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## The Impact of an Interprofessional Geriatric Training Experience: Attitudes of Future Healthcare Providers

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# The Impact of an Interprofessional Geriatric Training Experience: Attitudes of Future Healthcare Providers

## Abstract

As the older adult population increases, it is vital to educate and train healthcare providers as members of interprofessional healthcare teams who can work effectively with these individuals. Ageism is a potential obstacle to achieving this goal. The purpose of this pre/post-test design pilot study was to determine the impact of an interprofessional geriatric training experience on the attitudes of future healthcare providers towards interprofessionalism and working with older adults. Sixteen graduate level students from occupational therapy and clinical psychology programs completed four interprofessional sessions with older adults residing in a long-term care facility. Quantitative data were gathered from pre/post-test scores on three instruments: (1) Self-Perceptions and Older Adults Questionnaire; (2) A Refined Version of Aging Semantic Differential; and (3) Readiness for Interprofessional Learning Scale. Results of paired sample *t* tests indicated that participants described older adults significantly more positively and their perceptions about working with older adults became significantly more positive following the interprofessional geriatric training experience. Additional data were gathered regarding participants' perceptions of the interprofessional training experiences at the conclusion of the study. This feedback regarding students' perceptions of the interprofessional geriatric training experiences indicated that the majority of the participants found the experiences with the older adults to be valuable and that the interprofessional learning activities helped them better understand the older adults. The results of this pilot study suggest that even short-term interprofessional experiences may have the ability to positively influence the attitudes of future healthcare providers regarding older adults.

## Keywords

Interprofessionalism, occupational therapy education, ageism, older adults, clinical psychology education

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## **The Impact of an Interprofessional Geriatric Training Experience: Attitudes of Future Healthcare Providers**

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### **ABSTRACT**

As the older adult population increases, it is vital to educate and train healthcare providers as members of interprofessional healthcare teams who can work effectively with these individuals. Ageism is a potential obstacle to achieving this goal. The purpose of this pre/post-test design pilot study was to determine the impact of an interprofessional geriatric training experience on the attitudes of future healthcare providers towards interprofessionalism and working with older adults. Sixteen graduate level students from occupational therapy and clinical psychology programs completed four interprofessional sessions with older adults residing in a long-term care facility. Quantitative data were gathered from pre/post-test scores on three instruments: (1) Self-Perceptions and Older Adults Questionnaire; (2) A Refined Version of Aging Semantic Differential; and (3) Readiness for Interprofessional Learning Scale. Results of paired sample *t* tests indicated that participants described older adults significantly more positively and their perceptions about working with older adults became significantly more positive following the interprofessional geriatric training experience. Additional data were gathered regarding participants' perceptions of the interprofessional training experiences at the conclusion of the study. This feedback regarding students' perceptions of the interprofessional geriatric training experiences indicated that the majority of the participants found the experiences with the older adults to be valuable and that the interprofessional learning activities helped them better

understand the older adults. The results of this pilot study suggest that even short-term interprofessional experiences may have the ability to positively influence the attitudes of future healthcare providers regarding older adults.

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## INTRODUCTION

The number of older adults in the United States (US) is expected to more than double in the next twenty years (US Census Bureau, 2014). Since the population of older adults in the US will represent an unprecedented proportion of the population, it will be important to train, educate, and recruit competent healthcare providers who are able to comprehensively address the healthcare needs of older adults (Centers for Disease Control and Prevention, 2013). Unfortunately, according to the Elder Care Workforce Alliance (2015), the current healthcare system cannot meet the present-day demands for geriatric care, let alone the projected needs for eldercare. One obstacle that can hinder education, training, and availability of practitioners who serve older adults is a negative bias towards aging (Dittmann, 2003; Klein & Liu, 2010). Ageism is the stereotyping, prejudice, and discrimination against people on the basis of their age (World Health Organization, 2018). As Klein and Liu (2010) indicated, "ageism is a social construct that is internalized in the attitudes, beliefs, and behaviors of individuals" (p. 334). Ageism can result in misconceptions and negative attitudes about older adults that can lead to false assumptions about their lifestyles, abilities, and rehabilitation potential. Moreover, ageist attitudes and stereotypes have been identified as barriers to being able to recruit occupational therapists to work with older adults (Wilkins & Rosenthal, 2001). Ageist beliefs that are held by healthcare professionals can affect the broader healthcare system by placing an additional burden on other healthcare providers. For example, a healthcare provider might limit his or her time with an older patient because of his or her ageist beliefs. In this scenario, the healthcare provider may fail to meet the healthcare needs of the patient, whereby the patient's healthcare needs may grow because essential issues were not addressed during the initial visit.

