursing*, 46(5), 9-13. <https://doi.org/doi:10.3928/00989134-20200327-01>
- Land, L., & Harvey, M. (2021). Research Methods for Nurses and Midwives: Theory and Practice. *Research Methods for Nurses and Midwives*, 1-100.
- Lazaris, A. S., & Nazareno, J. (2020). Trans-incarceration: Reimagining confinement and the criminality of aging. *Journal of Aging Studies*, 53, 100854.
- Lee, C. C., Tseng, H. C., Wu, L. P., & Chuang, Y. H. (2020). Multiple brief training sessions to improve nurses' knowledge, attitudes, and confidence regarding nursing care of older adults with depression in long-term care facilities. *Research in Nursing & Health*, 43(1), 114-121.

- Lin, L., Jing, X.-C., Lv, S.-J., Liang, J.-H., Tian, L., Li, H.-L., Puts, M., & Xu, Y. (2020). Mobile device use and the cognitive function and depressive symptoms of older adults living in residential care homes. *BMC Geriatrics*, 20, 1-8.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- LoBiondo-Wood, G., & Haber, J. (2022). *Nursing research: Methods and critical appraisal for evidence-based practice* (10th ed.). Elsevier.
- Luc, V., Aggen, S. H., & Kendler, K. S. (2010). The DSM-IV definition of severity of major depression: inter-relationship and validity. *Psychological Medicine*, 40(10), 1691-1701.
- Ludlow, K., Churruarín, K., Mumford, V., Ellis, L., & Braithwaite, J. (2020). Staff members' prioritisation of care in residential aged care facilities: a Q methodology study. *BMC Health Services Research*, 20(423). <https://doi.org/10.1186/s12913-020-05127-3>
- Luff, R., Ellmers, T., Eysers, I., Young, E., & Arber, S. (2011). Time spent in bed at night by care-home residents: choice or compromise. *Ageing & Society*, 31(7), 1229-1250. <https://doi.org/10.1017/S0144686X10001285>
- Mail, M. P. (2022). Qualitative research: Loneliness and boredom in residential care: Voices of older adults. *Aotearoa New Zealand Social Work*, 34(1), 88-99.
- Malhi, G. S., Bassett, D., Boyce, P., Bryant, R., Fitzgerald, P. B., Fritz, K., Hopwood, M., Lyndon, B., Mulder, R., Murray, G., Porter, R., & Singh, A. (2015). Royal Australian and New Zealand College of Psychiatrists clinical guidelines for mood disorders. *Australian and New Zealand Journal of Psychiatry*, 49(12), 1-185.
- Manepalli, D., Thaipisuttikul, P., & Yarnal, R. (2011). Identifying and treating depression across the life span. *Current Psychiatry*, 10(6), 20-24.
- Mark, T., Joish, V., Hay, J., Sheehan, D., Johnston, S., & Cao, Z. (2011). Antidepressant use in geriatric populations: the burden of side effects and interactions and their impact on adherence and costs. *The American Journal of Geriatric Psychiatry*, 19(3), 211-221.
- Martyn, J.-A., Wilkinson, A., & Zanella, S. (2022). Identifying the continuing education needs of personal care workers in two residential aged care facilities by an appreciative inquiry study. *Collegian*, 29(6), 887-893.
- McAuliffe, L., Fetherstonhaugh, D., Rayner, J.-A., & Clune, S. (2024). Having to 'go beyond': Staff perspectives on activity programs for older people living in nursing homes. *Journal of Aging Studies*, 71, 101279.
- McCabe, M., Byers, J., Busija, L., Mellor, D., Bennett, M., & Beattie, E. (2021). How important are choice, autonomy, and relationships in predicting the quality of life of nursing home residents? *Journal of Applied Gerontology*, 40(12), 1743-1750.
- McCabe, M., Mellor, D., Davison, T., Karantzas, G., Von Treuer, K., & O'Connor, D. W. (2013). A study protocol to investigate the management of depression and challenging behaviours associated with dementia in aged care settings. *BioMed Central Geriatrics*, 13(95), 1-6. <https://doi.org/10.1186/1471-2318-13-95>
- McCormack, B., & McCance, T. V. (2006). Development of a framework for person-centred nursing. *Journal of Advanced Nursing*, 56(5), 472-479.
- Mellor, D., Kiehne, M., McCabe, M., Davison, T., Karantzas, G., & Kuruvilla, G. (2010). An evaluation of the beyondblue Depression Training Program for aged care workers. *International Psychogeriatrics*, 22(6), 927-937. <https://doi.org/10.1017/S1041610210000153>

- Mezuk, B., & Kendler, K. S. (2012). Examining variation in depressive symptoms over the life course: a latent class analysis. *Psychological Medicine*, 42(10), 2037-2046.
<https://doi.org/10.1017/S003329171200027X>
- Milte, R., Shulver, W., Killington, M., Bradley, C., Ratcliffe, J., & Crotty, M. (2016). Quality in residential care from the perspective of people living with dementia: The importance of personhood. *Archives of Gerontology and Geriatrics*, 63, 9-17.
- Mitchell, A. J., Bird, V., Rizzo, M., & Meader, N. (2010). Diagnostic validity and added value of the Geriatric Depression Scale for depression in primary care: a meta-analysis of GDS30 and GDS15. *Journal of Affective Disorders*, 125(1-3), 10-17.
<https://doi.org/10.1016/j.jad.2009.08.019>
- Mitchell, G., & Agnelli, J. (2015). Person-centred care for people with dementia: Kitwood reconsidered. *Nursing Standard* (2014+), 30(7), 46.
- Moilanen, T., Kangasniemi, M., Papinaho, O., Mynttinen, M., Siipi, H., Suominen, S., & Suhonen, R. (2021). Older people's perceived autonomy in residential care: An integrative review. *Nursing Ethics*, 28(3), 414-434.
- Moilanen, T., Suhonen, R., & Kangasniemi, M. (2025). Key professional stakeholders roles in promoting older people's autonomy in residential care. *Nursing Ethics*, 32(2), 575-587.
- Mortari, L. (2015). Reflectivity in research practice: An overview of different perspectives. *International journal of qualitative methods*, 14(5), 1609406915618045.
- Moyle, W., Hsu, M., Leiff, S., & Vernooij-Dassen, M. (2010). Recommendations for staff education and training for older people with mental illness in long-term aged care. *International Psychogeriatrics*, 22(7), 1097-1106.
- Murphy, B. J., Bugeja, L. C., Pilgrim, J. L., & Ibrahim, J. E. (2018). Suicide among nursing home residents in Australia: A national population-based retrospective analysis of medico-legal death investigation information. *International Journal of Geriatric Psychiatry*, 33(5), 786-796.
- Myagedcare. *Aged Care Quality Standards*. Retrieved January 25 2024 from
<https://www.myagedcare.gov.au/aged-care-quality-standards#quality-standards>
- Naef, R., Ward, R., Mahrer-Imhof, R., & Grande, G. (2013). Characteristics of the bereavement experience of older persons after spousal loss: an integrative review. *International Journal of Nursing Studies*, 50, 1108-1121.
<https://doi.org/doi.org/10.1016/j.inurstu.2012.11.026>
- National Health and Medical Research Council. (2023). *National Statement on Ethical Conduct in Human Research*. <https://www.nhmrc.gov.au/about-us/publications/national-statement-ethical-conduct-human-research-2023>
- Neimeyer, R. A., Klass, D., & Dennis, M. R. (2014). Mourning, meaning, and memory: Individual, communal, and cultural narration of grief. In *Meaning in positive and existential psychology* (pp. 325-346). Springer.
- Neves, B. B., Sanders, A., & Kokanović, R. (2019). "It's the worst bloody feeling in the world": Experiences of loneliness and social isolation among older people living in care homes. *Journal of Aging Studies*, 49, 74-84.
- Neville, S., & Whitehead, D. (2020). Analysing data in qualitative research. In D. Whitehead, C. Ferguson, G. Lo-Biondo-Wood, & J. Haber (Eds.), *Nursing and midwifery research methods and appraisal for evidence-based practice* (6th ed., pp. 136-155). Elsevier.

