

PROMOTING POSITIVE DEMENTIA ATTITUDES THROUGH OCCUPATIONAL  
ENGAGEMENT: THE DEVELOPMENT OF A DEMENTIA AWARENESS  
PROGRAM FOR COMMUNITY OLDER ADULTS

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## **Doctoral Project Approval**

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## Abstract

**Purpose:** This capstone project explored the effects of adding occupational engagement into a dementia awareness program on attitudes toward dementia among community-dwelling older adults, aiming to challenge dementia myths and promote an inclusive environment through occupational therapy perspectives.

**Methods:** This project used a pre-test, post-test design with convenience sampling to develop and assess a dementia awareness program based on insights from Silverado Red Rock Memory Care Community and participation from members of the Osher Lifelong Learning Institute (OLLI) at the University of Nevada, Las Vegas in the program. Changes in positive attitudes toward dementia were measured using the Dementia Attitudes Scale (DAS). Participants also completed a feedback form regarding their insights upon completing the program. The feedback was reviewed through thematic analysis and identification of positive keywords, phrases, and direct quotations.

**Results:** A Wilcoxon Signed Rank Test on the DAS showed a non-significant increase from a pre-program average of 102.33 (SD=14.59) to a post-program average of 104.75. However, upon completion of the program, five participants showed an upward trend toward more positive attitudes, which was also reflected in their feedback forms.

**Conclusion:** While the total scores of the Dementia Attitude Scale (DAS) did not significantly differ between pre and post-program assessment, qualitative feedback indicated a positive program reception, suggesting a beneficial impact on attitudes toward dementia.

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## **Dedication**

This capstone project mirrors the essence of those who have shaped me into who I am today. Thank you to Keisha, who has been my cheerleader since our high school days. Your encouragement and unwavering support have been a constant source of strength.

I owe a debt of gratitude to the support system I have found in this program. Andrew, Erik, Lester, Jerome, Jina, and Tashia. Each one of you has graciously included me in your significant moments and trusted me with your vulnerable ones. As we move forward, I cherish the hope that we will create more treasured memories to build upon the ones we have made thus far.

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## **List of Definitions**

**Alzheimer's Disease.** The most common type of dementia affecting parts of the brain that control thought, memory, and behavior (Alzheimer's Association, 2023)

**Alzheimer's Disease and Related Dementias (ADRD).** Refers to the most common forms of dementia, including Alzheimer's Disease, frontotemporal degeneration, Lewy body dementia, vascular contributions to cognitive impairment and dementia, and mixed-etiology dementias (National Institute of Neurological Disorders and Stroke, 2023)

**Dementia.** A collective term for symptoms including memory loss and cognitive decline, which significantly interfere with daily life, leading to a progressive deterioration of cognitive abilities and independence (Alzheimer's Association, 2023)

**Dementia attitudes.** Refers to the perceptions, beliefs, and behaviors that individuals and society hold toward people with dementia

**Dementia awareness.** The level of being informed and understanding dementia, its causes, symptoms, and influences of effects

**Dementia knowledge.** Refers to the person's knowledge and familiarity with dementia

**Occupation.** The activities that people do in their everyday lives, as individuals, in families, or in communities providing meaning or purpose to their life (AOTA, 2020)

**Occupational engagement.** The active involvement, participation, or performance of occupation (AOTA, 2020)

**Stigma.** The social experience that refers to the perception of others that deem an individual is deviant from the societal norms (Chang & Hsu, 2020)

## **Introduction**

In 2020, more than 55 million individuals worldwide were affected by dementia (World Health Organization, 2023). The projections show a significant rise in the number of people who will have dementia in the coming years. Projections are expected to nearly double every two decades, reaching around 78 million by 2030 and 139 million by 2050. This increase is primarily due to the global aging population, which will result in a significant and rapid growth in dementia prevalence. Annual global societal costs are estimated at \$1313.4 billion for the approximately 55 million people living with dementia (Wimo et al., 2023). The significant financial burden imposed by dementia highlights the urgent need for effective interventions and increased awareness. Currently, interventions and treatments related to dementia care are primarily focused at the secondary and tertiary levels. At these levels, dementia has already dominated many aspects of the individual's and their families' lives. However, public health initiatives have pushed for tools such as early detection, reducing risky health behaviors, and community partnerships to mitigate the future impact of dementia. Given the public health concern, addressing dementia at both the community and primary level can have a practical, wider-scale approach. Addressing the issue at the public level not only focuses on the individual but also considers the broader societal context, thereby aiming to create a more dementia-friendly society.

Dementia is an umbrella term for a range of neurological disorders resulting in a gradual decline in cognitive function over time (Alzheimer's Association, 2023). This progressive change mainly impacts cognitive areas such as memory, language, and executive functions, resulting in an escalation in disease severity and a subsequent loss of independence (Lespinasse et al., 2023). The progression of Alzheimer's disease is a continuum. Individuals can move from

normal cognition to preclinical Alzheimer's disease without any noticeable biological changes in the brain (Sperling et al., 2011). This stage can subsequently evolve into mild cognitive impairment, showing mild symptoms of Alzheimer's disease but not severe enough to interfere with daily activities.

Alzheimer's disease and related dementias (ADRD) encompass common forms of dementia, including frontotemporal dementia, Lewy body dementia, vascular contributions to cognitive impairment and dementia, and mixed-etiology dementias (National Institute of Neurological Disorders and Stroke, 2023). In particular, Alzheimer's disease, the most prevalent form of dementia, leads to issues with memory, thinking, language, and behavior. As Alzheimer's disease worsens, it can cause significant declines in memory, language abilities, and executive functioning, leading to a loss of independence and challenges in carrying out activities of daily living (ADLs). In severe cases, individuals with ADRD may struggle to recognize their family and friends. Traditionally, these symptoms are managed with pharmacological interventions, but therapeutic strategies are proving integral to comprehensive care and for delaying functional impairment (McLaren et al., 2013).

Occupational therapy (OT) can provide practical solutions for individuals living with dementia and their caregivers at the community level. This community-based approach incorporates the fundamental principles of individual interventions, such as promoting independence, engaging in meaningful activities, and enhancing quality of life. However, it does so with a focus on the cost-effectiveness of community interventions (Wenborn et al., 2016). Although researchers have explored the role of occupational therapy in improving the quality of life for individuals with dementia, the focus has primarily been on implementing secondary

interventions after a determined diagnosis. This post-diagnostic approach underutilizes the potential for occupational therapy to have a preventative role in dementia care.

There is a significant opportunity to expand the scope of occupational therapy to include educational initiatives about dementia outside of traditional care settings and before the onset of dementia (Maclean et al., 2022). Integrating the concept of occupational engagement into these educational strategies not only aligns with promoting healthy aging but also ensures that interventions are personally meaningful to each individual. By engaging in activities that resonate with their interests and life experiences, individuals can foster a sense of purpose and belonging. This approach not only benefits individuals living with dementia by enriching their daily lives but also aids in building a more informed and inclusive community. Such proactive engagement helps cultivate an environment where understanding and support for dementia are enhanced well before the typical onset of symptoms.

## **Statement of the Problem**

Negative attitudes toward and stigmatization of dementia are a pervasive problem that impacts individuals, their families, and communities (Nguyen & Li, 2020). Stigma can be presented in the form of public fear and the negative perception of dementia from healthcare providers and patients. Negative stereotypes include perceiving those with dementia as dangerous and incompetent in the community. Misconceptions about dementia reflect a general lack of knowledge of dementia among the public, contributing to negative health behaviors, such as reluctance to undergo cognitive screenings or engagement in lifestyle choices that increase the risk of dementia (Kim et al., 2022). Other misconceptions can feature the assumption that dementia is a normal part of aging (Cahill et al., 2015; Cheston et al., 2016). The abundance of misconceptions in the attitudes of older adults toward dementia highlights the need for interventions addressing dementia and improving awareness (Rosenberg et al., 2020).

Occupational therapy interventions for health promotion and prevention can be applied at both individual and societal levels (AOTA, 2020). These interventions aim to enhance the quality of life of clients in their chosen environment and context. Health promotion programs focus on prevention or reduction in illness, promotion of mental health and quality of life, and promotion of healthy living practices and communities. Such programs operate at primary, secondary, and tertiary levels. Occupational therapy practice primarily focuses on secondary and tertiary levels, which involve environmental modifications, assistive devices, and compensatory strategies (McGrath et al., 2014). Although these strategies may cater to individualized needs, community interventions are equally important for individuals and their families affected by dementia to receive sufficient support (Hynes et al., 2016). Therefore, occupational therapy

interventions that target health promotion at the primary level are essential to promote overall health and well-being, both at the individual and societal levels.

The pursuit of value, meaning, balance, and identity development through social and environmental interactions is at the core of occupational engagement (Black et al., 2019). For community-dwelling older adults, participation in various occupations and activities is encouraged to support their health. As cognitive decline emerges as a significant issue among many older adults, examining how specific occupations may act as protective factors or potentially pose risks in the community becomes essential. Additionally, older adults can benefit from learning strategies that facilitate their engagement in various occupations (Leland & Elliot, 2012). Despite the need to address occupational engagement, there is a noticeable absence of programs that integrate occupations into dementia awareness or prevention initiatives. This gap raises an important question: Can a dementia awareness program that includes occupational engagement concepts improve positive attitudes about dementia among older adults in the community?

This capstone project was designed to answer this question by developing an integrated dementia awareness program that incorporates occupational engagement concepts. Through this initiative, the program not only addresses the existing stigma associated with dementia but also fosters empathy and cultivates a more inclusive and informed societal perspective. Ultimately, it aims to transform how older adults perceive and interact with dementia, potentially reshaping community attitudes and improving the quality of life for those affected.

## **Literature Review**

The literature review highlights three key themes. The first theme explores the knowledge and attitudes surrounding dementia. The second theme examines dementia awareness programs designed to reshape these attitudes. The last section discusses occupational engagement in older adults and individuals living with dementia. Finally, the literature review synthesizes these critical elements, demonstrating their interconnected roles in the successful development of an effective dementia awareness program.

### **Knowledge and Attitudes Toward Dementia**

The perception of dementia is affected by social constructs that significantly shape attitudes toward the condition. Dementia knowledge encompasses an understanding of its etiology, diagnosis, symptoms, behaviors, and management (Carpenter et al., 2009). Healthcare professionals generally exhibit low to moderate levels of knowledge, impacting the quality of dementia education provided to patients (Chang & Hsu, 2020; Lawler et al., 2021). This trend is mirrored in the lay public, particularly in low-to-middle-income countries, where levels of dementia knowledge also tend to be low to moderate (Cahill et al., 2015). This lack of understanding often stems from the widespread misconception that dementia is a normal part of aging. Among the public, there is also uncertainty about the differences between age-related memory problems and warning signs of dementia (Cahill et al., 2015; Cations et al., 2018). Efforts to raise public awareness of dementia through educational and advocacy programs play a pivotal role in enhancing dementia care and improving caregivers' quality of life (Ashworth et al., 2022; Cahill et al., 2015). Despite the presence of existing initiatives, both at the population and professional levels, knowledge of dementia remains relatively low. Dementia education courses are provided to diverse groups, including children, students, and healthcare workers, to



help reduce stigma (Bacsu et al., 2022). Despite this, there is a noticeable shortfall in educational offerings specifically designed for the older population. Integrating topics on healthy aging with dementia-related content could effectively address this gap.

Attitudes toward dementia encompass behavioral, cognitive, and emotional responses toward the condition (O'Connor & McFadden, 2009). Negative attitudes toward aging and dementia symptoms can contribute to stigma against individuals with dementia within healthcare services. This stigma can cause those affected to internalize negative beliefs, resulting in depression, lower self-esteem, and decreased participation in activities (Chang & Hsu, 2020). Societal perceptions of dementia are often influenced by harmful dualistic frames that separate the body and mind, devaluing the humanity of individuals with dementia (Cuadrado et al., 2022). Conversely, counter-framing strategies that unite the body and mind can challenge misleading stereotypes. Failure to address these stereotypes results in individuals living with dementia avoiding their symptoms and seeking assistance (Burgener et al., 2015; Low & Purwaningrum, 2020). The widespread stigma poses significant barriers to early diagnosis and treatment (Chang & Hsu, 2020; Kim et al., 2022). Recognizing and addressing stigma toward individuals with dementia and their condition is imperative for changing perceptions of dementia.

