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Exploring Occupational Therapy Student Ageist Perceptions Using Life Review: An Educational Intervention



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Abstract

Introduction: Addressing student ageism is essential for promoting a desire to work with older adults. Little is known about how life review intervention, used as an educational tool in occupational therapy (OT) programs, can affect ageism. In this study, the researcher aimed to explore the effect of life review on OT students' ageist perceptions and desires to work with older adults.

Methods: A qualitative focus group research approach was performed. Thirty entry-level OT students from a Texas university were used as a convenience sample. After participating in a four-hour workshop, students conducted a life review with older adult volunteers. A focus group was conducted two weeks after the intervention using a semi-structured interview guide with four open-ended and seven probing questions to elicit in-depth discussion of the life review experience.

Results: Four themes emerged related to the intervention: (1) *experience influenced attitude*, (2) *preconceived ideas changed*, (3) *finding similarities and commonalities*, and (4) *reflective insight*.

Discussion: The life review experience with older adults provided a preliminary examination of students' own ageist attitudes. The life review intervention enhanced students' desire to work with older adults after graduation. To impact ageism and desire to work with older adults, students should participate in life review intervention experiences during their education program.

Key Words: Ageism, Aged, Occupational Therapy, Occupational Therapy Students, Students, Life Review, Health Occupations

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Introduction

With the expansion of the older adult population, the need for occupational therapists is expected to rise (Forlenza & Bourassa, 2017; Knecht-Sabres et al., 2018; Rowe et al., 2020). Ageism might limit students' desire to enter a health care environment that already has a provider shortage (Nissen et al., 2022). Ageism is the systematic prejudice reflective of stereotyping and discrimination based on age (Butler, 1963). Researchers have indicated that ageism is reflected in individuals' behaviors as negative attitudes toward older people (Carlson et al., 2021; Jeffers et al., 2020). With increases in the older adult population and projected shortages of occupational therapists working with older adults, impactful health care education strategies and interventions targeting negative perceptions and decreased desires to work with older adults will become increasingly important (Chippendale, 2013). Intergenerational experiences early in the educational process have been found to promote positive attitudes toward older adults (Horowitz et al., 2014). With its intergenerational and interactive exchange, life review intervention is an educational intervention method to address ageism within the health care profession (Chippendale, 2013).

Targeted interventions, such as narratives about older adults' lives, have improved attitudes about aging (Whatley & Castel, 2020). Life review, sometimes noted in the health care literature as “reminiscing” or “storytelling,” is a therapeutic psychosocial intervention that will enable participants to reflect on memories, events, and experiences across the life span for therapeutic purposes (Wren, 2016). This therapeutic psychosocial intervention is a systematic and formal evaluation of past life starting at childhood

and extending to the present (Chippendale & Boltz, 2015). The process starts with a memory prompt, such as a picture from the 1930s or 1940s, to recall early memories and progresses through life to the most recent memories. Focusing on different life stages allows the life review participant to reflect on past events, situations, accomplishments, and regrets that might affect present-day quality of life and generalized well-being (Wren, 2016). These sessions can be one-to-one or in a group and allow older adults to talk about their lives across the life span. The literature points to the validity of life review as an evidence-based therapeutic psychosocial intervention used by many health care providers from various fields, such as occupational therapy (OT) and nursing (Chippendale & Boltz, 2015; Wren, 2016).

Listening to older adults' life stories can help students form different perspectives and highlight ageist perceptions (Bednarski, 2016). Instructors utilizing life review to improve knowledge of aging have mutually benefited older adults and students (Levy, 2018). Life review is a systematic, facilitator-led therapeutic psychosocial intervention to explore memories from the past and gain coping strategies for the present (Wren, 2016). Life review can change students' ageist attitudes by providing experiences of shared life stories within a social context (Chippendale, 2013; Shea et al., 2021). Using life review as an interactive educational tool within the OT curriculum offers students inclusive learning opportunities to understand older adults' challenges and develop new age-related views (Chippendale & Boltz, 2015; Leedahl et al., 2020). Although Kwan et al. (2019) pointed to the efficacy of life review as a psychosocial intervention, a gap exists utilizing the intervention within OT education.

Ageist perceptions, such as biases and misconceptions about older adults, are prevalent among occupational therapists (Friedman & VanPuymbrouck, 2021). Students entering OT health care programs often display ageist notions (Carlson et al., 2021; Friedman & VanPuymbrouck, 2021). Ageist perceptions can hinder OT students' desire to work with older adults upon graduation (Koehler et al., 2016). OT education programs must address ageism to combat ageism in practice. Life review allows students the ability to reflect on their attitudes toward older adults and how those negative attitudes can influence clinical care (Klein & Liu, 2010).

In 1969, Robert Butler, an American psychiatrist, created the term ageism to describe prejudices against older adults that have transcended across time and generations (Achenbaum, 2015). Butler defined ageism as systematic prejudice reflective of stereotyping and discrimination against older people due to their age. In Western cultures, ageism is embedded, more visible, and expressed as blatant negative attitudes toward older adults (Achenbaum, 2015; Dahlke et al., 2021; Heape et al., 2020; Marquet et al., 2019). The World Health Organization indicated that “ageism is influencing the health and well-being of older persons, even decreasing life spans, because it is insidiously integrated into cultures” (Dahlke et al., 2021, p. 2). Until the world changes its perspective on old age, older adults will continue to be marginalized in society (Achenbaum, 2015).

Butler's opinion of ageism was that ageist perceptions fuel animosity against old age and create negative attitudes toward older adults, producing a generational gap. Ageist prejudice can divide generations within society and isolate older adults from younger generations, leading to age-related barriers that may block the ability of age cohorts to

understand one another (Leedahl et al., 2020). Leedahl et al. (2020) stated that ageism begins at a young age and can be found in all levels of society. Ageism is perpetuated by pervasive negative stereotypes, such as the views that older adults are physically and mentally incompetent because of declining age.

Less than 5% of health care students across all disciplines pursue geriatric careers, a major challenge for growing the older adult care workforce (Rowe et al., 2020). Occupational therapists may have ageist ideas, such as the belief that most older adults have poor health, are confused, are less productive than their younger counterparts, and are unable to learn new things such as technology (Leedahl et al., 2020; Steward et al., 2020). These ageist ideas could affect geriatric clinical services by resulting in negative behaviors, such as avoidance, leading to poor care and a lack of interest in pursuing careers in aging (Dahlke et al., 2021; Forlenza & Bourassa, 2017; Horowitz et al., 2014; Knecht-Sabres et al., 2018; Leedahl et al., 2020; Rowe et al., 2020). Thus, low desire to work with older adults stems from ageism (Bednarski, 2016; Carlson et al., 2021; Koehler et al., 2016; Rowe et al., 2020), and ageism can lead OT students to be disinterested in working with older adults (Leedahl et al., 2020).

Although research has underscored the importance of providing geriatric educational experiences with older adults to optimize psychosocial practice skills, none included life review intervention as an educational tool during entry-level OT education. However, the researcher identified a gap in the literature related to OT education involving students' ageism and desires to work with older adults. Given the relevance of ageism in clinical practice, OT curricula must consist of educational tools, such as life review

interventions, to allow students to explore their perceptions of older adults. Including life review intervention in the OT geriatric education can assist students in developing skills, attitudes, and perceptions related to older adults that may influence their desire to work with older adults in the future. This study aimed to explore the effect a life review intervention experience on students' ageist perceptions and desire to work with older adults after graduation. The researcher investigated the qualitative research question: "How does life review with older adults affect OT students' desires to work with older adults?"

Much research on the conceptual aspect of health care students' ageist attitudes during program education exists (Carlson et al., 2021; Crandlemire, 2020; Dahlke et al., 2021; Friedman & VanPuymbrouck, 2021; Martinez-Arnau et al., 2022). The concept that ageism affects students' behaviors during interactions with older adults is prevalent (Calma et al., 2019). However, few current studies (2017-2022) involve ageism and OT students' older adult education (Friedman & VanPuymbrouck, 2021; Knecht-Sabres et al., 2018). To this end, this research seeks to close the gap in the OT literature involving a life review intervention experience during OT education to examine its effect on OT students' ageist perceptions of older adults and how that perception might influence desires to work with older adults after graduation.