- O'Regan, C., Kennedy, R. A., Cronin, H., & Kearney, P. M. (2015). Antidepressants strongly influence the relationship between depression and heart rate variability: findings from The Irish Longitudinal Study on Ageing (TILDA). *Psychological Medicine*, 45, 623-636.
- Ofose, E., De Nys, L., Connelly, J., Ryde, G. C., & Whittaker, A. (2023). A realist evaluation of the feasibility of a randomised controlled trial of a digital music and movement intervention for older people living in care homes. *BMC Geriatrics*, 23(1), 125.
- Ouyang, Z., Chong, A. M., Ng, T. K., & Liu, S. (2015). Leisure, functional disability and depression among older Chinese living in residential care homes. *Aging & Mental Health*, 19(8), 723-730. <https://doi.org/10.1080/13607863.2014.962009>
- Polacsek, M., & Woolford, M. (2022). Strategies to support older adults' mental health during the transition into residential aged care: a qualitative study of multiple stakeholder perspectives. *BMC Geriatrics*, 22(1), 151.
- Polit, D., & Beck, C. (2021). Nursing research. Appraising evidence for nursing practice (10. utgave). In: Wolters Kluwer Health.
- Polit, D. F., & Beck, C. T. (2017). *Nursing research: generating and assessing evidence for nursing practice* (10th ed.). Wolters Kluwer Health.
- Polit, D. F., & Beck, C. T. (2022). *Essentials of nursing research appraising evidence for nursing practice*. (Tenth ed.).
- Rashal, A., & Tahir, I. (2015). The prevalence and predictors of severe depression among the elderly in Malaysia. *Journal of Cross-Cultural Gerontology*, 30, 69-85.
- Repo, V. (2019). Spatial control and care in Finnish nursing homes. *Area*, 51(2), 233-240.
- Roche, D., & Bennett, C. L. (2024). *Notes on... Nursing Research*. John Wiley & Sons, Incorporated.
<http://ebookcentral.proquest.com/lib/avondale/detail.action?docID=31728134>
- Royal Commissions. (2021). *Final Report of the Royal Commission into Aged Care Quality and Safety*. Retrieved 17 February 2025 from <https://www.royalcommission.gov.au/aged-care/final-report>
- Sakai, T., Jadczyk, A. D., Khalid, A., Piovezan, R. D., Leemaqz, S., & Visvanathan, R. (2024). The prevalence of, and factors associated with, a risk of depression in residential aged care services residents: Findings from the FIRST study. *Australasian Journal on Ageing*, 43(4), 811-817.
- Santandreu, J., Caballero, F. F., Gómez-Serranillos, M. P., & González-Burgos, E. (2024). Association between tricyclic antidepressants and health outcomes among older people: A systematic review and meta-analysis. *Maturitas*, 108083.
- Scerri, M. A., & Presbury, R. (2021). Contextual factors influencing talk in Australian residential aged care. *Journal of Health Organization and Management*, 35(5), 643-658.
- Schmidt, N. A., & Brown, J. M. (2022). *Evidence -based practice for nurses appraisal and application of research*. (Fifth ed.). Jones & Bartlett Learning.
- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *Kolner Zeitschrift für Soziologie und Sozialpsychologie*, 69(Suppl 2), 107.
- Schwarzbach, M., Lupp, M., Sikorski, C., Fuchs, A., Maier, W., van den Bussche, H., Pentzek, M., & Riedel-Heller, S. G. (2013). The relationship between social integration and depression in non-demented primary care patients aged 75 years and older. *Journal of Affective Disorders*, 145(2), 172-178. <https://doi.org/10.1016/j.jad.2012.07.025>

- Seah, S. S. L., Chenoweth, L., & Brodaty, H. (2022). Person-centred Australian residential aged care services: how well do actions match the claims? *Ageing & Society*, 42(12), 2914-2939.
- Seemann, N., Week, D., & Westera, A. (2024). National Aged Care Design Principles and Guidelines. In: Department of Health and Aged Care.
- Shishehgar, M., Kerr, D., & Blake, J. (2019). The effectiveness of various robotic technologies in assisting older adults. *Health informatics journal*, 25(3), 892-918.
- Siette, J., Dodd, L., Surian, D., Prgomet, M., Dunn, A., & Westbrook, J. (2022). Social interactions and quality of life of residents in aged care facilities: a multi-methods study. *PLoS ONE*, 17(8), e0273412. <https://doi.org/10.1371/journal.pone.0273412>
- Simning, A., & Simons, K. (2017). Treatment of depression in nursing home residents without significant cognitive impairment: a systematic review. *International Psychogeriatrics*, 29(2), 209-226.
- Sinclair, C., Field, S., & Blake, M. (2018). Supported decision-making in aged care: a policy development guideline for aged care providers in Australia. (2nd Ed). Sydney: Cognitive Decline Partnership Choice.
- Skropeta, C. M., Colvin, A., & Sladen, S. (2014). An evaluative study of the benefits of participating in intergenerational playgroups in aged care for older people. *BMC Geriatrics*, 14, 1-11.
- Snowdon, J., Rosengren, D., Daniel, F., & Suyasa, M. (2011). Australia's use of the Cornell scale to screen for depression in nursing homes. *Australian Journal on Ageing*, 30(1), 33-36.
- Sonnega, A., Faul, J. D., Ofstedal, M. B., Langa, K. M., Phillips, J. W. R., & Weir, D. R. (2014). Cohort profile: the Health and Retirement Study (HRS). *International Journal of Epidemiology*, 576-585. <https://doi.org/10.1093/ije/dyu067>
- Steckermeier, L. C. (2021). The value of autonomy for the good life. An empirical investigation of autonomy and life satisfaction in Europe. *Social Indicators Research*, 154(2), 693-723.
- Swinkels, J., Abbing, J., & Broese van Groenou, M. (2025). Why is the composition of older adults' care network associated with psychological wellbeing: an application of the self-determination theory. *Aging & Mental Health*, 29(1), 121-129.
- Tan, J. D., Maneze, D., Montayre, J., Ramjan, L. M., Wang, D., & Salamonson, Y. (2023). Family visits and depression among residential aged care residents: An integrative review. *International Journal of Nursing Studies*, 104568.
- Tan, S. Y., Taeihagh, A., & Tripathi, A. (2021). Tensions and antagonistic interactions of risks and ethics of using robotics and autonomous systems in long-term care. *Technological forecasting and social change*, 167, 120686.
- Tappen, R. M. (2022). *Advanced nursing research: From theory to practice*. Jones & Bartlett Learning.
- Thutoemang, T. C., & Oppong, S. (2021). *Utilizing cross-sectional study design, multi-site sampling, and multiple data collection platforms to investigate the influence of paternal involvement on female reproductive strategies*. SAGE Publications Limited.
- Towsley, G., Neradilek, M. B., Snow, A. L., & Ersek, M. (2012). Evaluating the Cornell Scale for Depression in Dementia as a proxy measure in nursing home residents with and without dementia. *Aging & Mental Health*, 16(7), 892-901. <https://doi.org/10.1080/13607863.2012.667785>
- Uger, H. G., Aktas, Y. Y., O'arak, O. S., Saglambilen, O., & Avci, I. A. (2017). The effect of music therapy on depression and physiological parameters in elderly people living in a Turkish