The relationship between knowledge and attitudes about dementia is nuanced and remains inadequately understood. Chang and Hsu (2020) highlight that while there is a recognized link between these elements, the precise nature of their relationship continues to require further exploration. A cross-sectional study examined two specific dimensions of attitudes toward dementia: accepting and affective (Lee et al., 2023). The findings indicated that increased knowledge positively influenced accepting attitudes but had no significant effect on affective attitudes. This suggests that while enhanced knowledge may promote greater

acceptance of individuals living with dementia, increased levels of knowledge may not necessarily result in modified emotional responses or more profound personal sentiments toward the condition. In a different cross-sectional study, it was observed that possessing knowledge does not automatically lead to positive attitudes toward dementia (Rosato et al., 2019). This could be due to personal biases that obstruct efforts toward social inclusion. Factors such as a broad understanding of dementia, coupled with a lack of awareness about its risk factors, can contribute to sustaining negative attitudes. The discrepancies observed between these studies may be attributed to the different dimensions of attitudes measured. Understanding and addressing these variations is crucial for developing more effective educational interventions aimed at improving attitudes toward dementia.

Age differences also present a challenge, as older adults possess more knowledge but demonstrate fewer positive attitudes toward dementia than the youth population (Newton et al., 2021; Wu et al., 2022). Individuals with personal experiences with dementia often possess greater knowledge of dementia through the reality and risk factors of the disease, potentially leading to increased worry (Joo et al., 2021; Kessler et al., 2012). However, those with higher dementia knowledge who engage in cognitive activities such as writing and music can reduce worry and lower their risk of developing dementia. Thus, there is significance in encouraging public engagement in cognitive activities as a preventive measure against dementia (Joo et al., 2021). While a complex relationship exists between dementia-related knowledge and attitudes, evidence indicates that age, personal experiences, and engagement in cognitive activities shape these attitudes. Therefore, increasing public engagement in such activities could potentially modify attitudes toward dementia and may be necessary for older adults.

The interplay between knowledge and attitude surrounding dementia is intricate. Despite increased awareness efforts, the persistent low levels of dementia knowledge across various demographics highlight the need for more effective educational strategies (Cahill et al., 2015; Lawler et al., 2021). Furthermore, the influence of personal experiences and societal stigma on attitudes toward dementia underscores the complexity of changing public perceptions (Cheston et al., 2015; Cuadrado et al., 2023).

### **Dementia Awareness Programs**

With global and national organizations increasing efforts to enhance dementia awareness, there is a growing emphasis on community engagement as a strategy to address dementia (Odzakovic et al., 2021). Dementia education and training at the community level are vital interventions aimed at enhancing understanding, promoting the creation of dementia-friendly environments, and supporting early diagnosis and prevention efforts (Matsumoto et al., 2021). Programs addressing early diagnosis aim to motivate individuals to seek help and receive diagnostic procedures promptly. Training for healthcare professionals aims at refining their skills in early diagnosis of dementia, with reported outcomes showing increased practitioner confidence in both diagnosis and management (Lathren et al., 2013; Schütze et al., 2018).

Apart from individual-focused approaches to diagnosis and prevention programs, some programs address awareness from the perspective of a supportive community. One significant approach is to develop dementia-friendly communities that foster an inclusive environment where individuals with dementia receive understanding, respect, and support (Wu et al., 2022; Hung et al., 2020). These communities actively involve the public in awareness education and create welcoming and accessible environments that support social inclusion (Matsumoto et al., 2021; Phillipson et al., 2019). In order to expand dementia-friendly communities and provide

support for individuals and families affected by dementia, there is a need to raise awareness, improve knowledge, and develop openness to welcome dementia-friendly communities (Parkinson et al., 2022). One six-week dementia awareness and prevention program showed a significant reduction in dementia-related fears among older adults but had minimal impact on their knowledge, attitudes, and health behaviors (Kim et al., 2022). While individual and community-focused programs are crucial steps toward fostering dementia-friendly environments, continuous efforts in education, awareness, and behavioral change are necessary to truly cultivate communities that fully embrace and support individuals with dementia.

Occupational therapy is increasingly recognized as a vital component of dementia awareness initiatives. Through the development of practical tools tailored for daily activities, occupational therapy practice aims to enhance the quality of life for individuals with dementia and positively shifts public perception when applied community-wide (Darlington et al., 2021; Maki & Endo, 2018). Research indicates that integrating these tools into mainstream services is more effective than isolated initiatives improving attitudes toward dementia (Darlington et al., 2021). For the current project's purpose, various types of dementia awareness programs provide insight into how community engagement and education can be optimized to foster a more inclusive and supportive environment for individuals living with dementia.

### **Occupational Engagement**

Occupation refers to the everyday activities people do as individuals, families, or communities that occupy time and bring meaning into everyday lives (AOTA, 2020). The domains of occupation include ADLs, instrumental activities of daily living (IADLs), health management, rest and sleep, education, work, play, leisure, and social participation. Occupational engagement refers to active involvement, participation, or performance in

meaningful activities (Black et al., 2019). This section explores occupational engagement in two groups: individuals living with dementia and older adults looking to promote healthy aging. It also highlights the need for increased societal awareness to overcome obstacles that hinder occupational engagement for individuals and their families living with dementia.

### ***Strategies for Sustaining Occupational Engagement in Dementia Care***

Occupational engagement is essential for maintaining dignity, a sense of identity, and quality of life in those living with dementia (Han et al., 2015; Kielsgaard et al., 2020; Toit et al., 2018). Meaningful activities, habits, routines, and roles are essential for individuals with dementia to maintain a sense of normality and preferred lifestyle (Han et al., 2015). Beyond mere participation, engagement in occupations provides individuals with a sense of purpose, autonomy, and value (Han et al., 2015; Wolfe et al., 2021). Creating continued opportunities for building agency and promoting occupational justice in residential care can enhance the engagement of individuals with dementia in meaningful occupations (Toit et al., 2018). However, individuals living with dementia often lack engagement in meaningful occupations, which can lead to a decreased quality of life (Kielsgaard et al., 2020). Nevertheless, individuals with dementia have the right to actively engage in social and occupational activities within residential care settings. Therefore, it is vital to promote their engagement in meaningful occupations (Morgan-Brown et al., 2019). Through meaningful activities, those with dementia can not only maintain a sense of agency but also forge vital connections to their identity, others, and the world around them.

For a dementia awareness program centered on occupational engagement, it is essential to comprehend the needs of individuals living with dementia. Social activities and outside occupational pursuits can promote well-being and reduce neuropsychiatric behaviors in those

with dementia (Marx et al., 2019; Morgan-Brown et al., 2019). In addition, activities in landscapes can aid in reorienting individuals with ADRD (Brittain et al., 2010). Occupations in a social context underscore the importance of allowing individuals with dementia to express meaningful activities, requiring mindfulness from those interacting with them (Teitelman et al., 2010). The occupational engagement intervention developed by Kielsgaard and colleagues (2022) emphasizes three components: an activity program, staff workflow, and environmental adaptations. The activity program involves daily clubs, group activities such as games or walks, and staff planning. Environmental adaptations, such as room decorations, aim to address stimuli. Three key components emerged, which guide the effective facilitation of occupational engagement for individuals living with dementia, supporting better understanding and interaction for caregivers, friends, and family members: 1) providing opportunities for engagement in everyday spaces, 2) granting autonomy for individualized engagements, and 3) establishing structured routines for familiarity.

The environmental context plays a pivotal role in supporting individuals with dementia in engaging in their occupational activities, which is crucial for their well-being. Due to the progressive nature of dementia, cognitive and physical deterioration present significant challenges, impeding the ability to participate in meaningful activities. Environmental modifications are essential in facilitating engagement and reducing the demands placed on individuals. Simple yet effective strategies such as adjusting lighting and utilizing color contrasts can greatly enhance comfort and promote independence within residential care settings (Soilemezi et al., 2017). Furthermore, non-pharmacological interventions are instrumental in managing neuropsychiatric symptoms common in dementia, including agitation and apathy. These interventions not only provide relief to the affected individuals but also offer support to

caregivers by easing the challenges associated with these symptoms (Livingston et al., 2020). Tailoring the environment and consideration of interventions are vital to fostering occupational engagement and improving the overall well-being of those with dementia, directly addressing the hurdles posed by cognitive impairments and emotional disturbances.

Environmental challenges extend beyond the home to include hospitals and long-term care facilities, where generic design standards fail to address the specific needs of those with dementia, contributing to distress and disorientation (Catt & Giridharan, 2018; Xidou et al., 2020). The design of living and care spaces emerges as a pivotal factor influencing the well-being of individuals with dementia. Features promoting safe mobility, visibility, and interaction with nature, along with creating homelike environments, play an integral role in improving mood, social interaction, and the overall quality of life (Motealleh et al., 2019). Awareness programs can enlighten older adults about the importance of personalized activities and tailored environments, leading to greater empathy and improved support structures for those living with dementia.

The findings underscore the significance of tailored environments in supporting the well-being of individuals with dementia, highlighting the potential benefits of awareness programs that address occupational engagement concepts. By educating community older adults on the importance of environmental adaptations and personalized activities, such programs could foster a deeper understanding and more positive attitudes toward dementia. This enhanced awareness can lead to greater empathy and support for creating dementia-friendly communities, ultimately improving the quality of life for those living with dementia. Through the strategic design of living spaces and the implementation of non-pharmacological interventions, these programs can

play a pivotal role in promoting inclusivity and well-being for individuals with dementia, reflecting a community-wide shift toward more supportive and understanding attitudes.

### ***Strategies for Promoting Active Aging through Occupational Engagement***

Occupational engagement also serves as a cornerstone for promoting healthy aging among the general older adult population (Stav et al., 2012). Meaningful activities can enhance life quality, independence, and well-being across the aging spectrum, making them particularly important for the older adult population. Participation in ADLs and IADLs is linked to improved health outcomes, cognitive enhancement, and diminished dementia risk (Stav et al., 2012; Koh et al., 2021). Further insights reveal that older adults perceive the value of an occupation not only from physical engagement but also through the intensity of the involvement and the enjoyment it brings (Lundgren et al., 2020). Although mental and social engagements are more challenging to quantify than physical engagements, the outcome of enjoyment is still of significance. Embracing a comprehensive understanding of these activities can advance a holistic view of aging that celebrates continued engagement across a spectrum of occupations.

The integration of occupational engagement with daily routines is central to promoting healthy aging, highlighting the importance of activities that enhance life quality, autonomy, and overall well-being. This approach aligns with active aging strategies that emphasize lifestyle changes and meaningful activities to improve health outcomes among older adults. Research suggests that a comprehensive approach targeting various health aspects, including physical activity, psychosocial factors, social support, and healthy eating habits, is effective in addressing the multifaceted determinants of active aging (Menichetti et al., 2016; Stav et al., 2012). While lifestyle interventions typically focus on rectifying specific health behaviors, such as physical



inactivity or unhealthy eating, occupational engagement utilizes a profound approach to explore the significance of meaningful activities to provide purpose and fulfillment.

This holistic view acknowledges the necessity for integrative interventions to navigate the physical and cognitive challenges of aging. Multicomponent interventions that include cognitive training, rehabilitation, psychological support, and lifestyle modifications have shown efficacy in boosting self-efficacy among older adults with subjective cognitive decline (Kim et al., 2022).

Additionally, principles of lifestyle redesign that encourage active participation in meaningful occupations significantly enhance life satisfaction and positively affect physical and mental health. Programs such as the Well Elderly Treatment program, which targets healthy lifestyles and meaningful occupations across various dimensions, such as health awareness, social relationships, and cultural engagement, further exemplify this integrated approach (Jackson et al., 1998). By employing didactic presentations alongside interactive activities such as dancing and puzzles, such initiatives highlight the critical link between cognitive health and occupational engagement, offering valuable insights into their combined effect on well-being. Together, these strategies underscore the imperative of a comprehensive plan for fostering active aging, advocating for the integration of lifestyle adjustments and meaningful activity engagement to markedly enhance the aging process.

This literature review highlights the importance of occupational engagement in promoting healthy aging and enhancing the quality of life for individuals with dementia. It emphasizes the significance of meaningful activities in maintaining dignity, identity, and well-being and outlines the challenges faced by individuals with dementia in engaging in these activities. Multicomponent interventions address these challenges and showcase programs such

as the Well Elderly Treatment program as examples of integrating occupational engagement with lifestyle modifications to improve cognitive health and overall well-being (Jackson et al., 1998). The current program development project is directly informed by emphasizing the need for interventions that engage the broader community in understanding and supporting the needs of individuals with dementia to create more inclusive, empathetic, and supportive environments for older adults.