Even though the literature suggests there is ageism and decreased desire to work with older adults among healthcare students and workers, there is evidence to suggest that healthcare students who interact with older adults as part of their educational programs are able to maintain better attitudes about aging and are less likely to believe negative stereotypes (Brown, Kother, & Weilandt, 2011; Currey, 2008; Klein & Liu, 2010). In fact, numerous studies have provided evidence that the provision of opportunities for students to work directly with older adults has helped combat ageist beliefs and has positively influenced willingness to work with older adults (Chonody, Webb, Ranzjin, & Bryan, 2014; Horowitz, Tagliarino, & Look, 2014; King, Roberts, & Bowers, 2013; Oggins & Whitlow, 2001; Wilkinson, Gower, & Sainsbury, 2002).

The Institute of Medicine (2008) has asserted that all health professionals should be educated in content related to geriatric care. Furthermore, the Interprofessional Education Collaborative (2011) asserted that it is imperative that all healthcare professional students develop the knowledge, skills, and attitudes to become effective members of interprofessional teams in order to ensure a better, safer, and patient-centered healthcare system. The World Health Organization (2010) defined

interprofessional education (IPE) as educational experiences in which students from “two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes” (p.13). In order to comprehensively address the healthcare needs of older adults, healthcare workers must be able to address the medical, psychological, functional, and social well-being of the elderly. In other words, best practice in geriatric care often requires a team of health professionals, which makes IPE and experiences imperative with the older adult population. An interprofessional approach can aid in not only accurately diagnosing the patient but also in creating a holistic treatment plan that will meet the unique needs of each patient (Interprofessional Education Collaborative, 2011). Collaborating with other professionals may also allow for carry-over of goals or intervention (Interprofessional Education Collaborative, 2011).

According to the American Occupational Therapy Association (AOTA) Salary and Workforce Survey (2015), over 45 percent of occupational therapy practitioners surveyed indicated they worked in hospitals, long term care, and skilled nursing facilities. Since almost half of occupational therapy practitioners may work with older adults, it is important that occupational therapy students gain comfort and skills working with this population, especially given the predicted dramatic increase in the older adult population (US Census Bureau, 2014). In addition, the Accreditation Council for Occupational Therapy Education (ACOTE) Standards for occupational therapy and occupational therapy assistant students mandate that students be prepared to effectively communicate and work interprofessionally with other healthcare providers and be skilled in executing intervention plans (ACOTE, 2012).

Carpenter (2013) presented preliminary evidence that an interprofessional course that incorporated in-class geriatric educational experiences (e.g., lectures provided by multiple healthcare professionals, case-based assignments, and observation of healthcare professionals working with older adults) can positively change attitudes and beliefs towards older adults. However, these experiences did not provide opportunities for the students to have direct interactions with an older adult. Thus, to build on this premise, this interprofessional pilot study investigated the impact of an educational experience involving face-to-face interactions between interprofessional student groups and older adults in a healthcare setting.

## **METHODS**

### **Purpose**

The purpose of this study was to determine the impact of an interprofessional geriatric training experience on the attitudes of future healthcare providers towards working with older adults and interprofessionalism. More specifically, the aim of this study was to determine if an interprofessional geriatric training experience would lead to: (1) significantly improved attitudes of future healthcare providers towards older adults; (2) significantly improved attitudes of future healthcare providers regarding their own

general interactions in working with older adults; and (3) significantly improved attitudes of future healthcare providers toward working on interprofessional healthcare teams in the future.

### **Participants**

Sixteen graduate level occupational therapy (n= 9) and clinical psychology (n=7) students completed four interprofessional sessions consisting of four different activities with older adults residing in a long-term care facility. Participants were, on average, 23 years old (range from 21-31 years), mostly female (94%; n=15), and predominantly white (82%; n=13).

Recruitment occurred via announcements that were made by the researchers in classes with a script approved by the Institutional Review Board (IRB). To address ethical considerations, recruitment did not occur in the specific courses the researchers taught. It was made clear that this was a volunteer opportunity and would not impact their grades in any manner. Anonymity of the participants was maintained through the use of non-identifying specifiers on the pre/post-test data forms. All participants signed an informed consent form prior to engaging in this study. All participants were informed that they could withdraw from the study at any time without any consequences.