Theoretical Framework

According to Bandura (1989), social cognitive theory (SCT) is rooted in social learning theory and posits that learning occurs within social contexts. SCT is an introspective of interactions between a person, the environment, and behaviors (Shamizadeh et al., 2019) and is suitable for

understanding the constructs of ageism and students' ageist perceptions. The main ideas of SCT are self-efficacy, observational learning, and outcome expectancy. Before an individual is led to change attitudes or beliefs, such as negative perceptions, they need to consider their behavior and how that behavior reflects self-value and abilities. Modeling self-efficacy, whether from self or others, leads to motivation for obtaining positive outcomes through interactions and engagement within learning environments (Shamizadeh et al., 2019). The reciprocal interaction between a person, their behavior, and the environment within social contexts creates learning (Bandura, 1989; Schunk & DiBenedetto, 2020). The need for humans to control their thoughts and situations is reflective of human cognitive processes and can affect change within them (Bandura, 1989). These cognitive processes influence personal and psychosocial factors, such as beliefs and motives, to determine variables like skills training, observed behaviors, expected social support, and perceived barriers (Otake-Ebede et al., 2020). Based on the SCT tenets, this study examined the effectiveness of a life review intervention experience on OT students' ageist perceptions and the students' desires to work with older adults post-graduation.

Literature Review

Current literature details concerns about the limitations of health sciences programs regarding ageism and the absence of addressing ageism in OT education (Calma et al., 2019; Crandlemire, 2020; Knecht-Sabres et al., 2018). OT programs should provide students with opportunities to examine and address ageist perceptions (Klein & Lui, 2010). Factors influencing students' desires to work with older adults are "limited gerontology education, interactive experiences with healthy older adults, and

negative perceptions" (Horowitz et al., 2014, p. 138). Research is needed to understand how to influence students' ageist beliefs and learn which educational strategies might generate a desire to work in geriatrics post-graduation (Nissen et al., 2022). Life review strategies have been used to help students gain insight about older adults and create student interest in working with older adults (Sellers, 2019).

Ageism Effects on Older Adults

Ageism has a negative effect on the older adult population, degrades the value of older adults, and is associated with poor health, functional decline, and frailty (Toygar & Kardakovan, 2020). The WHO (2021) stated that ageism is prevalent in society, permeates into health care institutions, and has serious health consequences for older adults, such as social isolation and loneliness, which often lead to decreased quality of life and even premature death. One stereotypical attitude toward older adults is that they are no longer a productive part of society, relinquishing the responsibility of the older adults' care on the shoulders of younger workers (Toygar & Kardakovan, 2020). Coupled with the fact that older adults tend to have increased health issues, a common negative attitude is considering older adults a dependent population and societal burden (Toygar & Kardakovan, 2020).

Ageism, a systemic and societal acceptance of stereotypical ideas of growing old, is associated with increased illness, isolation, poverty, and depression among older adults (Dahlke et al., 2021). This negative thinking toward older adults is discrimination and infiltrates the health care system (Dahlke et al., 2021). Dahlke et al. (2021) stated that ageism negatively affects older adults' psychological health, such as self-esteem, and impacts both physical and cognitive

health. Dahlke et al. also pointed out that the negative effect of ageism comes at a high cost to the U.S. health care system, with an estimated annual cost of \$63 billion in ageism-related illnesses, including depression. Ageism leads to poor care of older adults in the nursing field as many nurses see working in geriatrics as a less than desirable area of practice. Since ageist attitudes are pervasive in society, it is important to challenge the negative perceptions of older adults by developing anti-ageist strategies (Dahlke et al., 2021).

Discrimination is thoughts, attitudes, and behaviors that reduce or prevent the rights and freedoms of others, and ageism is one form of discrimination against the elderly (Oral et al., 2021). These discriminations can make life difficult and limited for older adults. Like Toygar and Kardakovan (2020), Oral et al. (2021) performed a study with participants from a university of medicine and involved first- and fourth-year students. The researchers compared attitudes toward aging among these students to determine if education level would make a difference in ageist beliefs. They found that the fourth-year students' attitudes toward aging were more positive than the first-year students. The results indicated that the longer a student was in the program and experienced frequent learning opportunities that involved interaction with older adults, the more positive they were toward elders. Thus, it would be beneficial to add instruction to the health care curriculum related to aging, service to older adults, and ageism to improve students' attitudes early in educational programs (Oral et al., 2021).

Ageism in Health Care

Research should focus on ageist attitudes to prepare for the future needs of the health care workforce. Changing the attitudes of health

care professionals and their students can reduce negative behaviors related to ageism (Kalu et al., 2018). Kalu et al. (2018) stated that increasing students' likelihood of working with older adults is a form of behavior change. Current literature focuses on educational aspects of changing older adults' attitudes toward aging and neglects investigation into students' ageist perceptions and how those attitudes might impact students' choices to work with older adults (Kalu et al., 2018).

Ageism can be a barrier and limit OT students' desire to work with older adults (Carlson et al., 2021). Carlson et al. (2021) defined ageism as stereotypes, attitudes, and discrimination against older adults reflected in individuals' behaviors that threaten self-efficacy. They stated that society places less value on older adults as current views represent negative thoughts about sharing resources. Since many older adults are not employed and require financial assistance, this economic disruption is believed to burden the rest of society. These thoughts and views have increased the social acceptance of ageist beliefs and prejudices and have permeated health care organizations (Carlson et al., 2021; Dahlke et al., 2021).

Ageism is prevalent in health care and extends into all aspects of older adult care (Dahlke & Hunter, 2021). Dahlke and Hunter (2021) stated that because older adults are the largest consumers of health care and nursing is the largest provider of health care services, it is safe to assume that nurses will encounter older adult patients at some point in their careers. Nurses can hold negative perceptions of older adults, including beliefs that there is a link between old age and physical and mental deterioration, which leads to dependency. These negative nursing perceptions are often followed by views that older adults have a lesser value in society and

that caring for older adults provides a “low occupational status” and “that working with older persons is simple and undesirable” (Dahlke & Hunter, 2021, p. 3). Often, these negative stereotypical views of older adults spill over into the nursing curriculum when practicing nurses model these behaviors. One answer to changing nursing views and desires to work with older adults is acknowledging ageism and exposing students to older adults through learning strategies that include conversations with older adults about their life stories (Dahlke & Hunter, 2021).

Negative attitudes toward older age are a common pattern throughout society and remain deeply rooted in negative attitudes that can greatly affect future health care problems (Achenbaum, 2015). Achenbaum (2015) suggested that combating ageism among health care professionals should be prioritized, including geriatric training to treat older adult patients with dignity and compassion. Negative perceptions of older adults can be noted in behaviors such as reduced contact. Even though ageism has been studied in health care research for years, ageist ideas continue to separate young adults from older adults (Achenbaum, 2015). Research should target, define, and measure ageism to mitigate this gap in literature. Reducing ageism amongst the next generation of clinicians is needed to improve older adults' treatment and reduce negative feelings and thoughts among health care professionals (Leedahl et al., 2020).

Strategies to Reduce Ageism

Since there is a strong link between ageism and negative perceptions of older adults (Burnes et al., 2019), researchers should focus on ways to reduce ageist perceptions. Various strategies have been utilized to address ageist perceptions against older adults. These strategies include exposure and

direct contact, understanding aging and issues over the life span, and the role knowledge and education can play in reducing negative stereotypes and biases. As the older adult population increases, it will become more relevant to provide strategies that help to eliminate ageism to help ensure that the older adult population can receive non-biased care.

Exposure to Older Adults

Exposure to older adults can provide opportunities for engagement, allowing for subjective and objective experiences (AOTA, 2020). These experiences can highlight the qualities of an occupational therapist and point to the “professional behaviors and disposition” (AOTA, 2020, p. 6) cornerstone embedded in OT practice. Ageist beliefs impact thinking and expectations but can be changed through evidence-based approaches that require positive interaction and allow self-reflection (Clemson, 2022). Exposure to older adults can help students realize their biases, understand the results of ageist attitudes, and be less likely to avoid working with older adults (Steward et al., 2020).

A major challenge in health care programs is determining how entry-level curricula can be enhanced to expose students to positive learning experiences with older adults (Blackwood & Sweet, 2017). Approaches should include interactions to reduce ageism, and exposure to older adults is key to shifting attitudes toward aging from negative to positive (Garrison-Diehn et al., 2022). Direct face-to-face experiences and in-person contact with older adults can help students develop attitudes for effectively working with older adults (Garrison-Diehn et al., 2022). Heape et al. (2020) studied ageism bias among demographic groups of 80 speech-language pathology students. The researchers used the Fraboni scale of ageism

to measure ageism, where lower scores meant a decrease in ageist attitudes. Students' levels of ageist attitudes were examined to determine any significant differences between group variables, including gender, ethnicity, age, and experience with older adults. The variable with the lowest ageist score were those students with previous exposure to older adults, including formerly volunteering and working with older adults in a way that allowed a greater understanding of the older adults' past lives (Heape et al., 2020).