- nursing home: a randomised-controlled trial. *Aging & Mental Health*, 21(12), 1280-1286.
<https://doi.org/doi:10.1080/13607863.2016.1222348>
- Underwood, M., Lamb, S. E., Eldridge, S., Sheehan, B., Slowther, A., Spencer, A., Thorogood, M., Atherton, N., Bremner, S., Devine, A., Diaz-Ordaz, K., Ellard, D., Potter, R., Spanjers, K., & Taylor, S. J. C. (2013). Exercise for depression in the elderly residents of care homes: a cluster-randomised controlled trial. *The Lancet*, 382, 41-49.
[https://doi.org/doi.org/10.1016/S0140-6736\(13\)60649-2](https://doi.org/doi.org/10.1016/S0140-6736(13)60649-2)
- van Poelgeest, E., Pronk, A., Rhebergen, D., & Van der Velde, N. (2021). Depression, antidepressants and fall risk: therapeutic dilemmas—a clinical review. *European geriatric medicine*, 12, 585-596.
- Verrusio, W., Renzi, A., Cecchetti, F., Gaj, F., Coi, M., Ripani, M., & Cacciafesta, M. (2018). The effect of a physical training with the use of an exoskeleton on depression levels in institutionalized elderly patients: a pilot study. *The Journal of nutrition, health and aging*, 22(8), 934-937.
- Von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., & Vandenbroucke, J. P. (2007). The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. *The Lancet*, 370(9596), 1453-1457.
- Walker-Clarke, A., Walasek, L., & Meyer, C. (2022). Psychosocial factors influencing the eating behaviours of older adults: A systematic review. *Ageing Research Reviews*, 77, 101597.
- Walker, H., & Paliadelis, P. (2016). Older peoples' experiences of living in a residential aged care facility in Australia. *Australian Journal on Ageing*, 35(3), E6-E10.
<https://doi.org/DOI:10.1111/ajag.12325>
- Watkins, R., Goodwin, V. A., Abbott, R. A., Hall, A., & Tarrant, M. (2017). Exploring residents' experiences of mealtimes in care homes: A qualitative interview study. *BMC Geriatrics*, 17, 1-9.
- Werner, J., Wosch, T., & Gold, C. (2017). Effectiveness of group therapy versus recreational group singing for depressive symptoms of elderly nursing home residents: pragmatic trial. *Aging & Mental Health*, 21(2), 147-155. <https://doi.org/doi:10.1080/13607863.2015.1093599>
- Whitehead, D., LoBiondo-Wood, G., & Haber, J. (2018). *Nursing and midwifery research: Methods and appraisal for evidence based practice*. Elsevier Health Sciences.
- Wilkinson, P., & Izmeth, Z. (2016). Continuation and maintenance treatments for depression in older people. *Cochrane Database of Systematic Reviews*(9), 1-83.
<https://doi.org/10.1002/14651858.CD006727.pub3>.
- Woo, S. M., & Keatinge, C. (2008). *Diagnosis and Treatment of Mental Disorders Across the Lifespan*. John Wiley & Sons, Inc.
- Wrycraft, N. (2012). Depression in older adults. In N. Wrycraft (Ed.), *Mental Health Nursing Case Book*. McGraw-Hill Education.
- Xiao, L., Gregoric, C., Gordon, S., Ullah, S., Goodwin-Smith, I., Muir-Cochrane, E., & Blunt, S. (2023). Comparisons on factors affecting residents fulfilling self-determination in ethno-specific and mainstream nursing homes: a qualitative study. *BMC Geriatrics*, 23(1), 81.
- Xu, H., Li, A., & Apuke, O. D. (2024). The impact of group music therapy in ameliorating the depression among patients with dementia in care homes: A randomized control trial. *Geriatric Nursing*, 56, 304-311.

- Xu, M., Lu, S., Liu, J., & Xu, F. (2023). Effectiveness of horticultural therapy in aged people with depression: A systematic review and meta-analysis. *Frontiers in Public Health*, *11*, 1142456.
- Xue, B., Meng, X., Liu, Q., & Luo, X. (2023). The effect of receptive music therapy on older adults with mild cognitive impairment and depression: a randomized controlled trial. *Scientific Reports*, *13*(1), 22159.
- Zhu, F., Wang, Y., Yin, S., Liu, J., Zhong, Y., & Li, L. (2024). The effect of Tai Chi on elderly depression: a systematic review and meta-analysis of randomized controlled trials. *Frontiers in psychology*, *15*, 1489384.

Appendices

Appendix A

Ethics Approval

Human Research Ethics Committee

research.ethics@avondale.edu.au | +61 4980 2121



22 April 2021

Trish Eastwood

Avondale University College

Dear Trish

ETH.2019.016

The Avondale Human Research Ethics Committee considered the extension request submitted for the following project: **An investigation of the effectiveness of implementing a resident-directed care intervention and daily evening activity program on reducing symptoms of depression in older persons in residential aged care.**

I am pleased to inform you that the committee has agreed to approve the request to extend the approval period for this project through to 31 July 2022.

I confirm that the Avondale Human Research Ethics Committee is constituted according to the *National Statement on Ethical Conduct in Human Research 2007* and operates in compliance with applicable regulatory requirements.

Attached to this letter is an Outcome of Consideration of Protocol form for your records. Yours sincerely

A handwritten signature in blue ink, appearing to read 'Lisa Barnes', with a stylized, cursive script.

A/Prof Lisa Barnes

Chair, Avondale Human Research Ethics Committee

AVONDALE HUMAN RESEARCH ETHICS COMMITTEE

Outcome of Consideration of Protocol

Submission Number: ETH.2019.016

Date of Approval: 22 April 2021

Project Title: An investigation of the effectiveness of implementing a resident-directed care intervention and daily evening activity program on reducing symptoms of depression in older persons in residential aged care.

Submitted by: Trish Eastwood

Your request was considered by the Avondale Human Research Ethics Committee and approved for an extension to 31 July 2022.

Next Annual Review Due: 31 July 2022

Conditions of Approval:

At regular periods, and not less than annually, Principal Investigators are to provide reports on matters including:

- Unforeseen events that could affect the continued ethical acceptability of the project
- Proposed changes in the protocol or research design
- Updates of the investigators documentation
- Continued compliance with approved consent procedures and updates of consent documentation
- Security of records
- Compliance with other approved procedures
- All published reports are to carry an acknowledgement stating, *Approved by Avondale Human Research Ethics Committee on [date]*
- Principal Investigators are to provide a final report once the project is complete



A/Prof Lisa Barnes

Chair, Avondale Human Research Ethics Committee

Appendix B

Staff Interview Questions

1. How confident are you in recognising symptoms of depression in residents?

2. How important is providing residents with choice in their daily activities?

3. What do you see as possible barriers to providing residents with choice?

4. Do you think the evening activity program was beneficial to the residents?

Why?

Suggestions?

5. How important do you think choice of bedtimes for residents is?

Appendix C

Information Letter for Research—Residents

Information Letter for Research

TITLE OF PROJECT

An investigation of the effectiveness of implementing a resident directed care intervention and daily evening activity program on reducing symptoms of depression in older persons in residential aged care

DESCRIPTION OF PROJECT

Individual resident participants will be given the opportunity to choose preferred timeframes for getting out of bed and returning to bed each day, with the option of attending an evening activity program. The evening program will be developed in consultation with residents, diversional therapy staff and management. After a three-month period, resident participants will complete a Geriatric Depression Scale and a brief questionnaire on their experience of the project.

INVITATION

You are invited to participate in this research project which is being conducted by Patricia Eastwood, PhD Student, Avondale College of Higher Education

PURPOSE AND IMPORTANCE OF THIS RESEARCH

The purpose of this study is to determine if providing aged care residents with choosing their own bedtimes and attending an organised evening activity program reduces symptoms of depression. Another aim of the study is to gain insight into the experience of residents when provided with these choices.

WHO IS BEING INVITED TO PARTICIPATE?

Permanent residents of the facility.

WHAT DOES PARTICIPATION INVOLVE?

If you agree to participate, you will be offered the opportunity to choose your own bedtimes and the option to attend an organised evening activity program.

HOW MUCH TIME WILL IT TAKE?

