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## Global Occupational Therapists' Health and Wellness Interventions with Community-Dwelling Older Adults

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Global Occupational Therapists' Health and Wellness Interventions with Community-Dwelling

Older Adults

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Abstract

**Rationale:** The profession of occupational therapy (OT) has an opportunity to positively impact health and wellness for community-dwelling older adults with the approaching global increase of the aging population (He, Goodkind, & Kowal, 2016). **Objective:** The purpose of this study was to explore occupational therapists' use of health promotion and wellness approaches to facilitate healthy aging with community-dwelling older adults in a global context. **Results:** Four qualitative themes were uncovered: perceptions of older adults, safety, the role of OT, and preventive versus reactive care. Participants with 10 or more years of experience addressed spirituality in practice more often than those with less than 10 years of experience. **Implications:** The results provide insight into the perspectives of global occupational therapists' practice with community-dwelling older adults, and how the OT profession can increase awareness of the cultural impact on the OT process for the future development of OT practice.

As of 2015, older adults age 65 and older represent 8.5% of the world's population, equivalent to 617 million individuals (He, Goodkind, & Kowal, 2016). The United States Census Bureau predicts that the older adult population will increase by 27 million each year until

reaching 1.6 billion by 2050 (He et al., 2016). Older adults will exceed the number of all children under the age of five by 2020 (He et al., 2016).

The global aging trend provides challenges and opportunities in healthcare delivery, and increases the prevalence of non-communicable diseases including stroke, cancer, cardiovascular disease, and age-related disabilities (He et al., 2016). These illnesses and disabilities impose occupational performance issues, which are physical or cognitive impairments that inhibit the ability to participate in meaningful occupations (Townsend, 2002). As an individual ages, limitations in everyday activities that promote the maintenance of functional independence become prevalent (He et al., 2016; Rogers & Holm, 1994). The upward trend of the aging population provides opportunities for OT practitioners to focus on promoting health and wellness as a preventive measure, rather than an inevitable epidemic.

Aging stereotypes and perspectives on aging, influenced by ageism and environment, vary across cultures. According to a study by Ory, Kinney Hoffman, Hawkins, Sanner, and Mockenhaupt (2003), "Ageist stereotypes are pervasive in U.S. society and harmful to older adults' psychological well-being, physical and cognitive functioning, and survival" (p. 164). Ory et al. (2003) identified several common myths related to aging, including the belief that aging equates to sickness and that older adults are unable to learn new concepts. Appropriate communication strategies, such as offering motivating messages and addressing aging stereotypes, can increase the effectiveness of health promotion programs for older adults and create a positive societal view of aging (Ory et al., 2003). Strategies to address aging stereotypes include educating caregivers, creating opportunities for intergenerational connections, designing productive roles for older adults to participate in meaningful activities, and modifying the environment to facilitate independent functioning (Ory et al., 2003).

Having a positive perspective on aging can predict health outcomes, which leads to better physical functioning (Sargent-Cox, Anstey, & Luszcz, 2012). Levy, Slade, Kasl, and Kunkel (2002) found that older adults who had positive self-perceptions of aging lived 7.5 years longer than those who did not. The increasing older adult population constitutes an opportunity for health promotion and healthy aging programs, thus creating opportunities for positive aging stereotypes (Marques, Lima, Abrams, & Swift, 2014). Positive aging stereotypes and lower perceived subjective age are associated with successful recovery from disease and positive health outcomes (Levy, Slade, Murphy, & Gill, 2012; Levy, 2003). Positive aging perspectives influence longevity, self-image, and societal norms for individuals across varying contexts.

With societal and cultural considerations, safety for older adults also needs to be addressed. According to the World Health Organization (2018), falls are the second leading cause of accidental death worldwide for older adults, age 65 and older, constituting the largest group of fatal falls. In 2015, falls cost an estimated \$50 billion in the United States (Florence et al., 2018). OTs can use different assessments to determine if clients are at risk for falls, and use intervention strategies like home modifications, exercise, and education to reduce the occurrence of falls (Tomita, Saharan, Rajendran, Nochajski, & Schweitzer, 2014; Leland, Elliott, O'Mally, & Murphy, 2012).