Many researchers have suggested one reason for not wanting to work with older adults in the future is previous negative experiences with older adults (Forlenza & Bourassa, 2017). In a study by Forlenza and Bourassa (2017), four student participants were paired with an older adult during a 6-month walking program in which the students had direct contact with an older adult client. After completing the walking program, the researchers conducted three focus group interviews with the participants. The interviews focused on discussions surrounding past exposure to older adults, the students' feelings about being a part of the study, and the students' thoughts about the older adults before and after the study. Initially, students had ageist beliefs that influenced their attitudes. These attitudes were thematically associated with preconceived ageist ideas and general societal stereotypes of older adults. After the walking program, students indicated that working one-on-one with the older adults was critical in eliminating their stereotypical attitudes about older adults (Forlenza & Bourassa, 2017). Intergenerational interventions are strategies that can reduce ageism and element age barriers between generations that cause age-based discrimination (NCALL Staff, 2021).

Intergenerational contact can be a positive strategy for reducing ageism (Levy, 2018). Yet research on the impact of intergenerational engagement on students' ageist perceptions is lacking (Steward et al., 2020). Steward et al. (2020) explored the differences in students' ageist attitudes before and after engagement in an intergenerational learning experience with older adults. After the experience, students' ageist attitudes had significantly decreased. Steward et al. advocated for greater attention to positive learning experiences between students and older adults to support best practices that reduce negative perceptions of older adults.

Van den Berg et al. (2019) explored a "living lab" in which students and older adults "co-created" (p. 4) an educational experience aimed at capturing older adults' life stories and the students' experiences during the lab. The researchers wanted to understand the value of a partnership within an educational context during the collaborative experience. Included in this study were six undergraduate health sciences students and six older adult participants. The themes which emerged from this qualitative study were working together, our learning experiences, and our best experience. Van den Berg et al. explored collaborative interaction between students and older adults with the enabler of the process being education focused on the everyday lives of older adults. They concluded that "taking the time and effort to invest in the relationship" (Van den Berg et al., 2019, p. 11) made an impact on ageism due to positive example, skills, and expertise that the older adults added to the experience.

Both attitudes and perceptions are influenced by personal and work constructs, exposure, and observed behaviors that represent a level of understanding of aging (Ridgway et al., 2018). For example, one study explored

undergraduate nursing students' understanding of older adults after an interactive experience represented by students' visual drawings of older adults (Ridgway et al., 2018). Ridgway et al. (2018) had students draw a picture of a 75-year-old person during fieldwork with older adults. The drawings were categorized as either positive, neutral, or negative to offer a connection to the students' perceptions of older adults. Positive drawings increased as time in fieldwork increased and was 57% at the end of fieldwork. Thus, older adult contact is believed to play a vital part in challenging negative beliefs and stereotypes and be crucial in improving students' ageist attitudes. Direct contact with older adults should be promoted as a strategy to increase positive attitudes and eliminate ageist stereotypes (Liou & Cremeans-Smith, 2022). Strategies that foster intergenerational contact and education about older life stage issues and negative beliefs about the aging process work best to reduce ageism (Kelley, 2019).

Strategies that have been utilized to address students' ageist perceptions against older adults include exposure and direct contact and using education to reduce negative stereotypes and biases (Levy, 2018; Steward et al., 2020). Exposure to older adults can provide subjective and objective experiences (AOTA, 2020), helping students to realize biases, understand the results of ageism, and be less likely to avoid working with older adults (Steward et al., 2020). Often, ageism continues to exist, including among students in health care education, because of generational age gaps (Cheung et al., 2023). Intergenerational contact can be a positive strategy for reducing ageism (Levy, 2018). However, research on the impact of intergenerational engagement on students' ageist perceptions is lacking within OT programs (Steward et al., 2020).

Education about aging and older adulthood is key to reducing ageism (Levy, 2018) and may help students gain insight into their own ageist attitudes (Alden & Toth-Cohen, 2015). However, courses on aging where students interact with older adults are rare early in educational programs (Levy, 2019; Rowe et al., 2020; Whatley & Castel, 2020). According to Friedman and VanPuymbrouck (2021), OT program instructors should recognize ageist biases and how such biases might be formed and reinforced during the educational process. One way to reduce students' negative perceptions of older adults is to provide educational strategies focused on positive aging (Alden & Toth-Cohen, 2015; Koehler et al., 2016; Levy, 2018). A curriculum that includes knowledge about ageism gleaned from interactive opportunities with older adults encourages positive attitudes (Rowe et al., 2020).

Methods and Procedures

Qualitative methodology with a focus group design was used to provide an in-depth exploration of the life review experience for the OT students. The study was implemented across five weeks to assess the participants' perceptions of older adults and how those perceptions might have changed after the facilitation of a life review psychosocial intervention experience. The researcher met with potential student participants enrolled in an OT program at a Texas university twice within the Fall 2022 semester. The professional relationship between the researcher and the participants was that of guest lecturer and student. However, ethical considerations were addressed.

Ethical Assurances

The researcher implemented the study and proceeded with recruitment and data collection upon approval from the university

institutional review board. The researcher conducted the life review psychosocial intervention workshop on campus during a regularly scheduled lab for the course Clinical Applications in Geriatrics, which was part of the curricular design. To address ethical concerns regarding professional relationships, the researcher and the OT students in the lab were not familiar with each other and had never met. This aspect lessened bias for or against the participants or the researcher. The researcher and the lead instructor of the course assured students that participation in the study was voluntary, not mandatory for the course, and was not part of the students' grades.

All students enrolled in the course lab participated in the life review psychosocial intervention workshop and the life review psychosocial intervention experience with the older adult volunteers. However, only those students who agreed to participate in the study signed an informed consent form and participated in the post-intervention focus group interview.

To protect confidentiality and anonymity, after the recruitment discussion with all students at the start of the course lab, the researcher distributed a blank printed copy of the informed consent, and a "Joy of Aging" word search activity to all students. Students were asked to complete the informed consent form only if they wanted to volunteer to participate in the study. Those students who did not want to participate should complete the word search activity. Thus, all students received both documents, and no one was aware of who signed the consent or completed the word search activity. Further, during the focus group, the researcher did not record participants' names or any information that indicated participants' identity, in conjunction with protecting data integrity and confidentiality.

Population

Entry-level OT students from a university in Texas were used as a convenience sample of the target population of OT students in Texas. There were 30 students invited to participate in this study. For inclusion criteria to participate, the sample population was: (a) first- or second-year entry-level OT students, (b) enrolled in a Clinical Applications in Geriatrics course, (c) enrolled in the course during the Fall 2022 academic year, (d) able to communicate with older adults, and (e) English speaking. Exclusion criteria included: (a) students who would graduate prior to the end of the study, (b) participants who were familiar with the older adult volunteers, and (c) participants who did not have access to a phone, Internet, tablet, or computer to conduct the life review psychosocial intervention through video conferencing with an older adult. To recruit participants, the researcher developed an informative flyer regarding the study that was emailed to the lead instructor of the geriatric course prior to the Fall 2022 term. The lead instructor placed the flyer on the course home page in the learning management system and sent the flyer to students via an online course announcement the week prior to the term start and once the students received access to the online portion of the course. Additionally, the first 30 minutes of the 4-hour course lab, which included the life review psychosocial intervention workshop, was devoted to discussing the specific aspects of the study and answering any questions the students might have regarding participation in the study. As a result of these recruitment strategies, students were asked to participate in the study and provide consent before the life review psychosocial intervention workshop began.

Weeks 1 and 2

In Week 1, the recruitment of participants was initiated. The researcher distributed an informative flyer regarding the research study details (title, purpose, and so on) to the entry-level OT students enrolled in the Clinical Applications in Geriatrics course in the Fall 2022 term. This flyer was emailed to the lead instructor of the course prior to the start of the term. The lead instructor posted the flyer on the course home page in the learning management system and the flyer was sent as an online course announcement for students to view the week before the first on-campus course lab. The researcher's name, phone number, and email address were listed on the flyer, and students were invited to contact the researcher with any questions regarding the study.