### **Study Design and Research Instruments**

This pilot study utilized a pre/post-test design. A paired sample *t* test was used to examine whether or not there were significant changes from time one to time two. An alpha level of .05 was used to determine statistical significance. Quantitative data was gathered from pre/post-test scores on: (1) Self-Perceptions and Older Adults Questionnaire (Lee, Workman, & Harrow, 2006); (2) A Refined Version of Aging Semantic Differential (Polizzi, 2003); and (3) Readiness for Interprofessional Learning Scale (RIPLS; McFadyen, Webster, Strachan, Figgins, Brown, & McKechnie, 2005). At the conclusion of the study, quantitative data, as well as verbal and written feedback, were also gathered regarding students' reactions to the select learning activities. This study was approved by Midwestern University's Institutional Review Board.

**A Self-Perceptions and Older Adults Questionnaire.** This pre/post-test measure (Lee et al., 2006) assessed students' self-perceptions of their general knowledge and feelings regarding older adults. This tool was used in a similar research study by researchers who examined student attitudes towards work with older adults in a long-term care setting (Lee et al., 2006). For the purpose of this study, this tool was used to determine if participation in a geriatric learning experience would significantly improve occupational therapy and clinical psychology students' attitudes regarding their own general interactions in working with older adults. This questionnaire is a brief 10-item self-report measure in which raters indicate how they feel about each statement by circling a number on a 7-point Likert scale (1= *Not at all*; 7= *Extremely*). Questions ask about self-perceived general knowledge, interest, enjoyment, empathy, comfort, understanding of life experiences, and potential for future work with older adults.

**Refined Version of Aging Semantic Differential Scale.** This pre/post-test measure is a revised version of the Aging Semantic Differential Scale (Rosencranz & McNevin, 1969), which is commonly used to assess the attitudes of younger adults towards older adults (Gonzales, Tan, & Morrow-Howell, 2010). This tool was used to determine changes in students' attitudes toward older adults. This refined self-report measure (Polizzi, 2003) consists of 24 polar opposite adjectives. For each item, raters place a check mark along a 7-point scale that best represents their judgment about an older adult (e.g., 1 = *cheerful*; 7 = *crabby*). The refined version provides an updated list of adjectives and is more reliable for evaluating attitudes toward a more generalized elderly population (Polizzi, 2003). Internal consistency is very good (Cronbach's alpha = .97) and test-retest reliability is fair to good (.79, .81) based on undergraduate student responses (Polizzi, 2003).

**Readiness for Interprofessional Learning Scale.** The RIPLS survey (McFadyen et al., 2005) was used as a pre/post-test measure to assess the change in future healthcare providers' attitudes toward working on interprofessional healthcare teams in the future. The RIPLS is a 19-item measure that examines the attitude of healthcare students and professionals towards interprofessional learning. For each item, respondents are asked to rate their attitudes using a 5-point Likert-scale (1= *Strongly Disagree*, 2= *Disagree*, 3= *Neutral*, 4= *Agree*, 5= *Strongly Agree*), with higher scores indicating greater readiness for interprofessional learning. The psychometric properties of the RIPLS were established using a sample of students from eight different health and social care disciplines (dietetics, nursing, occupational therapy, physiotherapy, podiatry, prosthetics and orthotics, radiography, and social work). The individual items of the measure were found to load onto four distinct subscales: 1) teamwork and collaboration (Cronbach's alpha = .88), 2) negative professional identity (Cronbach's alpha = .76), 3) positive professional identity (Cronbach's alpha = .81), and 4) roles and responsibilities (Cronbach's alpha = .43), and produce a total scale Cronbach's alpha of .89 (McFadyen et al., 2005).

**Reactions to Learning Activities Form.** The Reaction to Learning Activities form was developed by the researchers and was administered at the conclusion of the interprofessional experience to gather feedback regarding students' perceptions of the interprofessional geriatric training experiences. This form consisted of 16 questions related to the interprofessional activities the students participated in with the older adult. The students rated their perceptions of each of the learning activities (how enjoyable, easy, interesting, and valuable). Each question utilized a 5-point Likert-type scale for these questions (1 = *not at all*; 2 = *somewhat*; 3 = *moderately*; 4 = *very*; 5 = *extremely*). Additionally, this form included open ended questions to gather information regarding the experiences with the older adults, the interprofessional experiences, and to elicit suggestions for improvement of interprofessional geriatric training opportunities.