The literature review delved into dementia-related knowledge and attitudes, evaluated the effectiveness of awareness programs, and explored the role of occupational engagement for those with dementia as well as the wider aging community. It revealed ongoing challenges in raising dementia awareness, highlighting the intricate relationship between knowledge, societal attitudes, and perceptions. While dementia awareness programs are pivotal in altering societal views and reducing fears, their impact on enhancing knowledge and attitudes needs strengthening through more immersive and interactive educational methods. Additionally, the review highlighted the importance of occupational engagement in supporting individuals with dementia through maintaining dignity, identity, and quality of life. The review also advocated for incorporating meaningful activities into the daily lives of the older population to improve cognitive health and well-being, suggesting a holistic approach to dementia awareness that involves community participation and the promotion of dementia-friendly environments. The literature review concludes that effective dementia awareness programs require a comprehensive strategy that boosts understanding, tackles stigma, and integrates occupational engagement while also educating and engaging the community to support individuals with dementia and create an inclusive environment for older adults.

## **Statement of Purpose**

This capstone project explored whether developing a dementia awareness program that included occupational engagement concepts could lead to a more positive attitude toward dementia among older adults in the community. The goal was to deepen understanding of how active participation in meaningful activities as part of dementia awareness efforts could enhance perceptions of dementia. By employing occupational therapy perspectives, the project aimed to develop a program that would educate the community on how to foster a more inclusive environment and challenge common dementia myths. The focus was on assessing the impact of incorporating occupational engagement into a dementia awareness program on community attitudes toward dementia.

## **Theoretical Frameworks**

Two theoretical frameworks guided the development and implementation of the dementia awareness program. The Canadian Model of Occupational Performance and Engagement played a pivotal role in shaping the program's foundation as it emphasized the importance of engagement for individuals with and without dementia (Polatajko, 2007). This framework provided a comprehensive approach to tackle the multifaceted aspects of occupational involvement. The program was designed to empower adults to identify and actively participate in meaningful occupations, which address both the enhancement of personal fulfillment for adults and the facilitation of engagement for those living with dementia. The framework offers a structured and holistic perspective, which aligns with the program's goal of instilling positive attitudes toward dementia through active participation and occupation.

To complement this foundation, the Adult Learning Theory was considered the best approach to address the target population of older adults. This theory recognizes the unique characteristics of adult learners and underscores the significance of personal experiences and self-motivation in the learning process (Lawler, 1991). Consequently, the program was able to adapt to the unique needs of each individual and provide a personalized learning experience that was both enjoyable and effective. The Adult Learning Theory emphasizes self-directed learning and personal relevance, which was instrumental in ensuring that the dementia awareness program resonated with the participants and facilitated a positive attitude shift through a learner-centered approach. Together, these frameworks not only enriched the content of the dementia awareness program but also ensured its relevance and effectiveness in promoting positive attitudes toward dementia through the lens of occupational engagement.

## **Methodology**

### **Project Design and Measures**

The project was designed with a pretest-posttest framework to assess changes in participants' attitudes toward dementia following a five-week program. This approach aimed to explore the effects of the program in enhancing participants' attitudes by comparing data collected before and after the program's implementation. Positive attitude was measured using the Dementia Attitudes Scale (DAS), a 20-item survey designed to assess beliefs, feelings, and understanding about dementia (O'Connor & McFadden, 2009). The DAS addresses various attitudes, such as empathy, stigma, and knowledge about dealing with dementia-affected individuals (O'Connor & McFadden, 2009). The questionnaire consists of a series of statements related to ADRD, requiring respondents to rate each statement on a Likert scale. Higher scores on the DAS indicate more positive attitudes associated with dementia, with some items requiring reverse scoring (see Appendix A). Each item was scored and then summed to produce a total score for each participant. This aggregate score was utilized to observe changes from pre- to post-program.

The DAS is made up of two factors: Dementia Knowledge and Social Comfort. The scale is reliable, with consistent results across evaluations, as demonstrated by Cronbach's alpha coefficients ranging between 0.83 and 0.85. The scale also shows solid convergent validity, as indicated by significant correlations (ranging from 0.44 to 0.55) with other scales that measure ageism and attitudes toward disabilities. Confirmatory factor analysis supports the DAS's two-factor structure and its applicability in diverse groups, affirming its construct validity. The scale was developed with the input of caregivers, professionals, and students and effectively differentiates attitudes toward dementia from general ageism or disability perspectives,

enhancing its discriminant and face validity. The DAS is a reliable tool suitable for both research and clinical settings to assess and monitor attitudes toward dementia. The DAS includes a section on demographics to capture information on participants' age, sex, gender, and ethnicity. It also inquired whether participants knew someone with dementia.

Upon completing the five-week program, participants were given a feedback survey form in paper format, where they responded to short answer questions (see Appendix B). This form was developed to inquire about key concepts covered during the program, including occupational engagement, to gather insights into each participant's personal experience. The feedback survey served as a qualitative tool to identify aspects of the program participants found beneficial as well as areas of improvement.

## **Settings**

The dementia awareness program was developed and implemented in Las Vegas, Nevada, through a collaborative effort involving two key agencies. The practices and insights from the Silverado Red Rock Memory Care Community informed initial development. This facility is recognized for its innovative approach to care, featuring customized neighborhoods designed to meet residents' needs and promote meaningful engagement through a diverse range of activities. The experiences at Silverado Red Rock provided valuable knowledge about dementia's manifestation and the adaptation of activities to suit the varying abilities of residents. This foundational knowledge was instrumental in shaping the program introduced at the Osher Lifelong Learning Institute (OLLI) at the University of Nevada, Las Vegas. OLLI, a community for adults aged 50 and older dedicated to lifelong learning, offered a course on dementia awareness. The program targeted members of OLLI who would have an interest in learning about dementia. OLLI was selected as the ideal venue for the newly developed course because its

members are in a prime position to deepen their understanding and potentially advocate for positive approaches and practices concerning dementia within their communities.

### **Target population and Recruitment**

All participants in the dementia awareness program were members of OLLI and were selected through convenience sampling. Individuals self-selected into the course at the start of the semester, as they were informed by the distributed course catalog prior to the beginning of the spring semester. This catalog provided detailed descriptions and overviews of available courses, including this specialized five-week course, which was shorter than the typical fourteen-week duration for most OLLI courses (see Appendix C). The enrollment process was designed to allow participants to select classes that aligned with their interests, thereby facilitating a personalized educational journey. The class size was capped at 30 participants to ensure an engaging and interactive learning environment. While enrollment in the program was based on voluntary participation, participants were not mandated to partake in the surveys.

### **Procedures**

The capstone project focused on exploring the benefits of occupational engagement for individuals with dementia through practical experiences at Silverado Red Rock Memory Care. By interacting closely with residents and staff, the project gathered valuable insights into successful engagement techniques and the impact of environmental or communication adjustments on these methods. This information was used to develop a five-week course at OLLI of one hour and 45 minutes that consisted of discussions and interactive activities (see Appendix D).

## ***Program Content***

### **Week 1: Understanding Dementia**

During the first week, the session delved into several key areas to enhance students' understanding of the condition (see Appendix E). The session covered the definition and various types of dementia, including Alzheimer's Disease, Vascular Dementia, Lewy Body Dementia, and Frontotemporal Dementia. It also addressed common myths and misconceptions, such as the notion that dementia is an inevitable part of aging (see Appendix E). Students were introduced to the progressive stages of dementia—mild, moderate, and severe—and discussed the cognitive and functional changes that occur at each stage. A video was presented featuring individuals with dementia, emphasizing the detrimental effects of the stigma they encounter. The course also stresses the importance of recognizing dementia as a complex condition that affects individuals differently, thereby challenging the stigma and fostering a compassionate perspective toward those affected.

### **Week 2: The Importance of Occupational Engagement and Healthy Aging**

The second week was centered on the importance of occupational and active engagement in promoting healthy aging, particularly addressing the six pillars of brain health (see Appendix F). The key concepts introduced were physical exercise, food and nutrition, medical health, sleep and relaxation, mental fitness, and social interaction (Jaqua et al., 2023). Safety and balance exercises were emphasized as critical for blood flow and memory improvement, reducing Alzheimer's risk. Nutrition advice highlighted the benefits of antioxidants to combat brain cell oxidation. For medical health, controlling risk factors like hypertension and diabetes was noted as essential in reducing dementia risks. Sleep and relaxation were discussed as vital for reducing stress and the build-up of beta-amyloid plaque linked to Alzheimer's. Mental fitness activities such as puzzles and reading promote brain cell growth and cognitive function. Lastly, social



interaction was shown to slow memory decline and enhance brain health, with community engagement serving as a protective factor against cognitive decline. Each pillar is designed to support overall cognitive health, enabling individuals to maintain independence and a high quality of life as they age.

### **Week 3: Communication Strategies for Dementia**

This week's session focused on the importance of communication strategies in dementia care, with a particular emphasis on the use of spaced retrieval as an effective technique for memory enhancement (See Appendix G). Spaced retrieval involves repeatedly recalling information or behaviors over increasingly longer intervals of time, which helps individuals with memory challenges retain and recall information more effectively. During the session, participants engaged in exercises to practice this technique, such as remembering names or the steps involved in daily activities, starting with short recall intervals, and gradually increasing them to strengthen long-term memory retention. The significance of maintaining communication during interactive tasks was also learned through a collaborative craft activity, emphasizing the practical application of these communication skills in real-life interactions with individuals living with dementia.

### **Week 4: Building Empathy and Sharing Personal Experiences**

The contents of this week highlighted the concept of empathy in dementia care, specifically focusing on its definition and practical applications (see Appendix H). Empathy is defined as the ability to sense, understand, and resonate with the emotions of another person, which includes both cognitive and emotional components. It was emphasized as a crucial skill for effective communication and as a therapeutic tool in care settings. During the week, various activities were conducted to foster empathy, including role-playing scenarios and empathy

mapping exercises. Role-playing involved participants acting out everyday tasks such as dressing, which helped them understand the emotional and physical challenges faced by individuals in the early stages of dementia. This purposeful engagement allowed participants to step into the shoes of those living with dementia, enhancing their empathetic understanding and enabling more compassionate care strategies.

### **Week 5: Planning the Environment & Ways to Provide Support**

In the program's final week, participants were educated on the importance of environmental modifications and support services for enhancing the lives of those with dementia (see Appendix I). This education aimed to equip them with the knowledge and practical skills necessary to foster inclusive, dementia-friendly environments. Additionally, the curriculum included comprehensive ADRD-related resources to broaden participants' understanding and capabilities in supporting affected individuals. For instance, participants were guided on how to utilize the Alzheimer Society's environmental checklist to see if a public space was dementia-friendly (Alzheimer's Society, n.d.). Using both knowledge of creating a dementia-friendly environment and being aware of barriers to a non-friendly climate ensures participants are equipped to contribute effectively to creating supportive community spaces, aligning with the program's goal of cultivating a knowledgeable and empathetic workforce dedicated to improving the quality of life for individuals with dementia.

### ***Data Management and Analysis***

The pretest and posttest scores from the DAS surveys were consolidated into a single Excel file for data analysis. Unique identification codes were assigned to each participant, immediately replacing their names in the pretest data to ensure privacy. The numeral values provided by the Likert scale responses of the DAS were inputted into the Excel Spreadsheet. Six

items from the DAS (Item #2, 6, 8, 9, 16, 17) required reverse scoring and were manually adjusted. Categorical demographic information, such as gender, sexual orientation, and ethnicity, was also inputted into the spreadsheet. The data from the Excel spreadsheet was then imported to IBM Statistical Package for the Social Sciences (SPSS) Version 28 for analysis, comparing means using both parametric and non-parametric testing. Due to the small sample size, a paired samples t-test and a related samples Wilcoxon Signed Rank test were used for analysis.

The feedback survey consisted of a 10-questions. The surveys were distributed on paper and subsequently transcribed into an Excel spreadsheet for analysis. Using a thematic approach, each response was meticulously reviewed to extract significant keywords and phrases, which were grouped into overarching themes. This process involved identifying key themes through recurring terms, systematically coding responses with similar terminology according to these themes, and ultimately distilling the main takeaways from the program's qualitative data.

## **Ethical and Legal Considerations**

This project obtained approval from the Institutional Review Board (IRB), designated under the IRB number UNLV-2023-536. At the start of the program, participants received consent forms pertaining to the surveys and collection of data for analysis, offering them the choice to refrain from answering the survey or participating in the course (see Appendix I). Even if participants chose not to engage in the surveys, the option to attend the course remained available to them. While active participation in all classes over the five weeks was encouraged, attendance for all sessions was voluntary. To maintain the impartiality of data collection and accurately reflect participants' experiences and attitudes, the course instructor was not directly involved in survey administration. Instead, this responsibility was delegated to another individual within the research team. No personally identifiable information, such as names and ages, was included in the data collection process to safeguard confidentiality. Each participant was assigned a unique code to ensure the privacy of sensitive information. These measures were imperative for upholding the ethical integrity of the program and demonstrating due respect for the rights and well-being of the participants.