During Week 2, the researcher met with the OT students on campus for the first time. This meeting was conducted during a 4-hour lab, which was part of the geriatric curriculum course practice. The Clinical Applications in Geriatrics course lab content focused on life review psychosocial intervention activities. First, at the beginning of the lab the researcher explained the specifics of the study to all students and asked for informed consent from volunteers who agreed to participate in the study. Secondly, the researcher conducted a life review psychosocial intervention workshop with all students. At the end of the workshop, the contact information of older adult volunteers was distributed to all students.

The researcher spent 30 minutes informing students about the study, including purpose and problem to be addressed, significance to the field of OT, research question, and participant time commitment. During the study recruitment discussion, students were informed that the study was voluntary and

that they could choose to drop out of the study at any time without penalty. After the discussion, the researcher distributed the informed consent form, and a word search activity to all students to protect participant confidentiality and anonymity. Only students who volunteered to participate in the study read and signed the informed consent. All other students present in the lab who did not agree to participate in the study completed the “Joy of Aging” word search activity.

Participants were given approximately 15 minutes to read the informed consent form thoroughly and ask questions regarding the study. Once the study participants completed the consent forms, the researcher conducted a life review educational workshop for four hours as part of the geriatric course lab. All students present in the course lab participated in the life review psychosocial intervention workshop. The researcher led the workshop during the curricular units on psychosocial and social engagement issues related to older adults, which aligned well with the life review psychosocial intervention workshop content.

The life review psychosocial intervention workshop included educational materials on how to facilitate a life review with older adults, and the researcher demonstrated a life review session with an adult volunteer. Students were given a packet that included a life review protocol and memory prompts (Wren, 2016) for use during the life review psychosocial intervention with the older adults. After the workshop, all students were randomly paired with an older adult volunteer and provided the information to contact the older adult to set up a one-hour life review psychosocial intervention session during Weeks 3 and 4 of the study.

Weeks 3 and 4

In Weeks 3 and 4 of the study procedures, all students in the Clinical Applications in Geriatrics course were allotted two weeks to schedule and facilitate a one-hour face-to-face life review psychosocial intervention session with the older adult volunteers. Students’ objectives for the life review psychosocial intervention video conference session with the older adults were as follows: (a) complete the session within a one-hour time frame, (b) facilitate the session using the life review protocol for guidance, and (c) listen to the older adult’s life story to gain an understanding of aging and the older adults’ perspectives (Raudonis et al., 2012). Students were instructed to contact the older adult through email or phone and facilitate the life review session through the Internet via a video conference platform. The students were instructed to schedule the life review psychosocial intervention session during a mutually agreed upon date and time within Weeks 3 and 4. Students were instructed to ask for verbal permission to facilitate the session before starting the life review psychosocial intervention with the older adults. The students were instructed to not facilitate the session if any older adult does not give permission. Students used the life review protocol and memory prompts (Wren, 2016) they received in the educational packet during the workshop. The life review psychosocial intervention protocol contained probing questions to elicit memories from the older adult’s life span (Wren, 2016). Students were instructed not to take any notes during the session but to rely on listening, communication, observation, and other skills necessary to facilitate the life review session to allow the students to focus on the interactive experience and encourage active listening (Jeffers et al., 2020).

Week 5

In Week 5, after students had completed the life review psychosocial intervention session with the older adults, the researcher met for the second time with study participants for approximately 1.5 hours for post-intervention data collection. The meeting occurred on campus in a private room prescheduled by the researcher in collaboration with the lead instructor. The researcher collected qualitative data during a post-intervention focus group interview with study participants, which was planned to last one hour or until the conversation faded.

Life Review Psychosocial Intervention Workshop

The life review psychosocial intervention workshop was conducted in Week 2 of the study. The workshop consisted of materials related to a developed life review psychosocial intervention protocol conducted with older adults at a skilled nursing facility (Wren, 2016). The researcher presented the materials from a presentation titled “Life Review: An Occupational Therapy Intervention,” which included the following learning objectives: (a) identify and define life review, (b) discuss the use of life review as an effective evidence-based OT intervention, and (c) implement an appropriate life review intervention protocol with an older adult (Wren, 2016). At the end of the presentation, participants engaged in a learning activity that included a case example. Participants were asked to problem solve the case for its application to life review psychosocial intervention to further the understanding of the intervention and structured protocol. After the presentation, the researcher conducted a short (approximately 30 minutes) life review session with an adult guest to demonstrate the

life review psychosocial intervention protocol process.

After completing the life review psychosocial intervention workshop, participants were given a packet containing the life review protocol developed by the researcher (Wren, 2016). This structured protocol contains probing open-ended questions that focus on life stages (including childhood, adolescence, and young adulthood), family and home, memory through song, and general to present day. The packet also included memory prompt pictures such as actors (Judy Garland, James Dean), antique toys such as bicycles and spinning tops, and the lyrics to the song “You Are My Sunshine.” These memory prompts were helpful to start the conversation between the participant and the older adult volunteer (Wren, 2016).

All students in the Clinical Applications in Geriatrics course lab received the life review psychosocial intervention educational packet at the end of the workshop and were paired with an older adult volunteer and given the older adults’ contact information. Any participants who were familiar with the older adult volunteers would have been excluded from the study, but there were none reported. During the workshop, all students were educated on how to gain permission from the older adult before starting the life review psychosocial intervention and students were instructed to end the session if permission is not verbally received.

Intervention

Using a predeveloped life review psychosocial intervention protocol for older adults (Wren, 2016), participants facilitated a life review psychosocial intervention session for one hour virtually using a video conferencing platform. Using video conferencing to facilitate the life review

added a face-to-face component to enhance the experience of visual connectedness. The face-to-face interactions were meant to enhance the experience and provide students with a sense of social connectedness, shared interests, and emotions with the older adult (Chippendale & Boltz, 2015; Shea et al., 2021). The life review psychosocial intervention sessions were facilitated over two weeks, allowing appropriate time for participants' and older adults' schedules. All participants were expected to facilitate and complete the life review psychosocial intervention experience with the older adult volunteers.

The life review psychosocial intervention protocol included topics across the life span and memory prompts and questions related to various stages of life during the 1940s, 1950s, 1960s, and beyond (Wren, 2016). Topics progressed through the life span including childhood, adolescence, family and home, adulthood, remembering the past through song, and a summary of life stages. Memory prompts included pictures from the past, such as antique toys, actors, songs, and games. Questions such as "What is your first memory?" "What was it like for you as a child?" and "What were you like as a teenager?" were used to start the conversation and switch from one life stage to the next. This protocol provided participants with a guide to give organization and structure to the process and to assist the older adults with a recall of the past (Wren, 2016). The protocol also assisted participants with an interactive exchange during the guided life review discussion with the older adults (Chippendale & Boltz, 2015).

Operational Definition of the Intervention

The independent variable was the life review psychosocial intervention the OT students facilitated with the older adult volunteers.

This interactive educational experience with older adults was conducted during the students' fourth semester of an entry-level OT program. This educational life review experience took place before level two fieldwork clinical rotations, where students get daily patient interaction. This variable had two conditions, including (a) attendance of the life review psychosocial intervention educational workshop and (b) completion of the life review psychosocial intervention experience with the older adult volunteer.

Data Collection

The primary source of qualitative data came from students' experiences with older adults using a life review psychosocial intervention. OT students were paired with one older adult to facilitate a one-hour life review psychosocial intervention session. After the life review experience, the researcher conducted a one-hour focus group interview with participants. Participants were asked to provide feedback on their overall interactive experiences facilitating the life review psychosocial intervention with the older adult volunteers to answer the qualitative research questions.

Four semi-structured, open-ended questions along with seven additional follow-up probing questions were used to prompt student insight and understand the most important aspects of the life review experience relevant to the qualitative research questions. The researcher audio recorded the focus group interview for the accuracy of oral comments and answers to the interview questions. Additionally, the researcher took handwritten field notes during the focus group, which were compared to the transcribed audio recorded information. The researcher chose to collect field notes to "track the key messages during

the discussion” and to add “depth to the interview data” (Snyder, 2018, p. 5).

Data Analysis

With the qualitative data analysis, the researcher aimed to understand the participants’ most important aspects of the life review psychosocial intervention experience. Dedoose qualitative data analysis web-based 2.0 software application was used to organize data and support coding. The researcher collected data by audio recording the in-person 1-hour focus group interview, which was transcribed within 48 hours of the interview session. The transcription was systematically compared to the field notes for accuracy of the content, and these data were compiled as one data set. The entire qualitative data set was analyzed concurrently through a systematic and thematic process, including getting familiar with the data, generating codes, searching for themes, and reviewing and naming the themes (Braun & Clarke, 2006). The researcher conducted a rigorous thematic analysis approach to establish a clear rationale for coding the transcribed data (audio recording and field notes from the focus group interview) (Nowell, 2017). Thematic coding was used for qualitative analysis by identifying passages of text linked by common ideas and indexed categories (Gibbs, 2011).