### **Interprofessional Geriatric Training Experiences**

The interprofessional geriatric training experience consisted of four 1-hour sessions in which an interprofessional group of students (occupational therapy and clinical psychology students) interacted directly with an older adult resident in a long-term care

setting. The sessions were designed sequentially for students to learn about the older adult's life and ultimately develop and participate in an activity that was meaningful to the resident. The sessions were conducted in a large common area which was suitable for conducting interviews and interacting with the residents. Each interprofessional group of students was assigned to interact with one resident for the entire interprofessional geriatric training experience. Faculty mentors were present during all four sessions and were available to answer questions and provide assistance, as needed. After each session, each interprofessional group of students met with their assigned faculty mentors to answer any questions, process the interprofessional geriatric experience, and prepare for the upcoming session. Each interprofessional group of students was assigned to at least two faculty mentors, with representation from both the occupational therapy and clinical psychology programs. All faculty mentors had experience with geriatric adults and working interprofessionally.

These interprofessional experiences provided opportunities for students to interact with older adults as well as students from a different profession in a non-competitive and humanistic environment, providing an opportunity for the students to learn about the older adult and each other. The activities in which the students participated in with the older adult were not discipline specific, but focused on the development of a therapeutic relationship with the older adult. This was intentional so that one profession was not featured more than the other. Through the shared planning and collaborative implementation of this experience, there were opportunities for students to learn together and enhance their abilities to appreciate the value of working with students who have different education, training, and expertise. This study was supported by the College of Health Sciences Geriatric Research Facilitation Grant. Funding from this grant allowed the researchers to provide supplies for the interprofessional training experiences.

**Session 1.** On the first visit, the interprofessional group of students met their assigned older adult and established rapport. Then, the interprofessional group of students conducted a life history interview and administered the Activity Card Sort (Baum & Edwards, 2008). The life history interview consisted of various questions that the students could ask the older adult to engage them in a dialogue regarding meaningful events experienced in their life (e.g., When you were a young adult, what was your life like? Looking back over your mid-life, what events were most meaningful for you? Now that you are older, what is your life like? Looking back over your later years, what life events have been most meaningful for you?). The Activity Card Sort is a flexible and useful measure of occupation (Baum & Edwards, 2008). The Activity Card Sort allows practitioners to help clients describe their participation in social, instrumental, and leisure activities, in the past and present (Baum & Edwards, 2008). For the purposes of this interprofessional educational experience, the Activity Card Sort was used to gather information related to the resident's participation in leisure and social activities and to decipher which activities the older adults found to be personally meaningful and important.



At the end of the first session, student groups met with their assigned faculty mentors to review the information obtained during their first interprofessional geriatric training experience and to plan for Session 2. In preparation for the second session of the interprofessional geriatric training experience, each student was required to reflect on his/her own life history and to create his/her own life story book. The life story book was a creative representation of significant life events, meaningful occupational roles, and future aspirations.

**Session 2.** The second session of the interprofessional geriatric educational experience involved the students sharing their own life story book with the older adult. Each interprofessional student group then assisted their assigned older adult in creating his/her own life story book. The books contained artifacts (e.g., words, pictures, magazine and newspaper clippings, etc.) representing their identified life events. Near the end of this interprofessional session, the students reviewed the older adult's life story book with the older adult and identified at least one interest or meaningful activity that the students and older adult could engage in during the next interprofessional experience.

After the completion of the second interprofessional experience, each interprofessional group of students met with their assigned mentor to process their experience and to plan for their next interprofessional experience (third session) with their assigned older adult. More specifically, the faculty mentors reviewed the information gathered from the Life History Interview, Activity Card Sort, and the life story book, as well as other information which was obtained during the interfacing with the older adult (e.g., clinical observation skills). Then, the faculty mentors assisted the students in identifying an activity which was meaningful to the older adult, as well as realistic (e.g., financially feasible, meeting the "just right" challenge for the older adult). For example, if the older adult expressed a strong interest in being able to cook, garden, or complete a specific craft activity, the faculty mentors helped the students identify the best activity, based on the adult's interests and abilities, as well as environmental and financial factors.

**Session 3.** The third visit involved the interprofessional student groups and older adults participating in the identified activity with the older adult. After the completion of the third interprofessional experience, each student group met with their assigned mentor to process this interprofessional experience. For example, faculty mentors discussed things such as what went well and what could have been done differently to enhance this interfacing. The faculty mentors also answered student inquiries related to the interprofessional geriatric experiences to date and worked with the students to plan out a meaningful fourth and final session with the older adults.