### Occupational Therapy Theoretical Model

Healthy aging among the older adult population requires environmental consideration. External environmental factors and fluctuating contexts influence occupational opportunity and performance (Dunn, Brown, & McGuigan, 1994). Within the scope of OT, the Ecology of Human Performance (EHP) model emphasizes the role of context as it facilitates human performance in activities or occupations (Dunn et al., 1994). The physical, social, and cultural features of an individual's environment continuously interact to produce optimal opportunities for occupational participation. Furthermore, context allows a person to derive meaning from an occupation or activity (Dunn et al., 1994). It is imperative that OTs examine these environmental features to determine the most efficacious interventions for healthy aging and health promotion.

The global population of older adults will outnumber all other age groups for most countries by 2020 (He et al., 2016). With the increase, there are opportunities for healthcare professionals to facilitate health promotion and wellness for older adults. The health profession of occupational therapy (OT) is equipped with knowledge and skills needed to provide evaluation and interventions for older adults that promote wellness. For the purpose of this research, OTs are individuals with all levels of education, including occupational therapy assistants and occupational therapists.

### **Problem Statement**

As individuals are living longer, there is an increased risk for limitations in daily routines and occupational engagement that negatively impact health and well-being. This phenomenon creates opportunities for OTs to intervene to facilitate occupational engagement through health promotion and preventive interventions for older adults.

### **Purpose and Research Question**

The pattern of decreased occupational engagement in the United States older adult population has emerged from an enduring cultural narrative that older adults are weak, ill, and incapable of independently performing daily occupations. This narrative could be one of the reasons that life expectancy in the United States is lower than other countries that have an expectation of older adults to remain active and independent (Buettner, 2012). The approach to aging in the United States is often more reactive than proactive, as there is more emphasis on medical and pharmacological treatment of age-related conditions than there is on health promotion (Karlin, Weil, Saratapun, Pupanead, & Kgosidialwa, 2014).

To alter public perception and approaches to aging, there is a need for further research to support global health promotion and aging. The purpose of this study was to examine how OTs use health promotion and wellness approaches to facilitate healthy aging with community-dwelling older adults in a global context. The research question was: How do global occupational therapists and occupational therapy assistants working with community-dwelling older adults address health promotion and wellness in the OT process?

### **Significance of Problem**

The population projection justifies the need for more OTs to take an active role in promoting health and wellness in older adults by influencing social norms about healthy aging across the life course. To adapt to this change and provide the best care, the OT profession must gain new knowledge to identify opportunities and new ways to deliver care in a proactive manner. He et al. (2016) predict that the global life expectancy will increase from 68.6 years to 76.2 years by 2050. The healthcare system can adapt to the increasing older adult population by providing more accessible healthcare services to older adults who are living longer and those who have chronic conditions (Garza, 2016). OTs can use preventive efforts, such as fall prevention education, home modifications, and positive aging perspectives to provide the framework for promoting health and wellness to facilitate healthy aging.

### **Justification**

The limited research about global OT and the predicted population trajectory elicits the opportunity for healthcare professionals, including OTs, to anticipate and prepare for the increasing aging population (He et al., 2016). Environments where individuals live longer and exhibit healthy aging serve as a guide for OTs to enhance the lives of older adults (Buettner, 2012). These connections lead to the current study's consideration of the increasing older adult population, how environment influences aging, and how OTs incorporate healthy aging techniques into practice to improve clients' well-being.

### **Summary**

The current study proposed to discover diverse methods that global OTs use to promote health and wellness for older adults. Knowing how global OTs work with older adults can highlight areas of practice that need revision and improvement, and provide future implications for practice. This research study provides valuable information about how global OTs promote health and wellness for older adults, thus influencing the future development of OT practice. Researching global OT practice will demonstrate differences in location and provision of OT services, and perspectives of the OT profession (Mackenzie et al., 2017).

### **Key Terms**

Health promotion - The use of discipline-specific techniques to assist people in achieving their health-related goals.

Occupational therapy - A health profession that facilitates and empowers people to engage in the activities that are necessary or desired to do in their daily lives.

Community-dwelling older adult - Any individual aged 65 years or older who resides within their own home or in the community.

Wellness - An individual's life satisfaction based on the perception of physical and psychological experience.