## Results

The total scores of the DAS were calculated for each participant pre- and post-program. The participants were also asked to complete a feedback survey regarding their experience with the program in the final week of the program.

### Participant Characteristics

Fourteen members of the Osher Lifelong Learning Institute (OLLI) self-enrolled in the awareness course. Of these, only nine attended the first session, where they completed the consent form and the DAS pretest survey. By the conclusion of the five-week program, eight participants had completed the post-program survey. The participants' ages ranged from 60 to 90, with an average age of 77.11 years ( $SD = 9.72$ ). Gender distribution was relatively balanced, with males constituting 55.6% ( $n = 5$ ) and females 44.4% ( $n = 4$ ) of the overall course sample. Detailed demographic data is presented in Table 1.

**Table 1: Demographic Characteristics of Sample**

<b>Demographic Characteristics</b>		<b><i>n</i> = 9</b>
Age	Mean Age	77.1 years old
	Age Range	60-90 years old
	Standard Deviation	9.727
Gender Identity	Female	4 (44.4%)
	Male	5 (55.6% <del>%</del> )
Sex	Female	4 (44.4%)
	Male	5 (55.6% <del>%</del> )
Latino/Hispanic Origin	Yes	1 (11.1%)
	No	8 (88.9%)
Ethnoracial Identity	White	5 (55.6%)
	Asian	3 (33.3%)
	Native American	1 (11.1%)
Have you ever known or worked with someone living with dementia?	Yes	5 (55.6%)
	No	4 (44.4%)

**Data from the Dementia Awareness Scale**

As the data collected from the Dementia Awareness Scale (DAS) did not conform to a normal distribution, a related sample Wilcoxon Signed Rank Test was employed to determine the statistical significance of the results regarding participants' understanding of dementia before and after the five-week program.

The Dementia Attitudes Scale (DAS) spans from 20 to 140, with higher scores indicating more positive attitudes toward dementia. At baseline, the average score recorded was 102.33. The scores at baseline were in the top half of the possible range and well above the lowest score possible, indicating baseline knowledge about dementia. The Dementia Attitudes Scale (DAS) is measured on a scale from 20 to 140, where higher scores reflect more positive attitudes towards dementia. Initially, the average score was 102.33, placing it in the upper half of the scale and significantly above the minimum possible score. This suggests a foundational understanding of dementia among the respondents.

There was a moderate level of variation among participants, indicated by a standard deviation of 14.59. The scores ranged from 79 to 132. Most participants' scores fell within the interquartile range of 93 and 109, with a median score of 102. After participants completed the program, their average score slightly increased to 104.75, with a standard deviation of 14.24. The post-program score spread from 81 to 127, with the interquartile range also broadening to 94.5 to 115.5 and a median score of 105. The statistical analysis indicated that the observed change in scores fell within a range of the distribution that was not significant enough to reject the null hypothesis of no difference. For a comprehensive comparison of DAS scores before and after the program, refer to Table 2.

**Table 2: Results from Dementia Attitudes Scale Pre- and Post-Dementia Awareness**

**Program**

	Pre-DAS		Post-DAS		<i>z</i>	<i>p</i>
	<b>M (SD)</b>	<i>Md</i>	<b>M (SD)</b>	<i>Md</i>		
Total Score	102.3 (14.5)	102	104.7 (14.2)	105	-1.18	0.23

*Note.* *Md* = Median scores.

Out of the eight participants, five showed positive ranks, indicating their scores improved after the program, with a mean rank of 4.20 and their ranks reaching 21.00. In contrast, two participants showed negative ranks, meaning their scores decreased, with a mean rank of 3.50 and a total rank of 7.00. Additionally, one participant's scores remained the same before and after the program. Although these results indicate a slight trend toward improved attitudes toward dementia following the program, the change in scores was not statistically significant. See Table 3 for more detailed information on the ranks.

The quantitative analysis also included a demographic variable indicating whether participants had known or worked with someone living with dementia to explore potential trends in how personal experiences influence outcomes related to positive attitudes. In the analysis of pre- and post-test score variations, five participants showed an increase in scores; two had experience in dementia care, while three did not have experience. Conversely, among the two participants whose scores decreased, one had prior experience with dementia, while the other lacked such experience. Both groups are represented across all outcomes, displaying a nearly even distribution between participants with and without experience. This balanced



representation complicates the ability to identify a definitive trend linking experience with a positive attitude in this sample.

**Table 3: Ranks from the scores of the DAS Post-Dementia Awareness Program**

	<b>n</b>	<b>Mean Rank</b>	<b>Sum of Ranks</b>
<b>Negative Ranks</b>	2	3.50	7.00
<b>Positive Ranks</b>	5	4.20	21.00
<b>Ties</b>	1		
<b>Total</b>	8		

*Note. n = 8*

### **Feedback Survey Results**

The analysis of the survey responses was conducted using a thematic approach. Initially, all responses were thoroughly examined to identify key words and phrases. These elements were then categorized into common themes. Subsequently, responses containing similar words and phrases were coded to align with these identified themes. From the survey responses, six central themes emerged: Influence on Attitudes, Understanding of Dementia and Occupational Engagement, Perceptions of Dementia, Useful Resources, Recommendation Likelihood, and Areas of Improvement. Table 4 provides an overview of themes to offer a structured analysis of the collected feedback.

**Table 3: Frequency of Keyword Occurrences by Question**

<b>Themes</b>	<b>Frequency of Keywords</b>	<b>Question(s)</b>
Influence on Attitudes	22	2, 3, 5, 6, 7, 10
Understanding Dementia and Occupational Engagement	16	3, 4, 5, 7
Perceptions of Dementia	14	1, 2, 3, 5, 6, 10
Useful Resources	11	2, 3, 4, 5, 7, 8, 9, 10
Recommendation Likelihood	6	9
Areas of Improvement	3	8, 10

Among these themes, the most prevalent pertains to the program's significant impact on influencing participants' attitudes. Table 5 describes the main themes derived from related keywords or phrases as well as direct quotes demonstrating the theme.

**Table 4: Identified Themes in Feedback Survey Responses**

<b>Theme</b>	<b>Keywords or Brief Phrases</b>	<b>Direct Quotes</b>
<b>Influence on Attitudes</b>	Positive influence, practical value, supportive	"Be positive, less emotional, and focus on the needs of the person." "A more positive and caring attitude will make them feel better and worthwhile."
<b>Understanding of Dementia and Occupational Engagement</b>	Informative, real-life examples	"I am better equipped to handle dementia matters – be it knowledge or learning resources." "It [the program] broadened my horizons on understanding occupational engagement."
<b>Perceptions of Dementia</b>	Fearful, uncomfortable, more tolerant	"Scary. I am at a new life and it seems to be getting worse." "More afraid of getting dementia than anything else."
<b>Useful Resources</b>	Resources	"This program provides additional resources I would not have known if I did not take this class."
<b>Recommendation Likelihood</b>	Recommendations to incorporate occupational engagement	"Yes. It would be helpful to incorporate the occupational engagement aspects with some of the other dementia classes." "I would say the reality was much more challenging, but an education like this program definitely is very helpful."
<b>Areas for Improvement</b>	Real-life examples, over-positive outlook	"Provide more real-life examples with input from the class if possible." "It would be helpful to cover more on moderate and severe dementia where patients have reduced capabilities."

The feedback survey revealed several key themes regarding the impact of the program on participants' understanding and attitudes toward dementia. Pertaining to the theme of Influence on Attitudes, responses mentioned several instances of positive influence. Participants noted a shift in their approach, with comments such as, "I am more compassionate and can be helpful when dealing with people living with dementia" and feeling as though they can be "more helpful to that person." These reflections emphasize the program's impact in fostering a more supportive and empathetic perspective toward individuals living with dementia.

The theme of Understanding Dementia and Occupational Engagement emerged from responses highlighting that the program significantly boosted participants' understanding of dementia and the importance of occupational engagement. Participants noted that it "greatly improved my understanding" and taught them how to be "more helpful to a person living with dementia." Additionally, remarks such as "I thought dementia was not as bad as Alzheimer's disease" prior to the program revealed their initial misconceptions and emotionally driven perceptions of the condition.

The theme of Perceptions of Dementia was predominantly defined by negative emotions, with participants expressing fear and discomfort prior to the program. They shared their personal experiences with dementia as being "difficult" and "emotional." Notably, one participant admitted to feeling "uncomfortable talking about dementia," which not only underscored the prevalent negative perceptions but also reflected how these attitudes influenced their behaviors and interactions related to the condition.

The theme of Useful Resources emerged prominently as many participants recognized the value of the program's materials. They expressed appreciation for how these resources

enhanced their ability to manage situations more effectively. They commented, “I think I have better eyes on how to deal with my husband,” and “knowing what resources to get for help.” Furthermore, participants noted that "learning resources" not only deepened their understanding of dementia but also equipped them to approach challenges with a more positive attitude.

All eight participants affirmed the effectiveness of the program in addressing the importance of occupational engagement, with each responding "yes" when asked directly. Additionally, six participants recommended the program to others. Comments such as, "Yes, it would be helpful to incorporate the occupational engagement aspects with some of the other dementia classes," suggest that the program's approach was not only valued but also seen as a beneficial addition to existing dementia education courses.

Lastly, the theme of Areas for Improvement emerged from participant feedback, highlighting opportunities to enhance the program. One participant noted, "The instructor's outlook is so positive; I think it will wear off for the others within this room." This comment reflects a concern about whether older participants can sustain the positivity displayed by the instructor over time.

## **Discussion**

The purpose of the capstone project was to develop a dementia awareness program that integrated educational content with principles of occupational engagement and evaluate an increase in positive attitudes toward dementia among older adults. Developed to dispel common misconceptions about dementia, the program also introduced participants to various occupational engagements, such as physical exercises, cognitive activities, communication strategies, and empathy building, from a preventative perspective. The awareness program encouraged participants to actively engage in these occupations and to understand how individuals living with dementia could participate in similar activities.

This program represented the first known initiative to explicitly incorporate occupational engagements into a dementia awareness curriculum, setting a precedent in occupational therapy. Additionally, it aligned with the principles of health promotion within occupational therapy (OT) practice, emphasizing the role of meaningful activities in maintaining and enhancing quality of life (AOTA, 2020). By integrating occupational engagement into the program, the project underscored the potential of OT practices in health promotion, particularly in educating and shifting perceptions about dementia among older adults.

### **Quantitative Results from the DAS**

The quantitative analysis of the total scores from the DAS did not demonstrate statistical significance in the improvement of participants' attitudes toward dementia before and after participation in the program. This finding is consistent with results from other integrated interventions, which similarly reported no significant alterations in dementia-related knowledge and attitudes (Kim et al., 2022). Notably, despite the lack of knowledge and attitudinal changes, a reduction in participants' fear of dementia was observed for an integrated dementia awareness

program (Kim et al., 2022). Higher levels of knowledge do not invariably lead to more positive attitudes, as factors such as age and personal experiences with dementia can play a role in cementing such attitudes (Rosato et al., 2019). The intricate relationship among attitudes, knowledge, and fear concerning dementia underscores the necessity for employing varied outcome measures. Such measures would facilitate a more comprehensive understanding of the dynamics influencing positive attitudes toward dementia.

The DAS results showed that while five participants demonstrated improvements, two exhibited a decrease in scores, and one participant's score remained unchanged. These variations did not yield statistically significant differences in the DAS scores before and after the program. The lack of statistical significance may be attributed to several reasons. One reason is the limited capacity of the outcome measure to detect more subtle changes in attitude. Also, the brief duration of the five-week intervention might not have been sufficient to capture nuanced shifts in attitudes. It has been suggested that longer interventions are more likely to yield significant improvements (Kim et al., 2022). Additionally, the participants' initially moderate to high baseline attitudes, which could have been shaped by personal experiences with dementia, might have influenced these findings. Research indicates that individuals with personal connections to dementia tend to have more positive views toward the condition (Cheston et al., 2015; Newton et al., 2021). An analysis of the pre- and post-test scores relative to each participant's experience with dementia revealed varied outcomes. Among the five participants whose scores increased, two had prior experience with dementia, while three did not. Conversely, of the two participants whose scores decreased, one had experience with dementia, and the other did not. These results demonstrate that both groups are represented across all outcomes, complicating any definitive conclusions about the impact of personal experiences on test score changes in this sample.