You will be asked 15 questions from the Geriatric Depression Scale at the commencement of the study, three months after the study has commenced and again at the conclusion of the study. Each questionnaire should take approximately 10 minutes. At the commencement of the study you will also be asked to complete the Mini-Mental State Examination questionnaire which will take approximately 15 minutes. At the conclusion of the study, you will be given the opportunity to complete a questionnaire regarding your perceptions/experience of the interventions and suggestions for future studies.

POSSIBLE RISKS OR INCONVENIENCES

There are no anticipated risks or inconveniences involved in your participation.

BENEFITS

We cannot and do not guarantee or promise you any individual benefits from participating in this research. However, we do hope this research will shed light on ways to improve resident care.

CONFIDENTIALITY, ANONYMITY AND DISCLOSURE OF INFORMATION

All names will be removed from the data and you will be allocated a numerical code which will be used for all observations, interview and questionnaire data.

The data will be stored for five years in a locked cabinet in my office. At the end of the five-year period after the conclusion of the research, hard copies will be shredded, and electronic data will be erased from discs, servers and hard drives.

All aspects of the study including results will be stored securely and only accessed by the researchers unless you consent otherwise.

USE OF INFORMATION COLLECTED

The information collected will be analysed and reported in a thesis, scientific papers and professional conferences. Confidentiality of individual participants and organisations will be assured. In any publication, information will be provided in such a way that you cannot be identified. Participants will be sent a summary of the final results.

FREEDOM OF CONSENT

Participation in this research is entirely your choice [or voluntary]. It is completely up to you whether you choose or not to participate. Only people who give their informed consent will be included in the study. Even if you agree to participate you may withdraw at any time without giving a reason. If you decide not to participate or wish to withdraw from the project at any time, you will not be disadvantaged.

Please read this information statement and be sure you understand its contents before you consent to participate. After you have read this information, Patricia will discuss it with you further or if there is anything you do not understand, or you have questions, you can contact the researcher.

If you would like to participate please sign the consent form.

FURTHER INFORMATION

If you would like further information, please contact Patricia Eastwood via email patricia.eastwood@avondale.edu.au or by phone on 0428 601 965

If you have a complaint or concern about this research project or the way it is conducted, contact Avondale's Research Services Office at PO Box 19, Cooranbong, NSW, 2265 or phone +61-2-4980 2121, or email: research.ethics@avondale.edu.au. You may also wish to discuss your concerns with the researcher.

Thank you for considering this invitation.

Patricia Eastwood

Appendix D

Information Letter for Research—Staff

Staff Information Letter for Research

TITLE OF PROJECT

An investigation of the effectiveness of implementing a resident directed care intervention and daily evening activity program on reducing symptoms of depression in older persons in residential aged care

DESCRIPTION OF PROJECT

Individual staff participants will be given the opportunity to complete a Staff Knowledge of Late-life Depression questionnaire and completing a depression training program. You will also be invited to participate in an interview to provide feedback on your experience in providing residents assistance with their choice of bedtimes and attending an evening activity program.

INVITATION

You are invited to participate in this research project which is being conducted by Patricia Eastwood, PhD Student, Avondale College of Higher Education

PURPOSE AND IMPORTANCE OF THIS RESEARCH

The purpose of this study is to determine if providing staff with depression training and purposeful care directives results in improved care outcomes for aged care residents with depressive symptoms.

WHO IS BEING INVITED TO PARTICIPATE?

Permanent staff of The Orchards Aged Care facility.

WHAT DOES PARTICIPATION INVOLVE?

If you agree to participate, you will be offered the opportunity to complete a Staff Knowledge of Late-life depression questionnaire and complete a depression training program. Also to participate in an interview to provide feedback on your experience in providing residents assistance with their choice of bedtimes and attending an evening activity program.

HOW MUCH TIME WILL IT TAKE?

The Staff Knowledge of Late-life depression questionnaire will take approximately 15 minutes to complete. The training session will take 30 minutes. The interview will take approximately 30 minutes.

POSSIBLE RISKS OR INCONVENIENCES

There are not anticipated risks or inconveniences involved in your participation.

BENEFITS

We cannot and do not guarantee or promise you any individual benefits from participating in this research we do, however, hope this research will shed light on ways to improve resident care.

CONFIDENTIALITY, ANONYMITY AND DISCLOSURE OF INFORMATION

All names will be removed from the data and you will be allocated a numerical code which will be used for all observations, interview and questionnaire data.

The data will be stored for five years in a locked cabinet in the researcher's office. At the end of the five-year period after the conclusion of the research, hard copies will be shredded, and electronic data will be erased from discs, servers and hard drives.

All aspects of the study including results will be stored securely and only accessed by the researchers unless you consent otherwise.

USE OF INFORMATION COLLECTED

The information collected will be analysed and reported in a thesis, scientific papers and professional conferences. Confidentiality of individual participants and organisations will be assured. In any publication, information will be provided in such a way that you cannot be identified.

FREEDOM OF CONSENT

Participation in this research is entirely your choice [or voluntary]. It is completely up to you whether or not you choose to participate. Only people who give their informed consent will be included in the study. Even if you agree to participate you may withdraw at any time without giving a reason. If you decide not to participate or wish to withdraw from the project at any time, you will not be disadvantaged.

Please read this information statement and be sure you understand its contents before you consent to participate. After you have read this information, Patricia will discuss it with you further or if there is anything you do not understand, or you have questions, you can contact the researcher.

If you would like to participate, please sign the consent form.

FURTHER INFORMATION

If you would like further information, please contact Patricia Eastwood via email

patricia.eastwood@avondale.edu.au or by phone on 0428 601 965

If you have a complaint or concern about this research project or the way it is conducted, contact Avondale's Research Services Office at PO Box 19, Cooranbong, NSW, 2265 or phone +61-2-4980 2121, or email: research.ethics@avondale.edu.au. You may also wish to discuss your concerns with the researcher.

Thank you for considering this invitation.

Patricia Eastwood

Appendix E

Resident Participant Consent Form

PARTICIPANT CONSENT FORM ¹

Research Title:

An investigation of the effectiveness of
implementing a resident directed care
intervention and daily evening activity
program on reducing symptoms of depression
in older persons in residential aged care

Researcher:

Patricia Eastwood
patricia.eastwood@avondale.edu.au

I agree to participate in the above research project and I give my consent freely.

I have read and understand the information provided in the Information Statement.

I understand that the project will be conducted as described in the Information Statement, a copy
of which I have been given to keep.

I understand I can withdraw from the project at any time and do not have to give any reason for
withdrawing. I will not be disadvantaged in anyway by withdrawing.

The procedures required for the project and the time involved have been explained to me. I have had the opportunity to ask questions and have had them answered to my satisfaction.

I consent to

- Completing a Geriatric Depression Scale and Mini-Mental State Examination scale questionnaire
- Participate in an intervention as described in the Information Statement

I understand that my personal information will remain confidential to the researchers.

Name

Signature

Date

Appendix F

Geriatric Depression Scale

Geriatric Depression Scale (short form)

Instructions: Circle the answer that best describes how you felt over the past week.

1. Are you basically satisfied with your life? yes no
2. Have you dropped many of your activities and interests? yes no
3. Do you feel that your life is empty? yes no
4. Do you often get bored? yes no
5. Are you in good spirits most of the time? yes no
6. Are you afraid that something bad is going to happen to you? yes no
7. Do you feel happy most of the time? yes no
8. Do you often feel helpless? yes no

9. Do you prefer to stay at home, rather than going out and doing things? yes no

10. Do you feel that you have more problems with memory than most? yes no

11. Do you think it is wonderful to be alive now? yes no

12. Do you feel worthless the way you are now? yes no

13. Do you feel full of energy? yes no

14. Do you feel that your situation is hopeless? yes no

15. Do you think that most people are better off than you are? yes no

Total Score _____

Geriatric Depression Scale (GDS)

Scoring Instructions

Instructions: Score 1 point for each bolded answer. A score of 5 or more suggests depression.