Prior to uploading the transcribed data to Dedoose, the researcher performed several steps. First, the researcher listened to the audiotaped interview while cross-checking it with the field notes and the transcript to check the accuracy of the transcription. The field notes contained concrete keywords as descriptors of what the participants had experienced during the life review session with the older adult volunteers (Marshall & Rossman, 2016). Secondly, the researcher

became familiar with the data by reading the transcripts multiple times and looking for reoccurring words and phrases before further analysis. Thirdly, the transcripts were uploaded to Dedoose and broken down into 19 codes; participants’ statements were assigned to corresponding codes based on words and phrases. An external reviewer was used to scrutinize the data and relevant coding process of the transcribed data in Dedoose. Thus, a code-recode procedure was applied to the data analysis process over a period of time. Finally, four themes were identified representing the most significant aspects of the participants’ life review psychosocial intervention experience with the older adult volunteers.

Overall Trustworthiness

To enhance credibility of the results, the researcher utilized a colleague, who is an expert in qualitative research, to assist in data analysis as a peer reviewer. The peer reviewer examined the coding for participants’ statements from the interview and all combined transcript data. To further enhance trustworthiness, the reviewer offered peer discussion with the researcher and external checking of the coding procedure to prevent bias that may have occurred from having only “one person’s perspective” (Connelly, 2016, p. 435). The peer debriefing strategy was significant in establishing credibility regarding the qualitative data results, including generated themes and capitalizing on the multi-analysis process while minimizing issues such as thematic variability and interpretations (Richards & Hemphill, 2017). During the peer discussion, the external reviewer confirmed the generated codes and themes. The reviewer added a value of external inspection of the process to verify that the collected data were analyzed in an appropriate manner, coding of participant statements was reliable, and that a

reasonable thematic conclusion was drawn. Further, an audit trail (see Appendix) of the coding process was kept providing guidelines and a checklist to enhance trustworthiness and represent a picture of the data analysis process (Snyder, 2018).

Results

The focus group data analysis revealed four themes: *experience influenced attitude, preconceived ideas changed, finding similarities and commonalities, and reflective insight*. Figure 1 depicts the four themes. Table 1 depicts an overview of the themes and sample quotes.

Figure 1
Focus Group Interview Themes

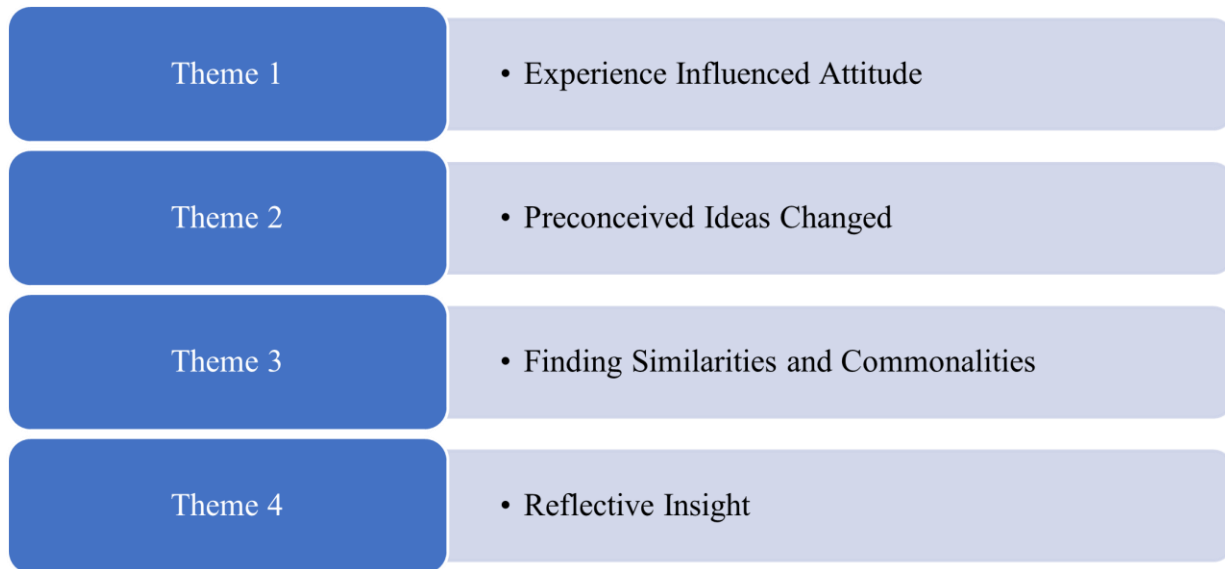


Table 1
Overview of Themes and Sample Quotes

Theme	Sample quote
Experience Influenced Attitude	<p><i>“The experience triggered positive memories about my grandparents who were a big part of my life. I sympathized with her and my feelings about wanting to help older adults grew.”</i></p> <p><i>“Divorce was talked about a lot, and I could relate because I have experienced that in my life. We had a lot to talk about and it made me know that I could interact with older patients.”</i></p> <p><i>“Before this experience, I felt as though I could not help older patients and could not see myself working with them after I graduate. But my opinion has changed because I realize they are willing to learn new things. I can help them.”</i></p>

Preconceived Ideas Changed	<p><i>"I had preconceived ideas of what they're going to be like but quickly realized they're more relatable than I thought."</i></p> <p><i>"I thought working with older adults is hard because they are not competent, but now, I know they can do lots of things, and many are still working. So, working with them would be easier than I thought."</i></p> <p><i>"I had a preconceived idea of what they were like, but I was wrong. I feel they are less intimidating now."</i></p>
Finding Similarities and Commonalities	<p><i>"I thought my life was very different, but I found it very similar."</i></p> <p><i>"My older adult had common things with my past, which helped us bond."</i></p> <p><i>"[It's] funny how similar experiences bring you closer."</i></p> <p><i>"This is...kind of like talking to my dad. It was very cool to see someone else's perspective from my dad's era. I am thankful for the opportunity to listen to his life story."</i></p>
Reflective Insight	<p><i>"This experience is what it will be like in level 2 fieldwork with older adults. This is a more real-life world experience."</i></p> <p><i>"I have never interacted with a real old person. This experience changed my perspective about the possibilities of working with older adults."</i></p> <p><i>"This experience showed me how powerful reflection is. We connected, so I want to work with them now."</i></p> <p><i>"In hindsight, going into it, I thought I wanted to work with children, but this experience made me think about the possibility of working with older adults."</i></p> <p><i>"Listening to his life story helped me to see older adults differently in a good way. I think I would enjoy working with them."</i></p>

Theme 1: Experience Influenced Attitude

Students acknowledged that the life review intervention experience reminded them of past relationships and elicited positive and negative emotions. They reported that the conversations with the older adults influenced their perceptions and changed their attitudes about being old. The following quotations from participants are examples.

- "The experience triggered positive memories about my grandparents who were a big part of my life. I sympathized with her and my feelings

about wanting to help older adults grow."

- "Because the older adult felt comfortable talking about his challenges in life, it helped me to understand the difficulties he faced. I felt a sense of connectedness."
- "The conversation was uncomfortable at times based on the topic of the story that was being told. But it allowed me to understand hardships and really changed my mind about older adults."
- "Divorce was talked about a lot, and I could relate because I have

experienced that in my life. We had a lot to talk about and it made me know that I could interact with older patients."

- "Before this experience, I felt as though I could not help older patients and could not see myself working with them after I graduate. But my opinion has changed because I realize they are willing to learn new things. I can help them."

Theme 2: Preconceived Ideas Changed

Students were surprised to learn that many older adults are healthy, vibrant, and active. Many students reported that the life review experience dismissed preconceived thoughts about aging; they described the older adults from a positive viewpoint. Some students shared their initial thoughts about older adults: "too old, hardheaded, mean, they don't know very much" and "they are headstrong, set in their ways, and are not open to treatment." However, after participating in the life review, students reported a shift in attitudes to a more positive view. The following quotations from participants are examples.

- "I had preconceived ideas of what they're going to be like but quickly realized they're more relatable than I thought."
- "I always thought of having to change diapers, but this experience opened my eyes that it would be very different than that."
- "I thought all older adults were mean going into this, but I now know that they are smart and have endured a lot of hard things."
- "I thought working with older adults is hard because they are not competent, but now, I know they can do lots of things, and many are still

working. So, working with them would be easier than I thought."