**Session 4.** For the fourth and final session, all of the student participants and the older adults who participated in this experience were invited to attend a "thank-you" session in which the students had a chance to formally say goodbye and express their gratitude. Following the completion of all four interprofessional geriatric training sessions, all participants met one last time with their faculty mentors. During this meeting, they were asked to complete post experience assessments. Following completion of measures,

the students also had a chance to discuss and provide feedback on the interprofessional geriatric experiences.

## RESULTS

Results from the Self-Perceptions and Older Adults Questionnaire revealed that the participants' perceptions about working with older adults became significantly more positive ( $p=.042$ ) following the interprofessional geriatric training. A Refined Version of Aging Semantic Differential Scale showed that participants described older adults significantly more positively ( $p=.002$ ) following completion of the interprofessional geriatric training experience. Results of the paired sample  $t$  test run on the four subscales on the RIPLS did not demonstrate any significant findings (all  $p$  values  $\geq .318$ ). Please see Table 1.

Table 1

### *Pre and Post-Test Scores*

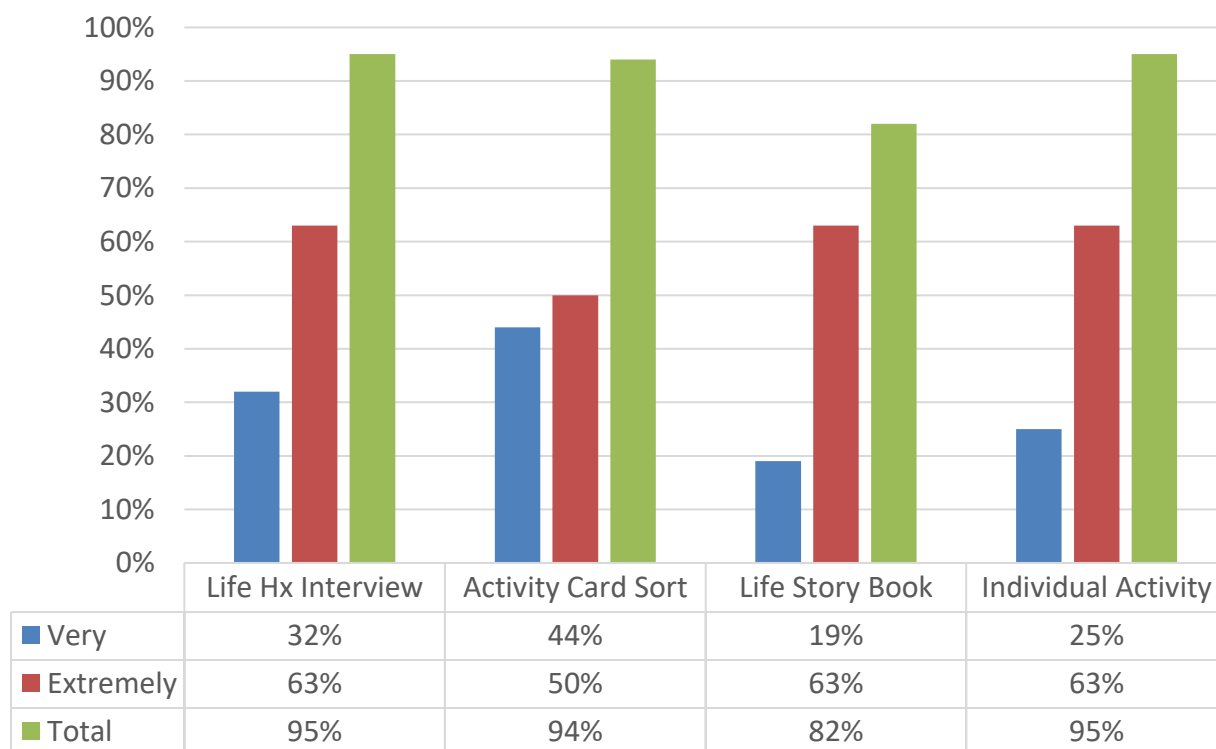
| Measure  | Mean (SD)<br>Pre-Test | Mean (SD)<br>Post-Test | $t$ value | $p$ value |
|--|-----------------------|------------------------|-----------|-----------|
| Self-Perceptions and Older Adults Questionnaire    | 5.53 (.70)            | 5.86 (.79)             | -2.23     | .042*     |
| A Refined Version of Aging Semantic Differential   | 2.99 (.48)            | 2.31 (.63)             | 3.83      | .002*     |
| RIPLS Subscale 1<br>Teamwork & Collaboration       | 43.25 (2.54)          | 43.56 (2.38)           | -.718     | .484      |
| RIPLS Subscale 2<br>Negative Professional Identity | 13.38 (1.70)          | 13.56 (1.78)           | -0.46     | .654      |
| RIPLS Subscale 3<br>Positive Professional Identity | 19.00 (1.63)          | 18.38 (2.65)           | 1.03      | .318      |
| RIPLS Subscale 4<br>Roles & responsibilities       | 6.06 (1.73)           | 5.88 (1.92)            | 0.87      | .566      |