1. Are you basically satisfied with your life? yes **no**
2. Have you dropped many of your activities and interests? yes **no**
3. Do you feel that your life is empty? yes **no**
4. Do you often get bored? yes **no**
5. Are you in good spirits most of the time? yes **no**
6. Are you afraid that something bad is going to happen to you? yes **no**
7. Do you feel happy most of the time? yes **no**
8. Do you often feel helpless? yes **no**

9. Do you prefer to stay at home, rather than going out and doing things? yes no

10. Do you feel that you have more problems with memory than most? yes no

11. Do you think it is wonderful to be alive now? yes no

12. Do you feel worthless the way you are now? yes no

13. Do you feel full of energy? yes no

14. Do you feel that your situation is hopeless? yes no

15. Do you think that most people are better off than you are? yes no

A score of > 5 suggests depression

Total Score _____

Ref. Yes average: The use of Rating Depression Series in the Elderly, in Poon (ed.): Clinical
Memory Assessment of Older Adults, American Psychological Association, 1986

Appendix G

Mini-Mental State Examination

Standardised Mini-Mental State Examination (SMMSE)

Please see accompanying guidelines for administration and scoring instructions

Say: I am going to ask you some questions and give you some problems to solve. Please try to answer as

best you can.

1. Allow ten seconds for each reply. Say:

a) What year is this? (accept exact answer only) /1

b) What season is this? (during the last week of the old season or first week of a new season, accept either) /1

c) What month is this? (on the first day of a new month or the last day of the previous month, accept either) /1

d) What is today's date? (accept previous or next date) /1

e) What day of the week is this? (accept exact answer only) /1

2. Allow ten seconds for each reply. Say:

a) What country are we in? (accept exact answer only) /1

b) What state are we in? (accept exact answer only) /1

c) What city/town are we in? (accept exact answer only) /1

d) <At home> What is the street address of this house? (accept street name and house number or equivalent in rural areas) /1

<In facility> What is the name of this building? (accept exact name of institution only)/1

e) <At home> What room are we in? (accept exact answer only) /1

<In facility> What floor of the building are we on? (accept exact answer only) /1

3. Say: I am going to name three objects. When I am finished, I want you to repeat them.

Remember what they are because I am going to ask you to name them again in a few minutes

(say slowly at approximately one-second intervals).

Ball Car Man

For repeated use: Bell, jar, fan; bill, tar, can; bull, bar, pan

Say: Please repeat the three items for me (score one point for each correct reply on the first attempt) /3

Allow 20 seconds for reply; if the person did not repeat all three, repeat until they are learned or up to a maximum of five times (but only score first attempt)

4. Say: Spell the word WORLD (you may help the person to spell the word correctly). Say: Now spell it backwards please (allow 30 seconds; if the person cannot spell world even with assistance, score zero). Refer to accompanying guide for scoring instructions (score on reverse of this sheet) /5

5. Say: Now what were the three objects I asked you to remember? /3

(score one point for each correct answer regardless of order; allow ten seconds)

6. Show wristwatch. Ask: What is this called? /1

(score one point for correct response; accept 'wristwatch' or 'watch'; do not accept 'clock' or 'time', etc.; allow ten seconds) /2

7. Show pencil. Ask: What is this called? /1

(score one point for correct response; accept 'pencil' only; score zero for pen; allow ten seconds for reply)

8. Say: I would like you to repeat a phrase after me: No ifs, ands, or buts /1

(allow ten seconds for response. Score one point for a correct repetition. Must be exact, e.g. no ifs or buts, score zero)

9. Say: Read the words on this page and then do what it says /1

Then, hand the person the sheet with CLOSE YOUR EYES (score on reverse of this sheet) on it. If the subject just reads and does not close eyes, you may repeat: Read the words on this page and then do what it says, a maximum of three times. See point number three in Directions for

Administration section of accompanying guidelines. Allow ten seconds; score one point only if the person closes their eyes. The person does not have to read aloud.

10. Hand the person a pencil and paper. Say: Write any complete sentence on that piece of paper (allow 30 seconds. Score one point. The sentence must make sense. Ignore spelling errors). /1

11. Place design (see page 3), pencil, eraser and paper in front of the person. Say: Copy this design please. Allow multiple tries. /1

Wait until the person is finished and hands it back. Score one point for a correctly copied diagram.

The person must have drawn a four-sided figure between two five-sided figures. Maximum time: one minute.

12. Ask the person if he is right or left-handed. Take a piece of paper, hold it up in front of the person and say the following: Take this paper in your right/left hand (whichever is non-dominant), fold the

paper in half once with both hands and put the paper down on the floor.

Takes paper in correct hand _____ /1

Folds it in half _____ /1

Puts it on the floor _____ /1

TOTAL TEST SCORE: /30

ADJUSTED SCORE: /

The SMMSE tool and guidelines are provided for use in Australia by the Independent Hospital

Pricing Authority under

a licence agreement with the copyright owner, Dr D. William Molloy. The SMMSE Guidelines for
administration and

scoring instructions and the SMMSE tool must not be used outside Australia without the written
consent of

Dr D. William Molloy.

Molloy DW, Alemayehu E, Roberts R. Reliability of a standardized Mini-Mental State Examination
compared with the

traditional Mini-Mental state Examination. American Journal of Psychiatry, Vol. 14, 1991a,
pp.102-105

Appendix H

10-item Knowledge of Late-life Depression Survey

Knowledge of Late Life Depression

INSTRUCTIONS:

Please choose one of the four options for each of the following questions

Question 1

Sleep problems are a symptom of depression?

☐

1. Strongly Disagree

☐

2. Disagree

☐

3. Agree

☐

4. Strongly Agree

Question 2

Depression is a normal reaction to a death of an older person's partner?

☐

1. Strongly Disagree

☐

2. Disagree

☐

3. Agree

☐

4. Strongly Agree

Question 3

Depression is quite common in Aged Care residents with dementia?

☐

1. Strongly Disagree

☐

2. Disagree

- ☐ 3. Agree
- ☐ 4. Strongly Agree

Question 4

Tiredness is a symptom of depression?

- ☐ 1. Strongly Disagree
- ☐ 2. Disagree
- ☐ 3. Agree
- ☐ 4. Strongly Agree

Question 5

Depression is a normal reaction to the change of old age?

- ☐ 1. Strongly Disagree
- ☐ 2. Disagree
- ☐ 3. Agree
- ☐ 4. Strongly Agree

Question 6

It is common for depression to go undetected among older people in Aged Care?

- ☐ 1. Strongly Disagree
- ☐ 2. Disagree
- ☐ 3. Agree
- ☐ 4. Strongly Agree

Question 7

Loss of interest in things previously enjoyed is a sign of depression?

- ☐ 1. Strongly Disagree
- ☐ 2. Disagree
- ☐ 3. Agree
- ☐ 4. Strongly Agree

Question 8

Most older people who have to sell their home and move into residential aged care will become depressed?

- ☐ 1. Strongly Disagree
- ☐ 2. Disagree
- ☐ 3. Agree
- ☐ 4. Strongly Agree

Question 9

Older people with depression often report physical aches and pains rather than their sadness?

- ☐ 1. Strongly Disagree
- ☐ 2. Disagree
- ☐ 3. Agree
- ☐ 4. Strongly Agree

Question 10

Late life depression is associated with poorer recovery from physical illness?