- "I felt like being troubled was a natural part of aging, but I now understand it could be a defense mechanism."
- "I had a preconceived idea of what they were like, but I was wrong. I feel they are less intimidating now."

Theme 3: Finding Similarities and Commonalities

Students reflected ideas of creating a bond and developing rapport and trust during the life review experience. Students reported that developing a rapport with older adults helped to create a strong trust that generated a deeper connection between them. The following quotations from participants are examples.

- "I thought my life was very different, but I found it very similar."
- "My older adult had common things with my past, which helped us bond."
- "Talking to her ended up...being like talking to a family member. It was...a very relaxed environment."
- "She got her master's, and I'm getting my doctorate, so we bonded over that."
- "It was hard to build a rapport at first. I did not know how to relate to her, but every time I pulled out a picture prompt, the stories she gave were very similar to what I heard growing up."
- "Listening to his experiences made me feel like there was a huge age gap, but we ended up doing some of the same things in the past. So, we bonded; I could talk to him for hours."
- "[It's] funny how similar experiences bring you closer."
- "This is...kind of like talking to my dad. It was very cool to see someone

else's perspective from my dad's era. I am thankful for the opportunity to listen to his life story."

Theme 4: Reflective Insight

Students remarked that the experience was enlightening, and they reflected on lessons learned, skills developed or sharpened, and how the experience was like real-world clinical practice. Students reported gaining wisdom and knowledge from the older adults and how the experience was rewarding. Several students mentioned how the experience changed their perception of working with older adults in the future. The following quotations from participants are examples.

- "I realize now an older adult can always tell you their needs and wants. That's not always a negative but sometimes a positive if you are working with them."
- "I learned a lot by watching her reactions, and how to ask questions while evaluating the situation."
- "It taught me to be quiet; active listening."
- "This experience is what it will be like in level 2 fieldwork with older adults. This is a more real-life world experience."
- "My older adult was very knowledgeable, was a blessing, and it benefited me to work one-to-one with her."
- "I have never interacted with a real old person. This experience changed my perspective about the possibilities of working with older adults."
- "This experience showed me how powerful reflection is. We connected, so I want to work with them now."
- "In hindsight, going into it, I thought I wanted to work with children, but

this experience made me think about the possibility of working with older adults."

- "Listening to his life story helped me to see older adults differently in a good way. I think I would enjoy working with them."
- "This experience affirmed in me that I want to work with older adults."
- "It reinforced my desire to work with them."

Discussion

This study emphasized the benefits of a life review experience to improve OT students' ageist attitudes toward older adults within an educational program. In support of the qualitative research question, "How does life review with older adults affect OT students' desires to work with older adults?", the data suggested that students were more open to working with older adults after the life review experience. This study offered students time to reflect on the life review experience and gain insight into possible post-graduation work. At first, students' attitudes were guided by experiences and prior contact with older adults. Steward et al. (2020) found that a student's behavior during interactions with older adults depended on context, relationship, and rapport. In the current study, students reported that finding similarities and commonalities helped build a connection and rapport with the older adult. Previous research found that meaningful conversations with older adults that included sharing emotions created a bond and a deeper connection for students (Van den Berg et al., 2019). Positive experiences with "non-family older adults" can increase students' desires to work in geriatrics (Leedahl et al., 2020, p.

12). These factors helped to bridge the intergenerational gaps and build trust that sparked an interest in working with older adults.

The current study incorporated life review intervention as an educational tool for OT students. The experience allowed students, as active listeners, to explore the interaction's effect on their ageist attitudes (Chippendale, 2013). The qualitative data indicated that students perceived older adults differently after the experience and many students reported a change in attitudes and preconceived ideas. These results align with those of Cheung et al. (2023), who found that students' perceptions changed, and assumptions were challenged after engagement in a program with older adults. Life review experience was found to be a positive educational tool to promote students' desire to work with older adults. Interventions that can improve students' negative attitudes toward older adults must be explored to understand the implications of ageist views on career choices (Martinez-Arnau et al., 2022; Shea et al., 2021).

The results of this study illustrate the need for educational programming that includes a focus on OT student ageism and how perceptions of aging impact the desire to work with a growing older adult population. Examining curriculum for inclusion of positive interactive experiences between students and older adults could shed light on ageist beliefs and provide students with an avenue for self-reflection on negative attitudes that could impact future practice in geriatrics (Sellers, 2019). Future research is

needed to examine the relationship between life review intervention as an educational tool and its effects on students' ageist perceptions.

Limitations

The students conducted the one-hour life review interventions with the older adults virtually. The virtual format allowed for a more robust experience and personal connection than other forms of interviewing such as over the phone. However, connecting with an older adult in person offers the best opportunity for genuine engagement. Also, existing literature supports higher frequency, high quality interactions with older adults (Rowe et al., 2020). Whereas the researcher took steps to ensure that the virtual interaction was high quality, the one-hour intervention may not have created adequate opportunity for a lasting change in ageist attitudes. Additionally, only OT students who were not familiar with and had never met the researcher were invited to participate in this study. This control effort produced a sample of students enrolled in one OT program yielding a small sample size. Finally, the researcher obtained older adult volunteers who were active and healthy. A life review experience with an older adult with medical issues may have given students a different perception of working with older adults.

Implications for OT Education and Clinical Practice

Providing opportunities for students to engage with older adults during health care education is important to impact ageist beliefs. Direct face-to-face engagement with

older adults during health care education allows students a greater understanding of the psychological challenges that older adults face. The current study incorporated the use of life review psychosocial intervention as an educational tool which was found to positively affect students' desires to work with older adults. The life review experience allowed students, as active listeners, the opportunity to explore the effects of the experience on their attitudes toward older adults (Chippendale, 2013). The unique needs of the older adult population and the impacts ageism can have on patient care bring to light the importance of adding educational strategies and opportunities to "increase knowledge, awareness, and management" (Crandlemire, 2020, p. 88) of ageist perceptions. It is critical for OT educators to address student ageism early in programs to prevent negative perceptions of older adults. Interventions should be embedded into the OT curriculum that help to understand students' ageist perceptions and the implications of ageism on career choice (Shea et al., 2021). Given the projected shortages of OT practitioners working with older adults, it is imperative that ageism be addressed to highlight the negative attitudes that might influence patient care. By impacting students' ageist beliefs, positive attitudes toward older adults will infiltrate clinical practice as new graduates enter the workforce.

Conclusion

The study examined changes in OT students' ageist attitudes after a life review experience and how those changes might influence the desire to work with older adults after <https://doi.org/10.46409/003.MPGH7978>

graduation. The data suggested that the students had a more negative attitude about older adults, which was mainly derived from previous experiences and preconceived ageist ideas, prior to the life review experience. The students indicated that the life review experience provided a positive opportunity to connect with an older adult and helped to dispel any negative thoughts about working with the older generation. In this study, the life review experience was found to be an effective intervention tool to enhance OT students' desires to work with older adults after graduation. Providing educational opportunities to address ageism allows students time to confront their own negative attitudes and biases against older adults. While much research regarding ageism among health care students has ensued, this study reiterates the lack of clarity surrounding how ageism affects students' desires to work with older adults post-graduation. The use of psychosocial interventions, like life review, can influence students' perceptions of aging and older adults to promote careers in geriatrics. Educators must add strategies to address ageism in OT education so that more students will work with older adults to help deter the projected shortages in the coming years. To impact ageism in the future and generate desires to work with older adults, OT students should participate in life review experiences while enrolled in educational programs.