\* Indicates significant value

Quantitative data collected from the Reactions to Learning Activities revealed that the majority of the participants found the experiences with the older adults to be valuable. This data was analyzed with descriptive statistics to examine participants' perceptions regarding the interprofessional learning activities (Life History Interview; Activity Card

Sort; Life Story Book; and engagement in an individualized and meaningful activity with the older adult). Please see Figure 1.

Additional feedback from the participants was gathered from open ended questions on the Reactions to Learning Activities form. The feedback was consistent with study findings regarding viewing older adults more positively. For example, the participants reported that the interprofessional learning activities helped them build rapport and better understand the older adults. Students also indicated that the interprofessional activities helped them think and respond in the moment and develop empathy towards older adults. Additionally, even though there were no statistically significant findings regarding participants' attitudes towards working on interprofessional healthcare teams, the participants indicated that they appreciated having opportunities to work with students and faculty from a different profession. Students also expressed a strong desire for more interprofessional learning opportunities.



*Figure 1. Percentage of participants who indicated the interprofessional activities were "Very Valuable" or "Extremely Valuable"*

## DISCUSSION

This study examined the impact of an interprofessional geriatric training experience on the attitudes of future healthcare providers towards working with older adults and interprofessionalism. The results of this study indicated that participants described older adults more positively and their perceptions about working with older adults became more positive following the interprofessional geriatric training experience. This study supports previous findings that educational programs may have the potential to influence ageist attitudes and improve willingness to work with older adults (Brown,

Kother, & Weilandt, 2011; Chonody et al., 2014; Horowitz et al., 2014; King et al., 2013; Oggins & Whitlow, 2001; Wilkinson et al., 2002). These findings are important since ageist attitudes and stereotypes have been identified as barriers to being able to recruit occupational therapists to work with older adults (Wilkins & Rosenthal, 2001). Preparing and recruiting future practitioners to work with older adults is critical since the workforce cannot meet the current and predicted needs for geriatric care (Elder Care Workforce Alliance, 2015).

Making assumptions about a person's capabilities, beliefs, lifestyle and interests based on his/her age can diminish the development of an honest, respectful, professional therapeutic relationship (Klein & Liu, 2010). The four interprofessional experiences offered as part of this research study were set up to allow the students to have time to get to know the older adult and to facilitate a reciprocal relationship with the older adult. Since ageist beliefs can interfere with collaborative and client-centered care (Brown et al., 2011), experiences like these are imperative to support future healthcare needs. The experiences in this study provided the opportunity for students to interact with older adults and learn about their past lives and what is currently meaningful to them. The participants in this study reported that the interprofessional learning activities helped them build rapport, better understand the older adults, and develop empathy towards older adults. These types of experiences may facilitate more productive encounters with older adults in the future. This is especially timely since there is currently a lack of research regarding the effectiveness of educational interventions to minimize ageism among occupational therapy and healthcare curricula (Brown et al., 2011).

The value of interprofessional education is recognized by the occupational therapy profession (ACOTE, 2012) and health professions at large (Interprofessional Education Collaborative, 2011). Unfortunately, the results of this study did not show a significant change on the pre/post-test scores on the RIPLS, indicating there was not a significant change in students' attitudes and perceptions regarding their level of preparedness for interprofessional learning. However, on the RIPLS pre-test, the majority of participants indicated that they strongly agreed with items on Subscale 1 (items related to teamwork and collaboration) and on Subscale 3 (items related positive professional identity). Thus, there may have been a ceiling effect related to these particular items. Since the students in this study volunteered to work with students from other professional programs, they may have already possessed an openness to learn from one another. Additionally, prior to this study, the participants had opportunities to interact with students from different healthcare professions as part of an interprofessional course and participate in other optional interprofessional learning opportunities. Therefore, the results on the RIPLS may also have been influenced by these factors. Nonetheless, the feedback from the Reactions to Learning Activities form and mentor meetings indicated that the students appreciated having an opportunity to work with different professions and desired more interprofessional learning opportunities.