☐

1. Strongly Disagree

☐

2. Disagree

☐

3. Agree

☐

4. Strongly Agree

Name: _____

Date: _____

Age: _____

Length of employment:

Gender: _____

Thank you for your participation

Appendix I

Initial Themes and Sub-themes

Initial themes	Initial sub-themes	Refined sub-themes	Core concepts
Choice of bedtimes	Impacts of facility routines	Bedtime choice constraints	
	Participants' perceptions of catering for individual choice	Conformity to facility routines	Facility routine impacts choice
Initial themes	Initial sub-themes	Refined sub-themes	Core concepts
Perceived benefit of the evening activity program	Adapting to getting along with others in group activities	Building connections	
	Previously enjoyed activities that are missed	Staff support of engagement	Factors that promote well-being
		Social enrichment through technology	
Initial themes	Initial sub-themes	Refined sub-themes	Core concepts
Concepts of the facility environment	Lack of understanding of facility processes	Adapting to cognitive diversity	Barriers to engagement

Loss of meaning
and purpose

Initial themes	Initial sub-themes	Refined sub-themes	Core concepts
----------------	--------------------	--------------------	---------------

Characteristics of the environment	Confinement and isolation Adjusting to facility procedures	Confinement and isolation	Confinement and isolation
------------------------------------	---	---------------------------	---------------------------

Initial themes	Initial sub-themes	Refined sub-themes	Core concepts
Confidence recognising depressive symptoms			

Initial themes	Initial sub-themes	Refined sub-themes	Core concepts
----------------	--------------------	--------------------	---------------

Experience of the evening program for residents	Evening program provided choice Impact on staff	A choice of activities in a calm environment Benefit versus disruption	Experience of the evening program for residents and staff
---	--	---	---

Initial themes	Initial sub-themes	Refined sub-themes	Core concepts
----------------	--------------------	--------------------	---------------

Catering to residents' choices	Staff time constraints
--------------------------------	------------------------

**Staff knowledge
and understanding**

**Tunnelled
approach**

**Impacts of family
involvement**

**Catering to
residents'**

choices

Publication 1 Literature Review

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Clinical Practice Review Care of older people

Keywords Depression/Care homes/
Older people/Mental health

This article has been
double-blind peer reviewed

In this article...

- Why care home residents are at high risk of experiencing depression
- How care home providers and staff can help reduce this risk for residents
- Staff training on depression is important for better mental health outcomes

Depression in care home residents: strategies for reducing the risk

Key points

Depression has long been recognised as a significant mental health issue among care home residents

Well-known risk factors include loss of autonomy, poor staff training, social isolation and loneliness

Care home providers must promote strategies to work towards better mental health outcomes for residents

Such strategies include involving residents in their care planning and facilitating the use of technology to maintain connections with families

Care home staff need to be trained to recognise depressive symptoms

Authors Patricia E Eastwood is clinical coordinator and lecturer; Paul Race is executive dean; Carolyn Rickett is dean of learning and teaching; Brett G Mitchell is professor of nursing and health services research; all at School of Nursing, Avondale University, Sydney, New South Wales, Australia.

Abstract Depression continues to be a widespread mental health issue among care home residents and is associated with higher rates of illness and mortality. It is imperative that care home providers are aware of the risk factors in the sector and make efforts to address the risks. This review of literature on the subject explores the identified risk factors, barriers to reducing risk and strategies that can help to reduce the risk of depression in this setting.

Citation Eastwood PE et al (2023) Depression in care home residents: strategies for reducing the risk. *Nursing Times* [online]; 19: 5.

Depression is a prevalent mental health issue among older people living in both residential and community care settings (McCabe et al, 2017). It is an international concern, with research indicating that an estimated 44% of care home residents in Sri Lanka (Abeysekera and De Zoysa, 2021), 49% in Australia (Australian Institute of Health and Welfare, 2021), up to 32% in seven European countries (Giovannini et al, 2020), and 36% in China have depressive symptoms (Tang et al, 2022). Recent evidence suggested that four in ten residents who were living in care homes in the UK had depression (Royal College of Psychiatrists and British Geriatric Society, 2018).

According to the *International Statistical Classification of Diseases and Related Health Problems*, the three fundamental symptoms of depression are:

- Low mood;
 - Loss of interest in activities that are usually enjoyed;
 - Reduced energy levels (World Health Organization (WHO), 2019).
- Other symptoms include:

- Loss of confidence;
- Suicidal ideation;
- Impaired concentration;
- Disturbances in sleep;
- Changes in appetite (WHO, 2019).

An overview of signs and symptoms for depression in older people is given in Box 1.

Symptoms must have been present for at least two weeks for a diagnosis of depression to be made (WHO, 2019) and, before treatment, an assessment based on the severity of depression should be made (Munro and Milne, 2020).

The Geriatric Depression Scale (GDS) is a tool commonly used to identify indicators for depression in older people. It was developed to reduce misdiagnosis, as many of the other depression detection tools include somatic symptoms that could have a different significance for older persons, such as weight loss, insomnia, energy loss and reduced activity (Chlest et al, 2017). There are two main versions of the tool:

- GDS-30 – created to diagnose depression based on symptoms specific to older persons;

Clinical Practice Review

"The three fundamental symptoms of depression are low mood, loss of interest in activities normally enjoyed and reduced energy levels"

- GDS-15 – this simplified version of the GDS-30 was later developed to reduce fatigue in the respondent and the time of administration (Chen et al, 2017).
- Although evidence indicates that older people with depression respond to antidepressant medications (Wilkinson and Izmet, 2016), there is a risk of increased falls from orthostatic blood pressure changes and sedation associated with antidepressant medication (van Poelgeest et al, 2021). In addition, many medications prescribed for comorbidities interact with antidepressant therapy (van Poelgeest et al, 2021).

An older person's physical circumstances and current medication should be taken into account when considering antidepressants (van Poelgeest et al, 2021). It is also important to reassess the ongoing use of antidepressants (van Poelgeest et al, 2021). Psychological therapies, such as cognitive behavioural therapy and mindfulness, combined with antidepressant medications, should be considered to improve outcomes for older people with depression (van Poelgeest et al, 2021).

Literature review search methods

To identify eligible studies for this review, key terms and phrases including 'depression', 'nursing homes', 'aged care' and 'depression management' were searched in a range of electronic databases, including the Cochrane Library, CINAHL, ProQuest, Medline, Science Direct and Ovid. Titles and abstracts were reviewed to identify eligible studies. The full text of papers was then assessed so studies for the final selection could be identified.

Risk factors for depression in older people in care homes

A loss of environmental mastery and meaningful existence have been identified as significant risk factors for depression in care homes (Chau et al, 2020). Environmental mastery refers to a person's ability to control events in their own life and is presumed to be associated with individual choices and self-determination (Lambotte et al, 2019). It has been suggested that there is a greater association between depression and environmental mastery, along

with loss of autonomy and purpose in life, than between disability and physical health (Davison et al, 2012).

Older people describe autonomy as their ability to:

- Exercise free will;
- Make choices independently relating to outside activities, bedtimes, diet, hygiene care, social activities and visitors (Mollanen et al, 2021).
- Other desirable choices include:
 - How they spend their money;
 - Choosing decorations for their own room (Mollanen et al, 2021).

Care home staff's knowledge of depression is another key risk factor for poor outcomes for residents with depression. It has been suggested that there is a critical insufficiency of depression knowledge among this staff cohort (Atkins et al, 2013), and that they commonly hold the view that depression is probable and natural among older people (Davison et al, 2013). This is perhaps not surprising as, in many care homes, a large proportion of staff have little or no qualifications (Anderson and Blair, 2021), and the focus is often predominantly on maintaining the residents' activities of daily living (Moyle et al, 2010).

In one study, researchers found that fewer than half of older people living in care homes with depression had received treatment for it (Stargatt et al, 2017). The Royal College of Psychiatrists and British

Geriatrics Society (2018) also highlighted that a number of other studies suggested:

- Older persons diagnosed with depression and living in care homes were not receiving effective treatment and did not have access to old age psychiatry specialists;
- Access to geriatric consultants need to be improved.
- Franck et al's (2016) systematic review of studies from a range of different countries showed that:
 - Loneliness and social isolation are also a risk factor for depression;
 - The prevalence of both are higher in care home residents than in older people living in the community.

A lack of meaningful activity in care homes and the loss of connectedness with family and friends leads to apathy and loneliness (Brimelow and Wollin, 2017). Panthi (2022) indicated that loneliness in care homes is often linked to there being a lack of activities that match residents' interests and an absence of significant relationships in the home. In addition, feelings of loneliness by older people in care homes are often unidentified or misinterpreted by staff (Panthi, 2022).