References

- Achenbaum, W. A. (2015). A history of ageism since 1969. *Generations: Journal of the American Society on Ageing*, 39(3), 10–16.
<https://www.jstor.org/stable/26556123>

- Alden, J., & Toth-Cohen, S. (2015). Impact of an educational module on occupational therapists' use of elderspeak and attitudes towards older adults. *Physical and Occupational Therapy in Geriatrics*, 33(1), 1–16.
<https://doi.org/10.3109/02703181.2014.975884>
- American Occupational Therapy Association (AOTA). (2020). Occupational therapy practice framework: Domain and process (4th ed.). *American Journal of Occupational Therapy*, 74(Suppl. 2). 7412410010.
<https://doi.org/10.5014/ajot.2020.74S2001>
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175–1184.
<https://doi.org/10.1037/0003-066x.44.9.1175>
- Bednarski, J. (2016). An elective course exploring occupational justice through storytelling and story making. *The Open Journal of Occupational Therapy*, 4(1), 1–15.
<https://doi.org/10.15453/2168-6408.1165>
- Blackwood, J., & Sweet, C. (2017). The influence of ageism, experience, and physical therapy students' perception of geriatrics. *Gerontology & Geriatrics Education*, 38(2), 219–231.
<https://doi.org/10.46409/003.MPGH7978>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
<https://doi.org/10.1191/1478088706qp063oa>
- Burnes, D., Sheppard, C., Henderson, C., Wassel, M., Cope, R., Barber, C., & Pillemer, K. (2019). Interventions to reduce ageism against older adults: A systematic review and meta-analysis. *American Journal of Public Health*, 109(8), 1–16.
<https://doi.org/10.2105/AJPH.2019.305123>
- Butler, R. N. (1963). The life review: An interpretation of reminiscence in the aged. *Psychiatry*, 26(1), 65–76.
<https://doi.org/10.1080/00332747.1963.11023339>
- Calma, K., Halcomb, E., & Stephens, M. (2019). The impact of curriculum on nursing students' attitudes, perceptions, and preparedness to work in primary care: An integrative review. *Nurse Education in Practice*, 39, 1–10.
<https://doi.org/10.1016/j.nepr.2019.07.006>
- Carlson, K., Black, D., & Coster, D. (2021, September 17). Perceptions of older adults? Measuring positive, negative, and physical descriptors using the

- stereotype content and strength survey. *Journal of Gerontological Social Work*, 1–13.
<https://doi.org/10.1080/01634372.2021.1978026>
- Cheung, J. C., Lou, V. W., Hu, D., Pan, N. F., Woo, E. M., & Cheng, M. S. (2023). Eliminating ageism in higher education: An intergenerational participatory co-design project. *Educational Gerontology*, 49(11), 966–978,
<https://doi.org/10.1080/03601277.2023.2187107>
- Chippendale, T. (2013). Elders' life stories: Impact on the next generation of health professionals. *Current Gerontology and Geriatrics Research*, 2013, Article 493728.
<https://doi.org/10.1155/2013/493728>
- Chippendale, T., & Boltz, M. (2015). Living legends: Effectiveness of a program to enhance sense of purpose and meaning in life among community-dwelling older adults. *American Journal of Occupational Therapy*, 69(4), 48–94.
<https://doi.org/10.5014/ajot2015.014894>
- Clemson, L. (2022). Relevance, resilience, and ageism: A bright future for occupational therapy *Australian Occupational Therapy Journal*, 69(1), 3–14.
<https://doi.org/10.1111/1440-1630.12783>
- Connelly, L. (2016). Understanding research: Trustworthiness in qualitative research. *Medsurg Nursing*, 25(6), 435–436.
- Crandlemire, L. (2020). Unconscious bias and the impacts on caring: The role of the clinical nursing instructor. *International Journal for Human Caring*, 24(2), 84–91.
<https://doi.org/10.20467/HumanCaring-D-19-00048>
- Dahlke, S., & Hunter, K. (2021). Harnessing nursing to diminish ageism. *International Journal of Older People Nursing*, 17, 1–11.
<https://doi.org/10.1111/opn.12417>
- Dahlke, S., Hunter, K., Fox, M., Davidson, S., Perry, N., Watts, L., Martin, L., Butler, J., Raymond, C., Chasteen, A., McCleary, L., Boscart, V., & Moody, E. (2021). Awakening Canadians to ageism: A study protocol. *BioMed Central Nursing* 20, 192.
<https://doi.org/10.1186/s12912-021-00713-0>
- Forlenza, S. T., & Bourassa, D. (2017). "Mind blown" – Including exercise science students as research assistants to reduce ageist perceptions. *JTRM in Kinesiology*, 1–23, EJ1143466.
- Friedman, C., & VanPuymbrouck, L. (2021). Ageism and ableism:

- Unrecognized biases in occupational therapy students. *Physical & Occupational Therapy in Geriatrics*, 39(4), 354–369.
<https://doi.org/10.1080/02703181.2021.1880531>
- Garrison-Diehn, C., Rummel, C., Au, Y. H., & Scherer, K. (2022). Attitudes toward older adults and aging: A foundational geropsychology knowledge competency. *Clinical Psychology: Science and Practice*, 29(1), 4–15.
<https://doi.org/10.1037/cps0000043>
- Gibbs, G. R. (2011, October 24). *Coding part 2: Thematic coding* [Video]. YouTube.
https://www.youtube.com/watch?v=B_YXR9kp1_o
- Heape, A., Causey, B., Lloyd, T., & Jeter, S. (2020). Ageism among graduate students in communication sciences and disorders: A longitudinal analysis. *Gerontology Perspectives of the ASHA Special Interest Group*, 5(5), 1306–1312.
- Horowitz, B., Tagliarino, J., & Look, K. (2014). Occupational therapy education, attitudes on aging, and occupational therapy students and therapists' interest in gerontology practice. *Physical & Occupational Therapy in Geriatrics*, 32(2), 136–151.
<https://doi.org/10.3109/02703181.2014.905898>
- Jeffers, S., Hill, R., Krumholz, M., & Winston-Proctor, C. (2020). Themes of gerotranscendence in narrative identity within structured life review. *Journal of Gerontopsychology and Geriatric Psychiatry*, 33(2), 77–84.
<https://doi.org/10.1024.1662-9647/a000235>
- Kalu, M., Abaraogu, U., & Norman, K. (2018). Do physiotherapy students demonstrate ageist attitude? A scoping review of literature. *Physical & Occupational Therapy in Geriatrics*, 36(1), 72–89.
<https://doi.org/10.1080/02703181.2018.1440040>
- Kelley, S. (2019, June 21). Ageism reduced by education, intergenerational contact. *ScienceDaily*.
<https://www.sciencedaily.com/releases/2019/06/190621140328.htm>
- Klein, J., & Liu, L. (2010). Ageism in current practice: Experiences of occupational therapists. *Physical & Occupational Therapy in Geriatrics*, 28(4), 334–347.
<https://doi.org/10.3109/02703181.2010.532904>
- Knecht-Sabres, L. J., Wallington, M., Lee, M. M., Gunn, J. F., Anaya, E. M., Getch, S. E., Krumdick, N. D., & Workman, G. M. (2018). The impact of an interprofessional geriatric training experience: Attitudes of future healthcare providers. *Journal*

- of Occupational Therapy Education*, 2(3), Article 5.
<https://doi.org/10.26681/jote.2018.020305>
- Koehler, A., Davies, S., Smith, L., Hooks, T., Schanke, H., Loeffler, A., Carr, C., & Ratzlaff, N. (2016). Impact of a stand-alone course in gerontological nursing on undergraduate nursing students' perceptions of working with older adults: A quasi-experimental study. *Nurse Education Today*, 46, 17–23.
<https://doi.org/10.1016/j.nedt.2016.06.015>
- Kwan, C., Chan, C., & Choi, K. (2019). The effectiveness of a nurse-led short term life review intervention in enhancing the spiritual and psychological well-being of people receiving palliative care: A mixed method study. *International Journal of Nursing Studies*, 91, 134–143.
<https://doi.org/10.1016/j.ijnurstu.2018.12.007>
- Leedahl, S., Brasher, M. S., LoBuono, D., Wood, B., & Estus, E. (2020). Reducing ageism: Changes in students' attitudes after participation in an intergenerational reverse mentoring program. *Sustainability*, 12, Article 6870.
<https://doi.org/10.3390/su12176870>
- Levy, S. R. (2018). Toward reducing ageism: PEACE (positive education about aging and contact experiences) model. *The Gerontologist*, 58(2), 226–232.
<https://doi.org/10.1093/geront/gnw116>
- Liou, C., & Cremeans-Smith, J. (2019). Attitudes toward aging: Using drawing as a teaching tool to prepare undergraduate students to work in an aging world. *College Student Journal*, 53(2), 216–228.
- Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research* (6th ed.). Sage Publications.
- Martinez-Arnau, F., Lopez-Hernandez, L., Castellano-Rioja, E., Botella-Navas, M., & Perez-Ros, P. (2022). Interventions to improve attitudes toward older people in undergraduate health and social sciences students: A systematic review and meta-analysis. *Nurse Education Today*, 110, 1–16.
<https://doi.org/10.1016/j.nedt.2022.105269>
- Marquet, M., Chasteen, A., Plaks, J., & Balasubramaniam, L. (2019). Understanding the mechanisms underlying the effects of negative age stereotypes and perceived age discrimination on older adults' well-being. *Aging & Mental Health*, 23(12), 1666–1673.
<https://doi.org/10.1080/13607863.2018.1514487>