## **Qualitative Findings from the Feedback Surveys**

The thematic analysis of the feedback surveys revealed the participants' overall positive experiences and perceptions of the program. Prior to the program, many participants regarded dementia as uncomfortable, emotional, scary, and difficult. These perceptions prior to the start of the program are aligned with the general public's perception of dementia, which could be categorized as uncomfortable, ashamed, or unfriendly (Chang & Hsu, 2020). After the program, participants expressed an increased readiness to support individuals with dementia. The high frequency of keywords related to practical value and positive attitudes toward dementia demonstrated through a better understanding of the condition and feeling empowered, illustrated a bridge between acquiring knowledge and application of empathy and providing support. Notably, interactions with those experiencing dementia and access to resources to promote occupational engagement in personal lives were highly valued. The overwhelming consensus was one of endorsement, with many participants expressing a willingness to recommend the program to others, suggesting the importance of integrating occupational engagements into broader dementia-related educational efforts.

While the feedback on the program was largely positive, there were also notable areas for improvement. One participant suggested incorporating more real-life examples with input from the class. As the Adult Learning Theory assumes that adults learn effectively when new information is connected to their existing knowledge and experience, future sessions may consider more encouragement from class members to share their experiences or observations of dementias to provide diverse perspectives and enrich collective understanding of dementia (Lawler, 1991). Feedback also indicated a need for the program to delve more into the complexities associated with moderate and severe dementia. This suggests an opportunity to



further explore the challenges and strategies for supporting individuals as their dementia progresses. Aligning this with principles of the CMOP-E, the program could enhance its curriculum by focusing on how to adapt the environment and activities to meet the evolving needs of individuals with dementia, considering their physical, social, and cultural contexts. This adjustment would offer practical insights into maintaining engagement and supporting the quality of life for those in the later stages of dementia.

The dichotomy between the statistical data and the qualitative feedback reflects a broader challenge in evaluating dementia awareness programs. While quantitative measures did not show significant improvements, the positive qualitative insights suggest a favorable perception of the program among participants. This discrepancy emphasizes the complexity of gauging attitude changes and the potential limitations of relying exclusively on quantitative metrics to capture the nuanced outcomes of educational interventions.

## **Limitations and Assumptions**

This capstone project was designed to develop a dementia awareness program aimed at enhancing the attitudes of older adults toward dementia. As the program was a novel approach that explicitly integrated occupational engagements into a dementia awareness program, several limitations and underlying assumptions merit discussion.

A significant limitation of this program was the small sample size, which might have restricted the ability to achieve statistically significant findings. The limited number of participants poses challenges in detecting subtle yet potentially meaningful changes in attitudes toward dementia, which are critical for assessing the effectiveness of the program. This small sample size also impacts the statistical power of the DAS results, thereby reducing the confidence in the results and limiting the extent to which these findings can be generalized to a broader population.

The utilization of the Dementia Attitudes Scale (DAS) as the sole instrument to assess changes in dementia awareness may not have comprehensively captured the multifaceted aspects of attitudes toward dementia. This focus raises the question of whether other dimensions, such as knowledge or fear associated with dementia, might have shifted without being detected by the DAS. Given that the DAS is specifically designed to gauge shifts in attitude, its sensitivity to detect nuanced changes in other cognitive or emotional responses to dementia, such as knowledge acquisition or fear reduction, is likely limited. This limitation suggests the use of a broader array of assessment tools in future iterations of the program. Incorporating measures that can capture knowledge enhancement and changes in emotional responses, such as fear or anxiety associated with dementia, would provide a more comprehensive understanding of how such programs impact participants beyond just attitudinal shifts.

Furthermore, the baseline data indicated that the initial total scores on the DAS fell within a moderate range, suggesting that participants started the program with a moderate awareness of dementia. The pre-existing moderate levels of positive attitudes could have obscured the detection of significant changes in attitudes as a result of the program.

## **Conclusion**

This program development project examined the impact of a five-week dementia awareness initiative targeted at community-dwelling older adults against the backdrop of the global dementia concern. With projections indicating a tripling of dementia prevalence by 2050 (WHO, 2022), the need for increased public awareness and understanding becomes increasingly urgent. Despite such prevalence, the general public's grasp of dementia is notably deficient, a gap that often fuels negative attitudes toward those affected (Cations et al., 2018; Kim et al., 2022; Rosato et al., 2019). Weaving occupational engagement into the fabric of the program aims to shift the narrative and improve attitudes toward dementia among older adults. Although the changes in DAS scores were minor and did not achieve statistical significance, qualitative feedback painted a picture of positive reception, highlighting the nuanced impact of the program.

### **Implications for Research**

The capstone project's findings illuminate critical paths for future research in dementia awareness. Research should explore longitudinal designs to assess the long-term impacts of dementia awareness programs, providing insights into the sustainability of attitude changes. Additionally, incorporating mixed methods approaches can enrich the understanding of program impacts, allowing for a comprehensive analysis that integrates quantitative outcomes with qualitative experiences. This broader methodological spectrum could unveil intricate dynamics affecting dementia awareness and attitudes, facilitating the development of more targeted and effective interventions.

### **Implications for Practice**

The project emphasizes the importance of integrating dementia awareness into community engagement initiatives by OT practitioners. Practitioners are encouraged to utilize

person-centered approaches that highlight the significance of occupational engagement in enhancing the quality of life for individuals with dementia. This includes advocating for environments that support meaningful activities tailored to individual capabilities and interests. Furthermore, practitioners should consider collaborative efforts that bridge the profession with other disciplines and community resources, enhancing the effectiveness of dementia awareness programs. These practices not only contribute to improving societal attitudes toward dementia but also reinforce the role of OT in promoting health, well-being, and inclusive communities.

### **Future Implications for OT**

The findings suggest several future directions for OT in the context of dementia care and awareness. There is a clear opportunity for OT professionals to lead in the development and implementation of dementia awareness programs that are grounded in occupational engagement. Such programs could emphasize the preventive aspects of OT by focusing on lifestyle modifications and early cognitive health interventions. Additionally, OT practitioners could play a crucial role in research, exploring innovative approaches to dementia care that prioritize meaningful engagement and occupational justice. By demonstrating the effectiveness of occupation-based interventions in improving attitudes toward dementia, OT can advocate for policies and practices that support a more dementia-inclusive society. Ultimately, these efforts can contribute to a shift in how dementia is perceived and addressed, highlighting the value of occupational engagement in fostering a compassionate and informed public response to dementia.

# Appendix A

## Dementia Attitudes Scale

### The Dementia Attitudes Scale

Melissa O'Connor, Ph.D. and Susan H. McFadden, Ph.D.

Please rate each statement according to how much you agree or disagree with it. Circle 1, 2, 3, 4, 5, 6, or 7 according to how you feel in each case. *Please be honest. There are no right or wrong answers.* The acronym "ADRD" in each question stands for "Alzheimer's disease and related dementias."

- |  |                   |          |                   |         |                |       |                |
|--|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| 1. It is rewarding to be around with people who have ADRD.               | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 2. I am afraid of people with ADRD.                                      | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 3. People with ADRD can be creative.                                     | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 4. I feel confident around people with ADRD                              | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 5. I am comfortable touching people with ADRD.                           | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 6. I feel uncomfortable being around people with ADRD.                   | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 7. Every person with ADRD has different needs.                           | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 8. I am not very familiar with ADRD.                                     | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 9. I would avoid an agitated person with ADRD.                           | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 10. People with ADRD like having familiar things nearby.                 | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
| 11. It is important to know the <u>past history</u> of people with ADRD. | 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |

*Turn Page Over*

12. It is possible to enjoy interacting with people with ADRD.

1            2            3            4            5            6            7  
Strongly Disagree    Disagree    Slightly Disagree    Neutral    Slightly Agree    Agree    Strongly Agree

13. I feel relaxed around people with ADRD.

1            2            3            4            5            6            7  
Strongly Disagree    Disagree    Slightly Disagree    Neutral    Slightly Agree    Agree    Strongly Agree

14. People with ADRD can enjoy life.

1            2            3            4            5            6            7  
Strongly Disagree    Disagree    Slightly Disagree    Neutral    Slightly Agree    Agree    Strongly Agree

15. People with ADRD can feel when others are kind to them.

1            2            3            4            5            6            7  
Strongly Disagree    Disagree    Slightly Disagree    Neutral    Slightly Agree    Agree    Strongly Agree

16. I feel frustrated because I do not know how to help people with ADRD.

1            2            3            4            5            6            7  
Strongly Disagree    Disagree    Slightly Disagree    Neutral    Slightly Agree    Agree    Strongly Agree

17. I cannot imagine taking care of someone with ADRD.

1            2            3            4            5            6            7  
Strongly Disagree    Disagree    Slightly Disagree    Neutral    Slightly Agree    Agree    Strongly Agree

18. I admire the coping skills of people with ADRD.

1            2            3            4            5            6            7  
Strongly Disagree    Disagree    Slightly Disagree    Neutral    Slightly Agree    Agree    Strongly Agree

19. We can do a lot now to improve the lives of people with ADRD.

1            2            3            4            5            6            7  
Strongly Disagree    Disagree    Slightly Disagree    Neutral    Slightly Agree    Agree    Strongly Agree

20. Difficult behaviors may be a form of communication for people with ADRD.

1            2            3            4            5            6            7  
Strongly Disagree    Disagree    Slightly Disagree    Neutral    Slightly Agree    Agree    Strongly Agree

**DEMOGRAPHIC INFORMATION**

1) Age: \_\_\_\_\_

Sex: *(Please check one that best applies to you)*

\_\_\_\_ Female

\_\_\_\_ Male

\_\_\_\_ Intersex

\_\_\_\_ Prefer not to say

\_\_\_\_ Other: \_\_\_\_\_

Which gender do you identify as? *(Please check one that best applies to you)*

- Woman
- Man
- Transgender
- Non-Binary
- Prefer not to say
- Other: \_\_\_\_\_

Are you of Hispanic/Latino/Spanish origin?

- Yes
- No

How would you best describe yourself?

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White

2) Have you ever known or worked with someone who has ADRD

- Yes

If yes, please explain. How long have you known, or did you know the person or people with ADRD? How close was your relationship?

---

---

---

---

- No

You're done! Thank you for your help!



## Appendix B

### Feedback Survey

*Thank you for your participation in the dementia awareness program. Your insights and experiences help me understand the program's potential impact on attitudes toward dementia. Please take a moment to share your thoughts on the program in 1-2 sentences.*

- 1) Before participating in this program, what were your perceptions and attitudes toward dementia?

---

---

- 2) Did this program influence your attitudes or perceptions about dementia? If so, in what ways?

---

---

---

- 3) To what extent do you feel the program improved your understanding of dementia and occupational engagement?

---

---

- 4) Did the course content effectively address the importance of occupational engagement in the dementia awareness program?

---

---

- 5) Please describe any specific moments or insights from the program that contributed to a more positive attitude toward dementia.

---

---

- 6) In what ways do you think a more positive attitude toward dementia can benefit individuals living with dementia and their caregivers?

---

---

7) Do you feel more prepared or empowered to engage with individuals who have dementia in your personal or professional life after participating in this program?

---

---

---

8) Were there any challenges or areas where you believe the program could have done more to promote positive attitudes about dementia?

---

---

---

9) Would you recommend this program to others to foster positive attitudes toward dementia?

---

---

---

10) Do you have any additional comments or reflections on the impact of this program on your attitudes toward dementia?

---

---

---

## Appendix C

### Example of Recruitment Material

# UNDERSTANDING DEMENTIA THROUGH OCCUPATIONAL ENGAGEMENT: A DEMENTIA AWARENESS PROGRAM

This five-week program is an engaging and informative course designed to empower adults to engage in meaningful activities and participation. This is also a dementia awareness program, where we will cover knowledge about dementia and deconstruct misconceptions about the condition. In each week, there will be lectures, as well as opportunities for physical and cognitive activities and discussions related to the weekly topic. This program is part of a capstone research project to see if a dementia awareness program with occupational engagement content can improve positive attitudes toward dementia.

UNLV OLLI Campus

Thursdays, February 15th - March 21st, 2024 (5 weeks)

Time: 1:45 PM - 3:30 PM

Instructor: Cynthia Lee is a third-year student at UNLV's Occupational Therapy program. At the end of spring 2024, Cynthia aims to graduate and become an occupational therapist who helps people across their lifespan to develop or regain the skills needed for everyday activities and meaningful activities to increase independence and achieve overall well-being. During her time as a student, Cynthia has experience working with children and adults in various settings. As this is a research project, please contact Dr. Samantha John at [samantha.john@unlv.edu](mailto:samantha.john@unlv.edu) if you have any questions.