As with loneliness, social isolation has been found to be an independent risk factor for depression and is linked to an individual experiencing:

- A reduced sense of belonging;
- Limited social contact and engagement;
- A deficiency of meaningful relationships (Franck et al, 2016).

This was particularly highlighted during the Covid-19 pandemic, when visits from friends and family were banned and outings were restricted (Brydon et al, 2022). The isolation and loneliness experienced by many care home residents worldwide during the pandemic restrictions had a marked negative impact on their mental health (Brydon et al, 2022).

Common risk factors for depression in older people living in care homes are summarised in Box 2.

Barriers to reducing risk factors

Perceived barriers to providing autonomy and environmental mastery in care homes include an absence of a collaborative approach to decision making in association with residents' care planning, staff routines and facility policies (Kalaitzidis and Harrington, 2018; Walker and Palladakis, 2016). Residents' choice and decision making is usually limited to choosing their clothing and menu options each day

Box 1. Signs and symptoms of depression in older people

- Loss of self-esteem and confidence
- Feelings of guilt
- Psychomotor activity changes
- Cognitive impairment
- Slow, monotonous speech
- Suicidal thoughts
- Impaired concentration
- Sleep disturbance
- Appetite and weight changes
- Somatic complaints
- Lethargy

Sources: World Health Organization (2019); Pocklington (2017); Weycroft (2017)

Box 2. Risk factors

- Loss of environmental mastery, autonomy and self-efficacy
- Lack of staff knowledge and training
- Loneliness and social isolation

Sources: Franck et al (2016); Atkins et al (2013); Knight et al (2011)

"More access to mental health professionals should be made available to residents"



QUICK FACT
40%
The proportion of care home residents in the UK experiencing depression

(Kalitzi and Harrington, 2018). Rigid routine nursing care practices and safety concerns that restrict an older person's freedom also affect their sense of autonomy (Molander et al, 2021).

Low levels of depressive symptom identification by care home staff are a fundamental barrier to depression management (Abrams et al, 2017). Although training can improve the identification of depression by care home staff, a high attrition rate among staff results in a reduction in the long-term benefits of training (McCabe et al, 2022). McCabe et al (2022) also identified that there is a general disengagement with training by care home staff, resulting in poor attendance (McCabe et al, 2022).

There have been few studies conducted investigating strategies to reduce loneliness in long-term care home settings (Brimelow and Wollin, 2017). The long-established biomedical care model often used in aged-care settings is linked to loneliness (Chen et al, 2022). This model of care focuses solely on the physical health aspects of the older person and ignores the social and psychological aspects (Ostaszewicz et al, 2018). A further barrier is the lack of social relationships with staff, who often do not have sufficient time to socialise with residents, and fellow residents (Chen et al, 2022).

Barriers to reducing risk factors for depression are summarised in Box 3.

Risk-management strategies

A range of interventions to manage the risks for depression in care homes have been explored internationally and ways to implement these strategies should be considered by care home providers and staff.

There are a variety of interventions that can be used to promote autonomy. Care home residents need to be encouraged to have direct involvement in their social and physical environments (Kalitzi and Harrington, 2018); this can be achieved by members of staff:

- Using a consultative process with residents (Ludlow et al, 2020);
- Providing information that promotes informed decision making (Molander et al, 2021).

Molander et al (2021) reported that older people have an increased sense of autonomy when they are directly involved in decision making related to their daily care plan, decoration of their own room, meals and bedtimes.

Care homes also need to explore ways of offering activities that are not just social in nature, but also promote mastery (Grace and Toukhsati, 2014). Chau et al (2020) suggested it is important for staff to support the preservation of current mastery by:

- Encouraging residents to perform activities despite difficulty;
- Refraining from performing tasks on the resident's behalf.

A greater emphasis on educating staff in recognising symptoms of depression in

Box 3. Barriers to reducing risk factors for depression

- Lack of a collaborative approach to decision making between staff and care home residents
- Lack of qualified mental health professionals
- Limited studies to identify strategies to reduce loneliness

Sources: Brimelow and Wollin (2017); Stargatt et al (2017); Walker and Falkowski (2016)

older people in care homes is also required (Yoon et al, 2018). Targeted depression training should be ongoing (Abrams et al, 2017), and well-defined protocols for screening and referrals for depression should be provided to staff (Davison et al, 2013). Greater access to mental health professionals should be made available to residents (Stargatt et al, 2017).

Older people benefit from enriched social networks and social interaction to reduce the risk of loneliness in care homes. Schwarzbach et al (2013) suggested that this indicates a need to develop programmes that increase social engagement for this demographic, and this suggestion remains relevant.

Interventions that promote connectedness with other residents, along with family and friends, should also be considered (Wilkinson et al, 2012). Research into the use of technology for family video-conferencing during the Covid-19 pandemic, when there were restrictions in care homes, revealed a significant reduction in social isolation when such technology was used (O'Connell et al, 2022). O'Connell et al (2022) advocated that care home staff should continue to explore innovative ways to incorporate and facilitate the use of technology to maintain connections with family and the outside community, even after the Covid-19 restrictions were lifted.

The implementation of activities, such as companion birds, companion dogs and reminiscence therapy, have also demonstrated some reduction in loneliness (Brimelow and Wollin, 2017). Studies have suggested that dogs as intervention animals can significantly reduce depressive symptoms in nursing home residents (Chang et al, 2021).

A summary of strategies to reduce risk factors for depression in older people in care homes is given in Box 4. Box 5 features a range of suggestions for improving mental health for care home residents.

Clinical Practice Review

Box 4. Strategies to reduce depression risk in care homes

- Encourage care home residents to have direct involvement in their physical and social environments
- Use consultative processes with residents to promote informed decision making
- Implement social activities that enhance mastery
- Involve older people in their care planning
- Allow residents to decorate their own rooms
- Improve access to mental health professionals
- Promote mastery in daily care

Conclusion

Depression is a continuing mental health concern among older people, particularly in care homes. Significant risk factors for depression include loss of autonomy and environmental mastery, as well as poor staff knowledge, loneliness and social isolation. It is crucial that care home providers and staff actively seek to reduce these risks by implementing strategies that promote better mental health outcomes for people living in these settings.

Antidepressant medications have been found to benefit this demographic, but other strategies also need to be implemented. These include encouraging residents to have direct involvement in their physical and social environments, using consultative processes to promote informed decision making, involving residents in their care planning, promoting mastery in activities of daily living, and facilitating the use of technology to maintain connection with families and friends. Education also needs to be provided for staff to promote recognition of depressive symptoms and improve referrals to mental health professionals.

References

- Abeyaratne NWSY, De Zoysa ED (2020) Higher prevalence of geriatric depression, cataplexy, pain and sleep disorders in institutionalized elders: a cross-sectional study in Galle District, Sri Lanka. *BMJ Geriatrics*; 21: 625.
- Abuse RC et al (2017) A training program to enhance recognition of depression in nursing homes, assisted living, and other long-term care settings: description and evaluation. *Gerontology & Geriatrics Education*; 38: 3, 325-345.
- Anderson K, Blair A (2007) What have staff got to do with it? Unraveling complex relationships between residential aged care staff, the quality of care they provide, and the quality of life of people with dementia. *Archives of Gerontology and Geriatrics*; 34: 104-118.
- Atkins J et al (2015) More age-care staff report helping care recipients following a brief depression awareness raising intervention. *BMJ Nursing*; 12: 10.
- Australian Institute of Health and Welfare (2020) Older Australians. <https://www.aihw.gov.au/reports/older-australians>, 30 November (accessed 20 March 2023).
- Bischoff RS, Witten JA (2007) Loneliness in old age: interventions to curb loneliness in long-term care facilities. *Activities, Adaptation & Aging*; 41: 4, 305-325.
- Byrdon A et al (2022) National survey on the impact of COVID-19 on the mental health of Australian residential aged care residents and staff.