### **The Ecology of Human Performance Model**

The components of EHP include the person, context, task, and performance range. The person component includes personal characteristics, such as cognition, behaviors, psychological factors, and physiological factors (Dunn et al., 1994). Context includes both temporal and environmental components. The person and context are components of the EHP model that

cannot disconnect, meaning the environment influences an individual's behaviors (Teeters Myers, 2009). The person and context work in conjunction to influence task and performance range. A person engages in tasks to complete a goal, and multiple tasks form an occupation. An individual's performance range influences the feasibility of tasks a person can engage in based on personal and contextual abilities (Dunn et al., 1994). Personal and contextual factors can alter this range, which can either help or hinder an individual's ability to engage in a task (Dunn et al., 1994).

EHP intervention strategies emphasize the environmental component of human performance. The specific interventions of EHP are to (a) establish new skills or restore skills lost due to the client's impairment, (b) alter the context in which the client performs the activity, (c) adapt contextual features or task demands to facilitate the client's performance, (d) prevent person, context, or task variables that are maladaptive to performance, and (e) create opportunities for the client to apply new or restored skills (Dunn et al., 1994). Furthermore, the authors of EHP suggested that people use environmental cues to adjust personal skills and abilities to facilitate task performance. According to Dunn et al. (1994), behaviors necessary to accomplish a goal are dependent on an individual's context. OTs can apply the EHP intervention strategies in several contexts with clients who vary in age and diagnoses, creating many opportunities for health promotion and wellness in older adults.

### **Person**

Cultures, norms, values, and beliefs are parts of the person that influence aging perspective. The growth of the older adult population warrants cultural diversification and increased illness prevalence across the world. Levy et al. (2002) found that older adults who had positive self-perceptions of aging lived 7.5 years longer than those who did not have as positive self-perceptions on aging, after controlling for age, gender, socioeconomic status, loneliness, and functional health (Levy et al., 2002). Additionally, an individual's will to live mediated self-perceptions of aging and survival. Although positive self-perceptions of aging increased will to live and survival, some individuals could successfully cope with negative perceptions and stereotypes without adverse effects (Levy et al., 2002). Aging has the potential to be an opportunity rather than a barrier to society by changing how the public perceives aging across cultures and generations.

An additional component of the person is the client factor of spirituality, identified in the Occupational Therapy Practice Framework (AOTA, 2014). Spirituality is an individual's sense of meaning or purpose, which influences the occupations an individual chooses to participate in (AOTA, 2014). An individual's spirituality can impact coping mechanisms, as older adults with greater spirituality use social support to cope with illness and injury (Moxey, McEvoy, Bowe, and Attia, 2011; Koenig, George, & Titus, 2004).

Older adults can maintain their psychosocial skills through actively engaging in social participation. In a study by Teater (2016), 70 older adults in Southwest England participated in an intergenerational program to promote active aging. The program "Time After Time" facilitated the participation of both older adults and college students in several activities,

including singing, dancing, board games, picnics, and tai chi (Teater, 2016). Participants reported that the program improved their self-confidence, improved their self-esteem, and helped develop their social skills (Teater, 2016). The study lacks the consideration of cultural contextual factors, which may have impacted interactions between the older adult and college student participants. Results of the study reinforce the importance of person factors, such as social skills, in the healthy aging process. Intergenerational programs like “Time After Time” could be pivotal in supporting health promotion for older adults.

### **Context**

A study by Chan, Chan, Chan, Cheung, & Lee (2016) examined older adults’ housing environments as a crucial component in promoting aging in place. Researchers used photovoice to allow older adults to express personal preference of what they thought they needed to help them remain independent in their home. The photovoice process identified three themes, including age-friendly housing design, supportive neighborhood, and connection to family and community (Chan et al., 2016). Suitable housing and community involvement connect to the current study because aging in place influences health and well-being (Hammarström & Torres, 2012). The article describes components of aging in place and important aspects to consider for housing environments; however, there needs to be additional research to support the applicability of results.