### **Limitations**

A limitation of this study pertains to the small sample size (n=16). This study only included graduate students from two different healthcare professions from one

institution. The interprofessional older adult experiences only spanned over four weekly sessions. Also, this educational opportunity focused on students interacting individually with only one older adult, with the exception of the fourth and final encounter. With the exception of the fourth and final session, there were limited opportunities for all of the involved participants to interact and discuss their experiences as a collective group. Therefore, their perceptions may have been primarily influenced by their interactions with only one older person and the members of their assigned interprofessional team. Due to these limitations, it is not known if the findings in this study are transferrable. Lastly, even though faculty members from multiple health professions were involved in the creation of the interprofessional educational experiences, and participants interacted with students and faculty from a different profession, there were minimal opportunities for the students to observe their faculty members engage interprofessionally. Thus, this factor may have also limited their exposure to interprofessional collaboration.

### **IMPLICATIONS FOR OCCUPATIONAL THERAPY EDUCATION AND FUTURE PRACTICE**

There is currently a shortage of healthcare professionals, including occupational therapy practitioners, who are working with the older adult population (Elder Care Workforce Alliance, 2015), which is affecting the ability of healthcare providers to address the comprehensive needs of this aged population (Centers for Disease Control and Prevention, 2013). Klein and Liu (2010) provided evidence that ageism is not only still present within the healthcare system but also within the occupational therapy profession. Educational experiences and positive experiences with older adults have been found to promote positive attitudes about older adults (Horowitz et al., 2010). Moreover, Horowitz et al. (2014) found significant positive relationships between occupational therapy gerontology education and willingness to work with older adults. Similarly, the findings of this pilot study provide some evidence to suggest that participation in geriatric educational opportunities may contribute to students' attitudes, interest, and willingness in working with older adults in the future. These types of experiences may be vital in addressing the future workforce needs for the aged population.

### **CONCLUSION**

The results of this study revealed that even short-term interprofessional experiences may have the potential to positively influence the attitudes of future healthcare providers towards older adults. This is an important finding since there is little research that has specifically examined these concepts with occupational therapy and clinical psychology students (Brown et al., 2011). Furthermore, there is minimal research which addresses healthcare students' attitudes, especially occupational therapy students, working with older adults while applying some of their own skills in a realistic context (Brown et al., 2011). The findings of this study support the need for more research focused on the geriatric population and interprofessional educational experiences to help meet the growing healthcare needs of older adults.

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## References

- Accreditation Council for Occupational Therapy Education (ACOTE). (2012). 2011 Accreditation Council for Occupational Therapy Education (ACOTE) Standards. *American Journal of Occupational Therapy*, 66, S6-S74. <https://doi.org/10.5014/ajot.2012.66S6>
- American Occupational Therapy Association. (2015). *2015 Salary and workforce survey: Executive summary*. Bethesda, MD: The American Occupational Therapy Association, Inc. Retrieved from <http://www.aota.org/-/media/Corporate/Files/Secure/Educations-Careers/Salary-Survey/2015-AOTA-Workforce-Salary-Survey-LOW-RES.pdf>
- Baum, C., & Edwards, D. (2008). *Activity card sort*, (2<sup>nd</sup> ed.) [Measurement instrument]. Bethesda, MD: American Occupational Therapy Association, Inc.
- Brown, C., Kother, D., & Weilandt, T. (2011). A critical review of interventions addressing ageist attitudes in healthcare professional education. *Canadian Journal of Occupational Therapy*, 78, 282-293. <https://doi.org/10.2182/cjot.2011.78.5.3>
- Carpenter, B. (2013, August). *Co-teaching interprofessional care in graduate school*. Presentation at the American Psychological Association Annual Convention, Honolulu, HI.
- Centers for Disease Control and Prevention. (2013). *The state of aging and health in America*. Retrieved from <http://www.cdc.gov/aging/pdf/state-aging-health-in-america-2013.pdf>
- Chonody, J., Webb, S., Ranzijn, R., & Bryan, J. (2014). Working with older adults: Predictors of attitudes towards ageing in psychology and social work students, faculty, and practitioners. *Australian Psychologist*, 49, 374-383. <https://doi.org/10.1111/ap.12056>
- Currey, R. (2008). Ageism in healthcare: Time for a change. *Aging Well*, 1, 16-20. Retrieved from <http://www.todaysgeriatricmedicine.com/archive/winter08p16.shtml>
- Dittmann, M. (2003). Geropsychologists are badly needed. *The Monitor*, 34(5), 51.
- Elder Care Workforce Alliance (2015). *Workforce shortage: A looming crisis for our families*. Retrieved from: <http://www.eldercareworkforce.org/research/issue-briefs/research:geriatrics-workforce-shortage-a-looming-crisis-for-our-families/>
- Gonzales, E., Tan, J., & Morrow-Howell, N. (2010). Assessment of the refined aging semantic differential: Recommendations for enhancing validity. *Journal of Gerontological Social Work*, 53(4), 304-318. Retrieved from <https://doi.org/10.1080/01634371003715791>
- Horowitz, B., Dapice Wong, S. & DeChello, K. (2010). Intergenerational service learning: To promote active aging and occupational therapy gerontology practice. *Gerontology and Geriatrics Education*, 31, 75-91. <https://doi.org/10.1080/270196090357845>
- Horowitz, B., Tagliarino, J., & Look, K. (2014). Occupational therapy education, attitudes on aging, and occupational therapy students and therapists' interests in gerontology practice. *Physical & Occupational Therapy in Geriatrics*, 32, 136-151. <https://doi.org/10.3109/02703181.2014.905898>