## Appendix D

### Summary of Interactive Content

Week	Topics	Activities/Materials
Week 1: Understanding Dementia	Debunking Misconceptions, Deciphering between age-related memory issues versus dementia	True/False Questions Brief Case Scenarios
Week 2: The Importance of Occupational Engagement and Healthy Aging	Physical Health Cognitive Health Occupational Engagement	Balance exercises; Energy conservation tips Word Games: A through Z associations Group Discussions
Week 3: Communication Strategies for Dementia	Spaced Retrieval Ask, Encourage, and Acknowledge Giving Instructions	Roleplaying scenarios Using Communication Strategies with Origami Folding Activity
Week 4: Building Empathy and Sharing Personal Experiences	Perspective of Dementia Creative Storytelling Empathy Mapping	Videos Using pictures and guiding questions to form stories Group Empathy Mapping with case scenario
Week 5: Planning the Environment & Ways to Provide Support	Home modifications Use of memory aids Dementia Friendly Communities Community Resources	Group discussions Using environmental checklists Scenarios

## Appendix E

### Example of Lecture Material from Week 1

Understanding  
Dementia Through  
Occupational  
Engagement

WEEK 1, February 15th, 2024



Agenda

- 01 Defining Dementia
- 02 Debunking Myths and Misconceptions
- 03 Stages & Types of Dementia



01  
Defining  
Dementia



What is dementia?

Dementia is an umbrella term that is used to describe a wide range of symptoms, most notably impacting **memory, thinking, language, problem-solving,** and **other thinking abilities** that interfere with everyday life.


(Alzheimer's Association, 2023)


02  
Debunking Myths  
and Misconceptions





#1. Dementia is a natural  
and inevitable part of  
aging.

(Alzheimer Society Canada, n.d.)

  
**#2. People with dementia cannot understand what's going on around them.**  
(Alzheimer Society Canada, n.d.)


  
**#3. People with dementia are violent and aggressive.**  
(Alzheimer Society Canada, n.d.)

  
**#4. People with dementia cannot contribute meaningfully to society.**  
(Alzheimer Society Canada, n.d.)

  
**#5. A dementia diagnosis means the end of a meaningful life.**  
(Alzheimer Society Canada, n.d.)

  
**The Unspoken Impact of Dementia: Video**



  
Dementia is the  
**2nd**  
most feared condition in both young and old adults  
(Watson et al., 2023)

**03**


## Stages & Types of Dementia



## Common types of dementia

Most common types of dementia are identified as

- Alzheimer's Disease
- Vascular dementia
- Dementia of Lewy bodies
- Frontotemporal dementia
- AIDS-related dementia
- Creutzfeldt-Jacob Disease (CJD)
- Alcohol-related dementia



(Alzheimer's Association, n.d.)

## Alzheimer's Disease


**Alzheimer's Disease** is a progressive neurodegenerative disorder affecting **cognition and memory**

**Due to:** Built-up of beta-amyloid and tau proteins in the brain

**Prevalence:** ~5.8 million people in the United States have Alzheimer's disease and related dementias (ADRD)<sup>4</sup>

- By 2060, the number of ADRD cases are predicted to rise to 14 million people.

(Alzheimer Society Canada, n.d.)



## Alzheimer's Disease

**Symptoms:** Memory loss, cognitive decline, disorientation, behavior changes, language difficulty, and decline in executive function


**Risk Factors:** Age, APOE gene, genetics, head injuries, cardiovascular

- Modifiable vs. Non-modifiable risk factors?

**Typical Age of Onset**

- 60+

(National Institute on Aging, n.d.)




## Vascular Dementia

**Vascular dementia** occurs when there is damage to the blood vessels that provide oxygen to the brain. This results in cognitive decline.

**Prevalence:** 2nd most common cause of dementia

**Due to:** Different conditions that interrupt blood flow and oxygen supply to the brain

(Dementia Australia, n.d.)



## Vascular Dementia

**Symptoms:**


- Memory, disorientation, difficulty planning, mood changes, coordination problems, slurred speech

**Risk Factors:** Vascular conditions, stroke, diabetes, smoking, high cholesterol

**Typical Age of Onset:**

- 65+

(Alzheimer's Association, n.d.; National Institute on Aging, n.d.)



## Frontotemporal dementia

**Frontotemporal dementia** is the progressive damage to the frontal and temporal lobes of the brain

**Due to:** Abnormal amounts of tau and TDP-43 protein within the neurons located in the frontal and temporal lobes → leading to degeneration of neurons

(National Institute on Aging, n.d.)



## Frontotemporal dementia

**Symptoms:** Personality, behavior, language difficulties, executive functioning, memory problems

**Risk Factors:** Genetics, age

**Typical Age of Onset**

- 45-64

(National Institute on Aging, n.d.)



## Lewy Body dementia

**Lewy Body Dementia is characterized by the** presence of abnormal protein deposits in the brain, leading to a combination of cognitive fluctuations, visual hallucinations, and motor symptoms reminiscent of Parkinson's disease.

**Due to** Abnormal protein deposits called Lewy bodies in the brain.

**Prevalence:** 3<sup>rd</sup> most common dementia



## Lewy Body dementia

**Symptoms:** Cognition, movement, sleep, and behavior

**Risk Factors:** Age, gender, family history

**Typical Age of Onset**

- 50



## Mixed dementia

Mixed dementia is when a person has more than one type of dementia.

**Prevalence:** Relatively common

Common types of mixed dementia:

- Alzheimer's disease and vascular dementia
- Alzheimer's disease and Lewy body disease



(Alzheimer's Society, n.d.)

## Mixed dementia

**Symptoms:** Memory loss, cognitive decline, behavior and mood changes, motor skills and coordination difficulties, language and communication problems

**Risk Factors:** Age, cardiovascular risk factors, genetics, history of stroke/vascular issues

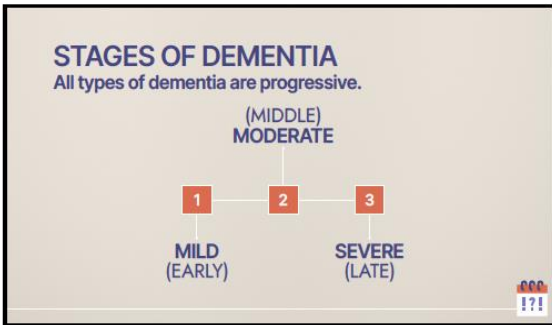
**Typical Age of Onset**

- 65

(Alzheimer's Society, n.d.)







### Mild stages

- Often not diagnosed
- Episodes of forgetfulness
- Develop coping mechanisms
- Likelihood for depression
- Communication skills are intact
- Able to complete Activities of Daily Living (ADLs)

### Mild Cognitive Impairment vs. Dementia: Definitions

Mild Cognitive Impairment	Dementia
<ul style="list-style-type: none"> <li>• Transitional stage</li> <li>• Not enough to significantly interfere with daily life</li> </ul>	<ul style="list-style-type: none"> <li>• Syndrome characterized by decline</li> <li>• Impairs daily functioning and quality of life</li> </ul>

### Mild Cognitive Impairment vs. Dementia: Memory loss

Mild Cognitive Impairment	Dementia
<ul style="list-style-type: none"> <li>• Memory loss may be observable, but can be compensated</li> </ul>	<ul style="list-style-type: none"> <li>• Memory loss is more short-term memory, forgetting familiar people, places, or important events</li> </ul>

### Mild Cognitive Impairment vs. Dementia: Progression

Mild Cognitive Impairment	Dementia
<ul style="list-style-type: none"> <li>• Not everyone may progress to dementia</li> <li>• Some may revert to normal cognitive function</li> </ul>	<ul style="list-style-type: none"> <li>• Progressive condition; symptoms will worsen over time</li> </ul>

### Mild Cognitive Impairment vs. Dementia: Diagnosis

Mild Cognitive Impairment	Dementia
<ul style="list-style-type: none"> <li>• Objective cognitive testing</li> </ul>	<ul style="list-style-type: none"> <li>• Comprehensive assessment, medical history, evaluation of daily functioning</li> </ul>

### Scenario 1

Susan occasionally forgets where they put their keys or glasses and struggles to remember names. However, they can recall the information later in the day.



### Scenario 2

Jeff has trouble balancing their checkbook and frequently forgets to pay bills on time. They struggle to comprehend financial statements.



### Scenario 3

Katherine repeatedly asks the same question in a short period, seemingly forgetting previous answers.



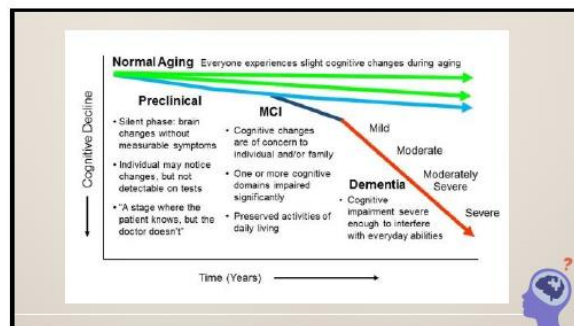
### Scenario 4

Ben often gets disoriented and takes a wrong turn while driving in familiar neighborhoods.



### Scenario 5

Manny was once outgoing and sociable. Now he has been increasingly withdrawn, showing signs of social apathy and disinterest.



### How to support someone in the early stages

- Open communication
- Lifestyle adjustments
- Community participation
- Cognitive stimulation

### Moderate stages

- More noticeable cognitive impairment
- Assistance with ADLs
- Self-neglect
- Communication difficulties
- Word finding
- Behaviors



### How to support someone in the moderate stages

- Establish a consistent and predictable routine
- Use simple and clear language
- Take safety measures for mobility

### Advanced Stages

- More dependent for all care
- Verbal communication becomes non-existent
- Bed bound
- May still have episodes insight



### How to support someone in the advanced stages

- Prioritize comfort and dignity
- Adjust care plans
- Gentle tones for reassurance

### True or False?

The stages of dementia are often clearly represented in an individual living with dementia.



**False.** Dementia manifests differently in each person.

Embrace the individuality of each person to promote compassion and respect.

**04**  
Healthy Aging

Prioritizing healthy aging not only can reduce dementia risk but also enhances overall well-being.

**Risk Factors**

**Non-Modifiable**      **Modifiable**

Risk factors represent an increased likelihood of getting a disease due to characteristics of your lifestyle, environment, and genetic background.

(Alzheimer Society of Canada, 2018)

**Risk Factors**

**Non-Modifiable**

- Age
- Gender
- Genetics
- Other medical conditions

**Modifiable**

- High blood pressure
- Smoking
- Diabetes
- High Cholesterol
- Obesity
- Lack of physical activity
- Poor diet

**Strategies for Healthy Aging**  
Taking care of your...

**Physical health**  
Exercise  
Diet  
Sleep

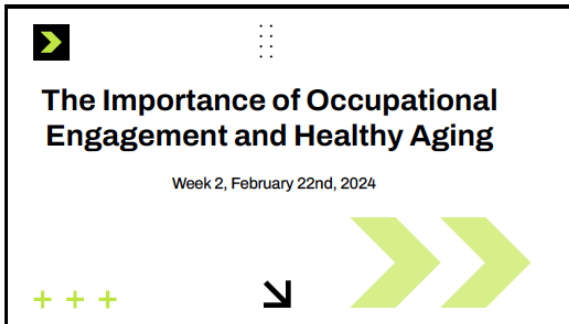
**Mental health**  
Social life  
Stress  
Depression  
Leisure

**Cognitive health**  
Learning new skills

(National Institute on Aging, n.d.)

## Appendix F

### Example of Lecture Material from Week 2

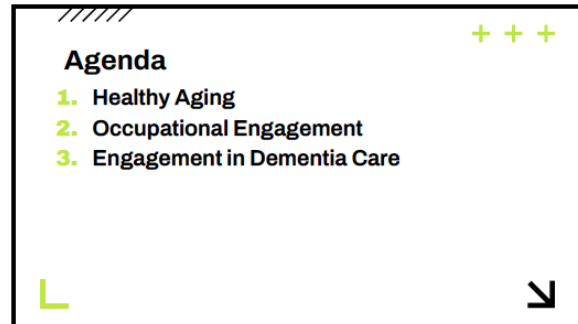


**The Importance of Occupational Engagement and Healthy Aging**

Week 2, February 22nd, 2024

+++

Navigation icons: back, forward, search, and a large green arrow.



**Agenda**

1. Healthy Aging
2. Occupational Engagement
3. Engagement in Dementia Care

+++

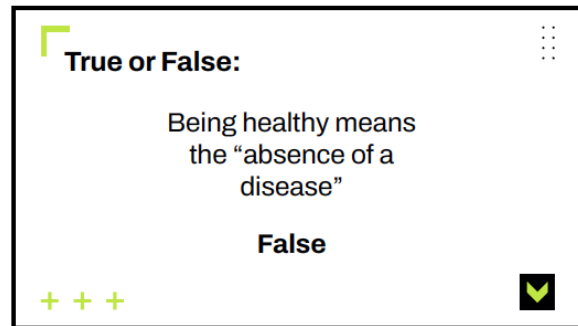
Navigation icons: back, forward, search, and a large green arrow.