Box 5. Areas for improvement to promote better mental health

- Ongoing care home staff depression training should be provided, along with referral protocols
- More needs to be done in mental health support being provided for older people in care homes by mental health professionals
- Older people in care homes should be involved in collaborative processes with staff to engage them in their everyday care and social engagement
- Opportunities should be sought to involve care home residents in meaningful activities and create significant relationships
- Incorporate and facilitate the use of technology to maintain connections with family

Clinical Gerontology; 45: 1, 58-70.

Chang SJ et al (2020) Animal-assisted therapy as an intervention for older adults: a systematic review and meta-analysis to guide evidence-based practice. *Workplaces on Evidence-Based Nursing*; 10: 1, 60-67.

Chau R et al (2020) Risk indicators for depression in aged care: the contribution of a meaningful life, mastery and environmental fit. *Australasian Journal on Ageing*; 39: 3, e328-e334.

Chen C et al (2022) Loneliness among older adults living in aged residential care in Aotearoa New Zealand and Australia: an integrative review. *Nursing Praxis in Aotearoa New Zealand*; 36: 1, 5-15.

Chen F et al (2017) The local reliability of the 15-item version of the Geriatric Depression Scale: an item response theory (IRT) study. *Journal of Psychosomatic Research*; 96: 94-98.

Devlin TE et al (2015) Staff-focused interventions to increase referrals for depression in aged care facilities: a cluster randomised controlled trial. *Ageing & Mental Health*; 19: 4, 449-455.

Devlin TE et al (2017) Biopsychosocial factors related to depression in aged care residents. *Journal of Affective Disorders*; 142: 1-3, 290-296.

Francis L et al (2016) Systematic review of interventions addressing social isolation and depression in aged care clients. *Quality of Life Research*; 25: 6, 1555-1607.

Giovannini S et al (2020) Use of antidepressant medications among older adults in European long-term care facilities: a cross-sectional analysis from the SHARE study. *BMJ Geriatrics*; 20: 2020.

Grace N, Toulhass SR (2014) Psychosocial functioning in the elderly: an assessment of

self-concept and depression. *International Journal of Psychological Research*; 7: 1, 12-31.

Kalatzidis E, Harrington A (2018) Resident decision-making in the context of residential aged care. *Collegian*; 25: 3, 509-515.

Knight T et al (2018) Environmental mastery and depression in older adults in residential care. *Ageing & Society*; 38: 5, 870-884.

Lambotte D et al (2018) Relational aspects of mastery for frail, older adults: the role of informal caregivers in the care process. *Health and Social Care in the Community*; 27: 5, 652-661.

Ludlow K et al (2020) Staff members' prioritisation of care in residential aged care facilities: a Q methodology study. *BMJ Health Services Research*; 20: 425.

McCabe M et al (2022) An evaluation of a consumer directed care training program for nursing home staff. *Geriatric Nursing*; 45: 277-284.

McCabe MP et al (2017) Organisational factors related to the confidence of workers in working with residents with dementia or depression in aged care facilities. *Ageing & Mental Health*; 21: 5, 487-495.

Molleram T et al (2018) Older people's perceived autonomy in residential care: an integrative review. *Nursing Ethics*; 26: 5, 494-514.

Moyle W et al (2020) Recommendations for staff education and training for older people with mental illness in long-term aged care. *International Psychogeriatrics*; 32: 7, 1059-1066.

Munro M, Milne R (2020) Symptoms and causes of depression and its diagnosis and management. *Nursing Times [online]*; 18: 4, 18-22.

O'Connell MC et al (2022) Overcoming barriers for older adults to maintain virtual community and social connections during the COVID-19 pandemic. *Clinical Gerontology*; 45: 1, 159-171.

Orlowski J et al (2018) Models of care for aged care – social or biomedical? *Australian Nursing and Midwifery Journal*; 25: 7, 45.

Panelli M (2022) Loneliness and boredom in residential care: voices of older adults. *Aotearoa New Zealand Social Work*; 54: 1, 88-99.

Prediger G (2017) Depression in older adults. *British Journal of Medical Practitioners*; 10: 1, e6007.

Royal College of Psychiatrists, British Geriatrics Society (2018) Depression among Older People Living in Care Homes. <https://www.rcpsych.ac.uk/docs/default-source/policy-and-research/older-people-in-care-homes.pdf>.

Schwaninger M et al (2015) The relationship between social integration and depression in non-demented primary care patients aged 75 years and older. *Journal of Affective Disorders*; 165: 2, 173-178.

Szargel J et al (2017) The availability of psychological services for aged care residents in Australia: a survey of facility staff. *Australian Psychologist*; 52: 6, 406-415.

Tang T et al (2022) Prevalence of depression among older adults living in care homes in China: a systematic review and meta-analysis. *International Journal of Nursing Studies*; 125: 10494.

Van Postgeest EP et al (2020) Depression, antidepressants and fall risk: therapeutic dilemma – a clinical review. *European Geriatric Medicine*; 12: 3, 525-536.

Walker H, Piliaditis P (2018) Older people's experiences of living in a residential aged care facility in Australia. *Australasian Journal on Ageing*; 35: 1, 145-150.

Wilkinson P, Bennett Z (2016) Continuation and maintenance treatments for depression in older people. *Cochrane Database of Systematic Reviews*; 9: CD006727.

Wilkinson TJ et al (2017) Quality of life for older people in residential care is related to connectedness, willingness to enter care, and co-residents. *Australasian Journal on Ageing*; 36: 1, 52-55.

World Health Organization (2018) *International Statistical Classification of Diseases and Related Health Problems, 10th Revision*. WHO.

Whytecraft N (2017) *Mental Health Nursing Case Book*. McGraw-Hill.

Yoon S et al (2018) Effective treatments of late-life depression in long-term care facilities: a systematic review. *Research on Social Work Practice*; 28: 2, 186-190.

Appendix K

Strengthened Aged Care Quality Standards 2025



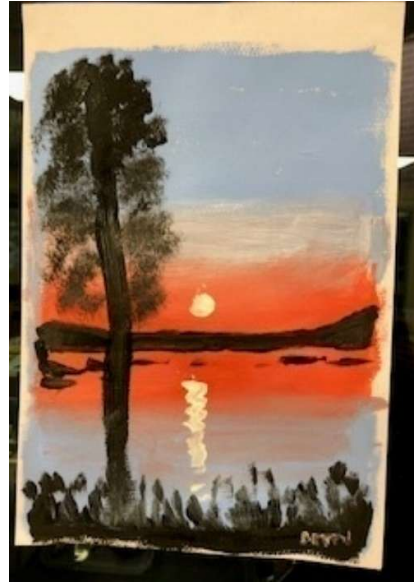
Source: Department of Health, Disability and Ageing

Appendix L

Sample of Resident's Paintings Produced During the Resident Intervention Study



Painted by 88-year-old



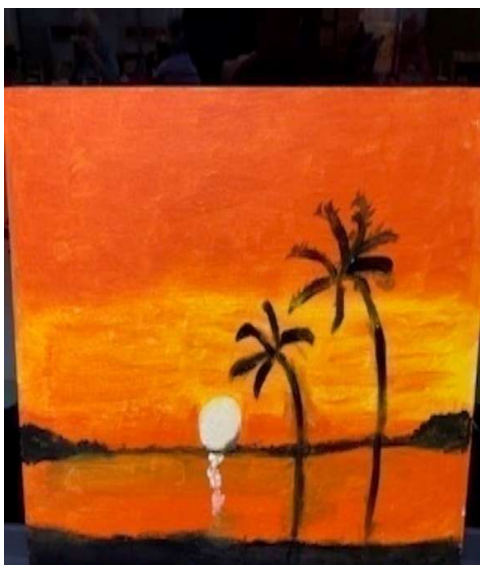
Painted by 95-year-old



Painted by 93-year-old



Painted by 88-year-old



Painted by 88-year-old



Painted by 87-year-old



Painted by 93-year-old