- Institute of Medicine (US) Committee on the Future Health Care Workforce for Older Americans. (2008). *Retooling for an aging America: Building the health care workforce*. Washington, DC: National Academies Press 4, The Professional Health Care Workforce. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK215402/>
- Interprofessional Education Collaborative Expert Panel (2011). *Core competencies for interprofessional collaborative practice: Report of an expert panel*. Washington, DC.: Interprofessional Education Collaborative. Retrieved from [https://www.aacom.org/docs/default-source/insideome/ccrpt05-10-11.pdf?sfvrsn=77937f97\\_2](https://www.aacom.org/docs/default-source/insideome/ccrpt05-10-11.pdf?sfvrsn=77937f97_2)
- King, B., Roberts, T., & Bowers, B. (2013). Nursing students' attitudes toward and preferences for working with older adults. *Gerontology and Geriatric Education*, 34, 272-291. <https://doi.org/10.1080/02701960.2012.718012>
- Klein, J., & Liu, L. (2010). Ageism in current practice: Experiences of occupational Therapists. *Physical & Occupational Therapy in Geriatrics*, 28, 334-347. <https://doi.org/10.3109/02703181.2010.532904>
- Lee, M., Workman, G., & Harrow, L. (2006). *Geriatric training exercise improves clinical psychology students' attitudes and self-perceptions of work with older adults*. Poster presented at the *Gerontological Society of America Annual Conference*, Dallas, TX.
- McFadyen, A. K., Webster, V., Strachan, K., Figgins, E., Brown, H., & McKechnie, J. (2005). The readiness for interprofessional learning scale: A possible more stable sub-scale model for the original version of RIPLS. *Journal of Interprofessional Care*, 19(6), 595-603. <https://doi.org/10.1080/13561820500430157>
- Oggins, J., & Whitlow, C. (2001). What student interviewers learn about survey research, aging, and themselves. *Gerontology & Geriatrics Education*, 22(3), 59-77. [https://doi.org/10.1300/J021v22n03\\_06](https://doi.org/10.1300/J021v22n03_06)
- Polizzi, K.G. (2003). Assessing attitudes toward the elderly: Polizzi's refined version of the aging semantic differential. *Educational Gerontology*, 29, 197-216. <https://doi.org/abs/10.1080/713844306>
- Rosencranz, H., & McNevin, T. (1969). A factor analysis of attitudes toward the aged. *Gerontologist*, 9, 55-59.
- US Census Bureau. (2014). *National population projections*. Retrieved from <https://www.census.gov/data/tables/2014/demo/popproj/2014-summary-tables.html>
- Wilkins, S., & Rosenthal, C. (2001). Career choices: A comparison of two occupational therapy practice groups. *Canadian Journal of Occupational Therapy*, 68, 29-40. <https://doi.org/abs/10.1177/000841740106800104>
- Wilkinson, T.J., Gower, S. & Sainsbury, R. (2002). The earlier, the better: The effect of early community contact on the attitudes of medical students to older people. *Medical Education*, 36(6), 540-542. <https://doi.org/abs/10.1046/j.1365-2923.2002.01226.x>
- World Health Organization. (2010). *Framework for action on interprofessional education & collaborative practice*. Geneva, Switzerland: World Health Organization.
- World Health Organization. (2018). *Aging and life course: Ageism*. Retrieved from <http://www.who.int/ageing/ageism/en/>