**1. Key Concepts in Healthy Aging**

+++

Navigation icons: back, forward, search, and a large green arrow.



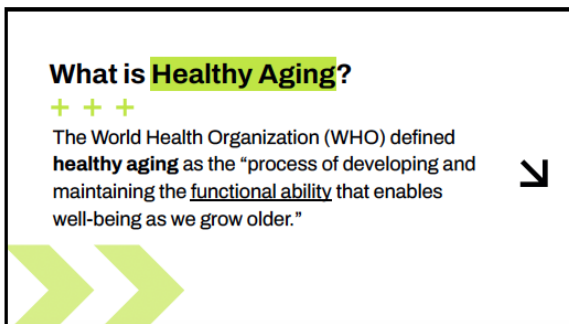
**True or False:**

Being healthy means the "absence of a disease"

**False**

+++

Navigation icons: back, forward, search, and a large green arrow.

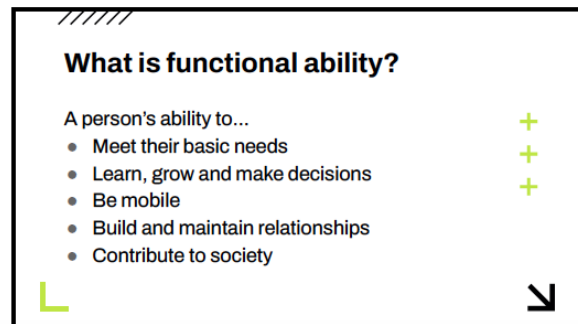


**What is Healthy Aging?**

+++

The World Health Organization (WHO) defined **healthy aging** as the "process of developing and maintaining the functional ability that enables well-being as we grow older."

Navigation icons: back, forward, search, and a large green arrow.



**What is functional ability?**

A person's ability to...


- Meet their basic needs
- Learn, grow and make decisions
- Be mobile
- Build and maintain relationships
- Contribute to society

+++

Navigation icons: back, forward, search, and a large green arrow.

**6 Pillars of Brain Health**

- 1) Physical Exercise
- 2) Food & Nutrition
- 3) Medical Health
- 4) Social Interaction
- 5) Sleep
- 6) Mental Fitness



+++ (Cleveland Clinic, n.d.)

**Why is cognitive health so important?**

Cognitive health is vital for supporting independence, quality of life, and the ability to engage in daily activities with resilience and adaptability.

+++

**Cognitive Health**

- Crossword puzzles
- Sudoku
- Jigsaw puzzle
- Memory games
- Chess / checkers
- Word search
- Reading aloud
- Learning a new language
- Brain training apps
- Music recall
- Storytelling
- Strategy board Games
- Math challenges
- Discussion groups
- Art appreciation
- Pictorial memory
- Daily journaling
- Computer Skills
- Logical reasoning exercises

+++

**Why is physical health so important?**

Physical inactivity is related to higher rates of mortality, higher likelihood of disease, and decreased levels of function.

+++

**Physical Activities for Healthy Aging**

- Adults 65+ need at least **150** minutes a week of moderate-intensity activities.
  - Cycling
  - Swimming
  - Dancing
  - Gardening

(Centers for Disease Control and Prevention, n.d.)

**Physical Activities for Healthy Aging**

- Adults 65+ need at least **75** minutes a week of vigorous-intensity activities.
  - Hiking
  - Jogging/Running
  - Cycling (faster pace)
  - Aerobic Classes
  - Tennis

(Centers for Disease Control and Prevention, n.d.)

Physical Activities for Healthy Aging

- It is recommended that adults 65+ engage in muscle-strengthening activities at least 2x a week
  - Resistance Training
  - Bodyweight Exercises
  - Yoga
  - Pilates
  - Water Aerobics

(Centers for Disease Control and Prevention, n.d.)

Physical Activities for Healthy Aging

- Balance
  - Heel-to-Toe walk
  - Tandem stance
  - One-leg stand
  - Balancing wand
  - Leg swings
  - Marching in place
  - Chair sit-to-stand
  - Clock reach
  - Side leg raises
  - Toe taps
  - Yoga tree pose
  - Weight shifts

(Centers for Disease Control and Prevention, n.d.)

Chair/Seated Exercises:  
Get your heart rate pumping!

Marches      Tap Dance  
Toe Taps      Jumping Jacks

Chair/Seated Exercises:  
Strength Training


Seated Leg Lifts      Chair Squats      Seated Row      Bicep Curls

Chair/Seated Exercises:  
Flexibility and Range of Motion



Neck Stretches      Shoulder Rolls      Wrist & Ankle Rotations


2. Occupational Engagement





 **What is Occupational Engagement?**  
**Meaningful Activities**


Occupational engagement is the active participation in activities that have personal meaning and purpose. These activities should contribute to a sense of fulfillment, satisfaction, and overall well-being.

  (Stav et al., 2012)



 **What is Occupational Engagement?**  
**Daily Living**

Occupational engagement can also be related to doing Activities of Daily Living (ADL) such as cooking, gardening, personal care, and household chores.

  (Stav et al., 2012)

 **What is Occupational Engagement?**  
**Leisure Activities & Interests**


Pursuing interests and hobbies that we enjoy, whether that's reading, cognitive puzzles, painting, playing music, or engaging in any other passion can contribute to a sense of a joy and satisfaction.

  (Stav et al., 2012)



 **What is Occupational Engagement?**  
**Social Participation**

Staying socially connected is the key! Engage in activities with friends, family, or community groups can decrease cognitive and physical decline and improve quality of life.

  (Stav et al., 2012)

 **What is Occupational Engagement?**  
**Work & Volunteerism**

Work or volunteering can extend to overall health and well-being, as well as improved mortality. This also lead to better mental health outcomes, and more positive life view.

  (Stav et al., 2012)

 **What is Occupational Engagement?**  
**Holistic Well-Being**

Occupational engagement encompasses physical, mental, social, and emotional dimensions. It's about nurturing a sense of purpose and maintaining a fulfilling lifestyle.

  (Stav et al., 2012)



**More occupational engaging activities**

- Walking the dog
- Dancing
- Swimming
- Playing a musical instrument
- Knitting
- Woodworking
- Fishing
- Yoga/Tai-chi
- Cooking
- Social sports

**3. Engagement & Dementia Care**

How do individuals living in the early stages of dementia participate in occupational engagement?

**Forms of Occupational Engagement: Cognitive Activities - Brain Games**

- Scrabble
- Mad Libs
- A to Z Word Associations

**Let's Try It! - A to Z Word Associations**

Category: Food

A	H	O	V
B	I	P	W
C	J	Q	X
D	K	R	Y
E	L	S	Z
F	M	T	
G	N	U	

**Forms of Occupational Engagement: Cognitive Activities - Bingo**

## Appendix G

### Example of Lecture Material from Week 3

# Communication Strategies & Dementia Care

Week 3, February 29th, 2024



## Agenda

- 01 Importance of Communication
- 02 Applying Communication Strategies

## How do we communicate?

<b>Verbal Communication</b> <ul style="list-style-type: none"><li>• Spoken words</li></ul>	<b>Nonverbal Communication</b> <ul style="list-style-type: none"><li>• Body language</li><li>• Gestures</li><li>• Environment</li><li>• Facial expressions</li></ul>
--	--

## Why do we communicate?

Communication gives us a sense of control in our world

- Express feelings
- Providing information
- Seek for help
- Seek information
- Share ideas



## Communication Needs for Individuals Living with Dementia

Needs are the same!

- Socialize
- Desire to express needs
- Continue life routines
- The want to feel included
- Desired to teach and learn
- Liked being asked for input

## How is Communication Different?

How is it different?

- Memory, attention, and concentration
- Perception
- Impaired language abilities
- Hearing
- Visual

### How Does Memory Affect Communication?

- Disoriented to time
- Forget people's names
- Lose ideas about what to say/talk about
- Repeat stories or questions
- Cannot retain information in conversation

### How does Language affect communication?

- Trouble finishing sentences
- Staying on topic
- Losing train of thought
- Word finding
- Word salad

### Types of Attention Affected In Early Dementia

#### Preserved

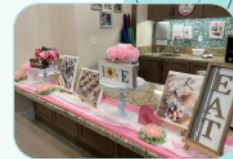
- Sustained

#### Affected

- Selective
- Divided
- Alternating attention

### How to Enhance Attention

- Limit the number of choices
- Environmental cues
- Task breakdown
- Have routines



### Nonverbal Communication: Body Language

- Eye contact
- Facial expressions
- Tone of voice
- Rate of speech
- Volume of speech
- Gestures

### Effective Communication

#### Things to consider...

- Find the right pace when you speak
- Invite and thank the person when participating
- Problem solve together

## Effective Communication

- Say their name first
- Get at eye-level
- Gestures
- Lower eye contact
- Smile

## Effective Communication

### Ways to Simplify Your Communication

- Ask one question at a time
- Provide choices
- Repeat
- Use cues if needed
- Ask yes/no questions

## Effective Communication

### Pay Attention

- Do not ignore rambling
- Do not argue or quiz
  - Instead, **VALIDATE!**

## Ineffective Communication

- "Do you remember when?"
- Speaking to someone behind them
- Speaking to someone across the room
- Speaking about others
- Sarcasm, eye-rolling

## Common Challenges



## What do we feel when we forget?



## Addressing Behavioral Challenges

- Provide reassurance
- Seek a calm or quiet environment
- Offer activities that give pleasure and confidence

## Repeating Questions

- Be patient
- Offer reassurance
- Help the person find the answer themselves

## Restlessness and fidgeting

- Make sure the person has plenty to eat and drink
- Daily routine
- Accompany them on walks or tasks

## Step into their Reality

- Center yourself
- Reminisce and show empathy
  - **ASK, ENCOURAGE, ACKNOWLEDGE**

Example: An individual living with dementia is wandering without understanding the potential risks.

ASK:  
ENCOURAGE:  
ACKNOWLEDGE:

## Scenarios

Let's go through some scenarios where you would use your communication strategies

## Scenario 1

Your friend living with dementia is becoming agitated and frustrated because they can't find their keys, even though they are in plain sight.

How would you **ask, encourage, and acknowledge?**

## Scenario 2

Your friend living with dementia is repeating the same question, not remembering the answer you gave a few minutes ago.

How would you **ask**, **encourage**, and **acknowledge**?

## Spaced Retrieval

- **Memory enhancement technique**
- Involves repeated the information and behavior over increasing intervals of time
- **GOAL:** To retain and recall information for adults with memory challenges

## Spaced Retrieval

Rooted in:

- **Classical conditioning:** forming an association between to stimuli
- **Spacing effect:** when information is retained more when learning is spaced out over time
- **Errorless learning:** teaches correct information without making you feel like you make mistakes
- **Priming:** activates particular representations in memory before carrying out a task – don't have to necessarily remember

## Spaced Retrieval: Directions

- Choose the specific information, task, or skills
- Assess the individual's baseline about the task, skill, or information
- Create clear instructions or prompts
- Start with short intervals (i.e., few seconds)
- Provide immediate feedback
- Gradually increase intervals
- Encourage independence
- Use visual aids if needed
- Positive reinforcement
- Space out sessions

What tasks, skills, or information might be improved with spaced retrieval?

- Recalling people's names and taking daily medication...

**Pick a skill, task, or piece of information. Practice spaced retrieval and share what you would do!**

**Are you ready for an origami exercise?**

**First, watch the video as is.**

**Then, follow my instructions as we follow along to the video.**



# **Communication Activities**

- Activities**
- |                               |                            |
|-------------------------------|----------------------------|
| <b>Exercise Routine</b>       | <b>Dressing</b>            |
| <b>Personal Care Routines</b> | <b>Building a Sandwich</b> |
| <b>Baking Cookies</b>         | <b>Puzzle Assembly</b>     |
| <b>Direction to Home</b>      | <b>Art</b>                 |

## Appendix H

### Example of Lecture Material from Week 4

### Building Empathy & Personal Experiences

WEEK 4  
March 7th, 2024



### Agenda

1. Overview of Empathy
2. Storytelling methods
3. Roleplaying
4. Empathy Mapping
5. Special Guests! - Conversational Card Game

### What is empathy?

Cognitive Empathy	Emotional Empathy
Ability to sense and understand the emotions of another	Being able to resonate or share the emotional state of another person

### Why is empathy important?

- Allows for free expression and communication
- Serves as a therapeutic tool (Sim et al., 2023)



### Challenges with Empathy

From the Caregiver Perspective:

- Empathy fatigue
  - Anxiety
  - Guilt
  - Depression (Jutten et al., 2019)

### Dementia From the Inside





## The Power of Storytelling


- Storytelling involves imagination, emotions, and narrative techniques
- Step into the emotions, challenges, and perspective that one with dementia might experience

### Creative Storytelling Guiding Questions



- "Close your eyes and imagine the forest. What sounds do you hear? Can you smell the fresh air or feel the cool breeze?"
- "Did you ever visit a forest or wooded area? What memories do you have from that experience? Can you describe the colors, sounds, or smells you remember?"
- "Imagine the forest in different seasons. How does it look during spring, summer, fall, or winter? What changes do you notice in the colors of the leaves or the activities of the animals?"