- NCALL Staff. (2021, May 12). *Ageism: Across the lifespan and everywhere*. <https://www.ncall.us/2021/05/12/ageism/>
- Nissen, R., Ikiugu, M., Barash, B., Kathol, M., & Oorlog, A. (2022). Perceptions of occupational therapy educators about the educational preparation of occupational therapists for designation as qualified mental health professionals. *Occupational Therapy in Health Care*, 1–14. <https://doi.org/10.1080/07380577.2022.2031371>
- Nowell, L., Norris, J., White, D., & Moules, N. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1). <https://doi.org/10.1177/1609406917733847>
- Oral, B., Ener, D., Gunay, O., & Cetinkaya, F. (2021). Attitudes of medical faculty students toward ageism: A cross-sectional study from Kayseri. *Erciyes Medical Journal*, 43(4), 1–19. <https://doi.org/10.14744/etd.2020.00878>
- Otaye-Ebede, L., Shaffakat, S., & Foster, S. (2020). A multilevel model examining the relationships between workplace spirituality, ethical climate and outcomes: A social cognitive theory perspective. *Journal of Business Ethics*, 166, 611–626. <https://doi.org/10.1007/s10551-019-04133-8>
- Raudonis, B., McLean, J., & Caubel, D. (2012). Life review: Connecting undergraduate nursing students with older adults. *Nursing Education Perspectives*, 33(3), 193–194. <https://doi.org/10.5480/1536-5026-33.3.193>
- Richards, K. A. R., & Hemphill, M. A. (2017). A practical guide to collaborative qualitative data analysis. *Journal of Teaching in Physical Education*, 37(2), 225–231. <https://doi.org/10.1123/jtpe.2017-0084>
- Ridgway, V., Mason-Whitehead, E., & McIntosh-Scott, A. (2018). Visual perceptions of ageing; A longitudinal mixed methods study of UK undergraduate student nurses' attitudes and perceptions towards older people. *Nurse Education in Practice*, 33, 63–69. <https://doi.org/10.1016/j.nepr.2018.08.005>
- Rowe, J., Kim, Y., Jang, E., & Ball, S. (2020). Further examination of knowledge and interactions in ageism among college students: Value for promoting university activities. *Gerontology & Geriatrics Education*, 42(3), 331–346. <https://doi.org/10.1080/02701960.2020.1864346>

- Schunk, D., & DiBenedetto, M. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60. <https://doi.org/10.1016/j.cedpsych.2019.101832>
- Sellers, J. B. (2019). Learning to listen: Baccalaureate nursing students conducting life reviews with older adults. *The International Journal of Reminiscence and Life Review*, 6(1), 40–44. <https://journals.radford.edu/index.php/IJRLR>
- Shamizadeh, T., Jahangiry, L., Sarbakhsh, P., & Ponnet, K. (2019). Social cognitive theory-based intervention to promote physical activity among prediabetic rural people: A cluster randomized controlled trial. *BMC*, 20(98), 1–10. <https://doi.org/10.1186/s13063-019-3220-z>
- Shea, A., Woolverton, C., Biccum, K., Yu, A., & Strong, J. V. (2021). Students' attitudes and intention to work with older adults in the era of Covid-19. *GeroPsych*, 35(1). <https://doi.org/10.1024/1662-9647/a000274>
- Snyder, K. (2018). Exploring students' use of feedback during occupational therapy level II fieldwork experiences. *Journal of Occupational Therapy Education*, 2(2), Article 4. <https://doi.org/10.26681/jote.2018.020204>
- Steward, A., Hasche, L., Talamantes, M., & Bernhardt, M. (2020). The impact of intergenerational engagement on social work students' attitudes toward aging: The example of Clermont College. *Health & Social Work*, 45(4), 250–258. <https://doi.org/10.1093/hsw/hlaa023>
- Toygar, I., & Kardakovan, A. (2020). Factors affecting the attitudes of nursing students toward ageism. *Nursing Practice Today*, 7(1), 38–44. <https://doi.org/10.18502/npt.v7i1.2298>
- Van den Berg, A., Dewar, B., Smits, C., & Jukema, J. (2019). Experiences of older adults and undergraduate students in co-creating age-friendly services in an educational living lab. *International Practice Development Journal*, 9(2), 2. <https://doi.org/10.19043/ipdj.92.002>
- Whatley, M. C., & Castel, A. D. (2020). Improving expectations regarding aging in younger adults: A classroom study. *Education Gerontology*, 46(12), 785–795. <https://doi.org/10.1080/03601277.2020.1826088>
- World Health Organization (WHO). (2021, March 18). *Ageism is a global*

challenge: UN.
<https://www.who.int/news/item/18-03-2021-ageism-is-a-global-challenge-un>

nursing homes. *Physical & Occupational Therapy in Geriatrics*, 34(4), 186–204.
<https://doi.org/10.1080.02703181.2016.1268236>

Wren, R. (2016). Effect of life review on quality of life for older adults in

Appendix

Audit Trail

Theme 1: Experience Influenced Attitude

Category	Codes	Representative Quotations
Participants have experiences that influenced perceptions of older adults	Past experiences (P-7,8,12,16,19,20,24,26) Past relationships (P-7,8,14,19,26,27)	“I have past experiences as a lifeguard [with] older adults” (P8) “reminiscing about my grandparents” (P7,14)
Engagement in the life review session with older adults produced a positive emotional interactive experience for participants	Positive emotional responses (P-2,5,7,10,11,12,15,24,27) Positive Life Review experience (P-4,5,8,18,23,29)	“fun”, “cool” (P11) “it was a positive experience” (P23)
The life review session could be emotionally negative and have an uncomfortable conversational interaction experience for participants	Negative emotional responses (P-5,8,11,14,18,26) Negative life review experience (P-5,11,14,28,29,30) Uncomfortable conversation (P-10,11,14,15,24,26,28,30) (P11)	“nerve racking” (P5,11,18) “we kinda butted heads” (P14) “Divorce came up” (P10) “she talked about getting pregnant, doing drugs”

Theme 2: Preconceived Ideas Changed

Category	Codes	Representative Quotations
Preconceived ideas as barriers during	Barriers: Preconceived ideas (P-8, 13,15,24,28)	“old people don’t know very much” (P15)

the life review

Preconceived ideas were beneficial to the life review process	Beneficial preconceived ideas (P-9,10,13)	“they’re more relatable” (P10)
Participants subjective descriptors of older adults affirms preconceived ideas	Description of old adults (P-2,3,5,8,10,17,18,19, 20,24,30)	“headstrong” (P24) “blunt and straight forward” (P17)

Theme 3: Finding Similarities and Commonalities

Category	Codes	Representative Quotations
Similarities and commonalities helped to create a bond	Finding similarities and commonalities (P-1,7,8,11,15,16, 17,18,19,26,29)	“I thought my life was different, but I found it very similar” (P1)
Participants sought to bridge generational gaps , such as age, by making connections to similar perspectives	Bridging generational gaps (P-3,4,7,8,11,14,15, 18,27,26)	“this is...kind of like talking to my dad... cool to see someone else’s perspective from that era” (P11)
Participants seek to build a rapport and trust with older adults to find commonalities and develop a relationship	Building rapport and trust (P-3,6,9,11,14, before 15,17,24,26)	“building a rapport with them gets that trust they will spill every detail” (P6)

Theme 4: Reflective Insight

Category	Codes	Representative Quotations
After reflection , participants learned lessons, built skills, and understood real world practice applications	Lessons learned (P-7,13, 17,18,20,24,24,27,28) Skills building (P-2,4,5, 6,7,16,17,24) Real world practice application (P-2,4,10,12, 13,15,24)	“learning a lot... watching their reactions” (P27) “I learned how to ask questions” (P17); “It taught me to be quiet, active listening” (P24) “a more real live world experience” (P4)

Wisdom and knowledge gained from **reflection** of the life review experience

Wisdom and learning from older adults (P-4,8,11,14,19, 26,29)

“her words of wisdom to me were “enjoy the little things in life”” (P11)

Verbalizations of **reflective insight** of rewards working with **unique** population

Rewarding and Different from Pediatrics (P-8,9,16,20,24,29)

“he was a blessing” (P16)
“older adults are more open than peds” (20)

Participants **reflective attitude change** regarding **future work** with older adults

Future occupational therapy work (P-2,5,7,15,18,23,28)

“I have never interacted with a *real* old person. This experience changed my perspective” (P5)
“I was interested in Peds, but I love talking to older adults” (P7)