## Empathic Curiosity



**Key Elements:**

- Open-mindedness
- Active Listening
- Asking thoughtful questions
- Respective boundaries
- Learning attitude

## Activity: Role Playing

Let's use empathic curiosity in some everyday activities.

- Example 1: Putting on Clothes

One person will be the caretaker and the other will be roleplaying as an individual living with dementia.

### Scenario 1: Dressing & Grooming

The individual living with dementia is having difficulties with putting on a button down shirt and pants due to confusion about clothing items, fine motor skills, and forgetfulness about the order of how to dress.

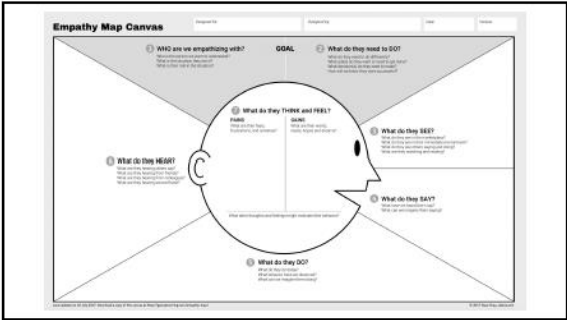
## Let's act it out!

**Scenario 2: Baking Cookies**

Setting: *In a cozy kitchen, the caregiver (C) is teaching the person living with dementia (D) how to bake cookies.*

**Act out this scenario and identify some challenges that D might have. Use empathic curiosity when addressing these challenges.**

# Empathy Mapping



# Conversational Cards

Get to know each other through conversations about travel, personality, careers, and more!

# Appendix I

## Example of Lecture Material from Week 5

### Planning the Environment & Ways to Provide Support

Week 5, March 21st 2024



### Agenda

- 01 Aging in Place
- 02 Environmental Design
- 03 Dementia-Friendly Communities

### 01 Aging in Place


The ability of individuals to remain in their own homes or communities as they age



**True or False: The diagnosis of dementia automatically results in being admitted into an assisted living facility.**

**If given the choice, 77% of adults over 50 would prefer to age in place.**

(AARP, 2021)



### Aging in Place: Benefits



- Maintaining autonomy & independence
- Familiarity and comfort
- Community connection
- Cost-effective

(Ratnayake et al., 2022)

### Aging in Place: Challenges

- Safety & accessibility concerns
- Lack of check ups
- Lack of transportation
- Social isolation, loneliness



### Strategies

#### Individual Level

- Become educated in the support systems you have
- Advocate for others

#### Community Level

- Addressing accessibility, mobility, supportive services
- Creating supportive, built environments

### Aging in Place Challenges for Cognitive Decline

- Memory decline
- Emotional challenges
- Social isolation
- Difficulty with mobility and physical tasks
- Activities of Daily Living/complex tasks
- Lack of educational resources

### Aging in Place with Dementia

**Although challenging, aging in place with dementia can be possible with the right support systems in place.**

- Being familiar with surroundings
- Feeling safe
- Opportunities to take care of oneself



## 02 Environmental Design

### Overview of Environmental Design Principles

#### The environment should...

- Create a familiar place
- Reduce risk
- Allow people to be seen
- Differentiate between helpful and unhelpful stimuli
- Be structured and stable
- Have environmental routines
- Promote recollection

**The built environment has significant impact on our independence and well-being.**



**Ability to engage in our ADLs and IADLs**

Well built environments can allow us to flourish, while poorly designed spaces can make us feel frustrated



**Can act as therapeutic role**

Sensory perceptions of space and place (bedroom, garden, etc.)



**Ways to Make Your Home Dementia-Friendly**

1. Better lighting
  - a. Open curtains in the home
  - b. Night light / sensor lights
2. Carpets/cushions absorb background noise
3. Safe flooring
  - a. Avoid rugs or mats
4. Contrasting colors
5. Remove mirrors

**Ways to Make Your Home Dementia-Friendly (continued)**

6. Labels and signs
  - Clear and straightforward
  - Have an appropriate picture
  - Slightly lower than normal
  - See through cupboards



**Ways to Make Your Home Dementia-Friendly (continued)**

7. Household items
  - Digital clocks
  - Reminder devices with audio prompt
  - Smooth edge tables

(NHS, 2022)

**Home Modifications**



**Grab Bars**



**Non-Slip Mats**



**Moving Items at Waist-Level**



**Sensor Night Light**



- Other Tips**
- Consider the layout of the home
  - Signage is secondary
  - Consider dividers
  - Declutter the environment

- Using the Environment to Engage in Meaningful Occupations**
- Bringing in objects like sand, seashells, or other items
  - Taking a short walk in a familiar location
  - Providing a change of scenery by taking the senior outdoors
  - Brushing their hair, trimming their nails, or going all out with a full spa treatment

**03**

**Dementia Friendly Communities**

**What is a dementia friendly community?**  
 A city, town, or village where people with dementia are understood, respected and supported.

**Dementia Friendly Environment Checklist**

(Alzheimer's Society, nd.)

**How to be dementia friendly:**

Things to consider:

1. What is the setting?
2. What are the types of behaviors you might encounter?
3. What are the possible causes of this behavior?
  - a. Cognitive?
  - b. Psychological?
  - c. Physical or Motor?
4. What are ways I can provide support?

	Behavior	Possible causes of the behavior (cognitive, psychological, physical?)	What are ways I can help?
<b>Setting:</b> Grocery Store - Checking Out	Misunderstanding the payment	Cognitive - impaired comprehension Physical - hearing impairment	Count money with the person; tell them or write down the correct amount
	Attempting to leave without paying	Cognitive - Impaired memory, attention deficit	Speak in a calm tone

	Behavior	Possible causes of the behavior (cognitive, psychological, physical?)	What are ways I can help?
<b>Setting:</b> Grocery Store - Leaving	Having trouble remembering the way home	Cognitive - topographical disorientation, impaired memory	Suggest the person to call their family to get picked up  Help the person recall the way home. If difficult, contact the police

## Appendix J

### Informed Consent



#### Department of Brain Health – Occupational Therapy

#### **Title of Study: UNDERSTANDING DEMENTIA THROUGH OCCUPATIONAL ENGAGEMENT**

Investigator(s): Samantha John, PhD; Cynthia Lee, OTD/S

For questions or concerns about the study, you may contact Dr. Samantha John at 702-895-4580. For questions regarding the rights of research subjects any complaints or comments regarding the manner in which the study is being conducted, contact the UNLV Office of Research Integrity – Human Subjects at 702-895-0020 or via email at IRB@unlv.edu.

*It is unknown as to the level of risk of transmission of COVID-19 if you decide to participate in this research study. The research activities will utilize accepted guidance standards for mitigating the risks of COVID-19 transmission: however, the chance of transmission cannot be eliminated.*

#### **Purpose of the Study**

You are invited to participate in two surveys. The purpose of these surveys is to see if the contents of the program played a role in increasing positive attitudes about Alzheimer’s Disease and Related Dementia (ADRD) and those living with ADRD.

#### **Participants**

You are being asked to participate in completing the surveys because of your willingness to participate in completing these surveys as part of the program.

#### **Procedures**

If you volunteer to participate in these surveys, you will be asked to do the following:

Complete the Dementia Attitudes Scale (DAS) before and after the program

The DAS is a questionnaire that you will be asked to complete as a part of the program. The DAS is a questionnaire that seeks to understand your thoughts and feelings about dementia. It consists of questions regarding your opinions and attitudes toward dementia. It is important to note that there are no right or wrong answers for any of these surveys. We kindly request that you provide your honest thoughts and feelings in your response

There are no right or wrong answers for any of these surveys. Please provide your honest thoughts and feelings.

At the end of the survey, the DAS will have a short section for demographic information. No identifiable information will be obtained. You are not required to complete this section if you choose not to.

Complete a feedback survey about the program itself at the end of the last session.



This is a 10-item short-answer questionnaire that will ask you about the contents of the program.

**Benefits of Participation**

There may not be direct benefits to you as a participant in these surveys. However, we hope that your participation may be a valuable learning experience for you.

**Risks of Participation**

There are risks involved in all research studies. Completing this survey may include only minimal risks. Surveys will be administered via hard copy forms in the course. Additionally, you may feel some discomfort answering the questions. However, surveys are anonymous and you are encouraged to be honest about your own feelings and experiences.

**Confidentiality**

All information gathered from this survey be kept as confidential as possible. All hard copy records will be stored in a locked filing cabinet within a locked room at UNLV.

**Voluntary Participation**

Your participation in this survey is voluntary. You may refuse to complete the surveys at any point of the program. You may withdraw at any time without prejudice to your relations with UNLV. You are encouraged to ask questions the program and surveys at the beginning or at any time during this program.

**Participant Consent**

I have read the above information and agree to participate in this program. I have been able to ask questions about the program. I am at least 18 years of age. A copy of this form has been given to me.

Signature of Participant:

Date:

Participant Name (Please Print):

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## Curriculum Vitae

Cynthia Lee

Email: cynthialeee0202@gmail.com

### Education

University of Nevada, Las Vegas May 2024

#### **Occupational Therapy Doctorate Program**

Capstone Title: *Understanding Dementia Through Occupational Engagement: A Dementia Awareness Program for Community Adults*

Faculty Mentor: Dr. Samantha John, Ph.D.

University of Nevada, Las Vegas May 2021

#### **Bachelor of Science in Kinesiology**

### Research Experience

**Graduate Research Assistant** 2022-2023

*Department of Nursing, University of Nevada, Las Vegas*

- Assisted nursing associate professor in conducting sports-related research
- Assisted in study protocol focusing on the relationship between mental health and body balance
- Conducted literature review related to saccadic eye movements among sports-concussion athletes
- Assisted in the preparation and submission of research findings for publication in peer-reviewed academic journals

### Teaching and Mentoring Experience

**Graduate Teaching Assistant** 2022

*Department of Online General Education, University of Nevada, Las Vegas*

- Developed a course inventory for DAN 101 online course
- Developed University Undergraduate Learning Outcome assessments
- Collaborated with the course instructor to develop engaging and informative course materials, including lecture notes, readings, and multimedia content
- Developed a comprehensive course syllabus, outlining course objectives, grading policies, and assignment schedules

### Related Experience

#### **Level 2 Fieldwork**

**Silver State Pediatrics** May 2023-August 2023

Setting: Pediatric Skilled Nursing Facility

- Applied developmental milestone knowledge into treatment plan

- Worked with clientele with rare medical conditions
- Collaborated with nursing, physical, & respiratory therapy

**Dignity Health, St. Rose Dominican Hospital** May 2022-August 2022

Setting: Acute Hospital (Medical-Surgical, ICU, Orthopedic)

- Conducted OT evaluation and treatment in medical-surgical, ICU, orthopedic, and emergency floors
- Developed clinical skill in conducting evaluation and treatment plans in acute setting

***Level 1 Fieldwork***

**The Garden Foundation** September 2023

Setting: Community Adults

**Silver State Pediatrics** February 2023

Setting: Pediatric Skilled Nursing Facility

**Cornerstone Christian Academy** October 2022

Setting: Pediatric Community

**Centennial Hills Hospital** March 2022

Setting: Acute

**Nevada Senior Services** November 2021

Setting: Adult Daycare

**Student Organization**

**Social Media Chair** 2022-2023

- Operated and maintained the organization’s social media presence across various platforms
- Boosted the organization’s digital footprint by expanding the follower base
- Fostered interactive relationships with related community accounts to enhance visibility and engagement
- Amplified the reach of student activities to the broader community through strategic social media campaigns

## **Student Organization**

### **Social Media Chair**

2022-2023

- Operated and maintained the organization's social media presence across various platforms
- Boosted the organization's digital footprint by expanding the follower base
- Fostered interactive relationships with related community accounts to enhance visibility and engagement
- Amplified the reach of student activities to the broader community through strategic social media campaigns

## **Services**

### **Dementia Friends Champion**

since August 2023

Raising awareness to change attitudes through Dementia Friends Session

## **References**

Available upon request.