Waite (2015) compiled information about OT settings in Colombia, Denmark, Zimbabwe and Thailand from interviews with eight OTs. The information gathered from the interviews discussed the most common settings OTs work in, the services provided, and the type of healthcare framework the country uses. The purpose of this article was to gather more in-depth information from these countries to help discover differences between global OT settings. Each country exhibited differences in interventions, making this article relevant to the current study (Waite, 2015). There are still differences in how OT is viewed as a profession and used within a healthcare framework, despite an established global standard for OT (Waite, 2015). This article lacks understanding of where the differences originate, and how these differences affect healthy aging (Waite, 2015). There needs to be more research conducted to identify and understand the origin of these differences, and how to use the unique perspectives of OTs from each nation to promote healthy aging.

### **Task and Performance Range**

The purpose of a study conducted by Eriksson et al. (2011) was to describe the occupations of older adults. Researchers found 10 activities, such as doing dishes and visiting with friends and family, that were central across culture, meaning that 50% or more of the older adults in all eight countries performed them (Eriksson et al., 2011). Furthermore, the study found 16 other activities central to Asian culture, and 18 that were central to Western culture. The results of this study enhance the understanding of activities that are important throughout the world, but also considers activities that embrace cultural significance (Eriksson et al., 2011). These concepts are relevant to the current study because participating in daily activities impacts individuals’ health and well-being (Yerxa, 1998). This study elicits a discussion about which



occupations are important across cultures; however, there needs to be more research about how these activities can promote health and well-being in older adults.

The purpose of a study by Bhella et al. (2014) was to examine how lifelong exercise can prevent common cardiovascular conditions seen in the older adult population, such as hypertension and heart failure. Each older adult walked on a treadmill and received a cardiopulmonary stress test and an echocardiography. The study found that sedentary and casual exercisers displayed stiffer ventricles compared to committed and competitive exercisers (Bhella et al., 2014). The results of this study display that exercise for four to five times per week over a lifetime can prevent the common cardiovascular conditions older adults experience (Bhella et al., 2014). Furthermore, these results highlight the importance of preventive healthcare and the need of these strategies to be lifelong starting from a young age. There needs to be more research about how to incorporate exercise from a young age to prevent cardiovascular conditions later in life.

A component to influencing performance range in community-dwelling older adults may include further insight into OT's role in healthy aging. A study by Clemson and Laver (2014) explored the attitudes of Australian OTs toward redefining the role of OT in promoting active aging in community-dwelling older adults. Survey participants reported that OTs spend a disproportionately large portion of time on assessment, and far less time on providing intervention (Clemson & Laver, 2014). This discrepancy is due to a lack of evidence and adequate training to support interventions in areas such as fall prevention and retraining of activities of daily living (Clemson & Laver, 2014). The authors suggested that refining the role of OT in active aging may require "lobbying to change organizational expectations of [OT's] role and investigating ways to better manage [OT's] practice" (Clemson & Laver, 2014, p. 206). These findings highlight the importance of reaffirming the role of OT in healthy aging with community-dwelling older adults to enhance performance range and subsequent occupational engagement.

### **Reliability and Validity**

A mixed methods design was used to collect qualitative and quantitative data using an online survey. The survey was adapted from a prior study to increase relevance for the current study (Lysaught, Schmaltz, & Zalar, 2017). The survey has accrued reliability and validity from its implementation in a previous study, and from its foundation of evidence-based research (Lysaught et al., 2017; Taylor, 2017). Measures to increase reliability, validity, and trustworthiness of the tool are further discussed in the methodology section.

### **Methodology**

#### **Study Design**

The study followed a mixed methods design, which is a form of mixed methods that combines qualitative and quantitative data to comprehensively analyze research topics (Creswell & Creswell, 2018). Mixed methods was an appropriate design for the current study, because it allowed the student researchers to combine both forms of data and integrate multiple perspectives on the topic while neutralizing bias that often results from quantitative or qualitative

data alone (Creswell & Creswell, 2018). A key assumption of mixed methods is that “both qualitative and quantitative data provide different types of information - often detailed views of participants qualitatively and scores on instruments quantitatively - and together they yield results that should be the same” (Creswell & Creswell, 2018, p. 217). The qualitative data came from open-ended survey questions providing a holistic, complex view of the research topic derived from the unique perspectives of OTs (Creswell & Poth, 2018). Quantitative data came from close-ended, Likert-style survey questions.

### **Participants**

The population for this study were occupational therapists and occupational therapy assistants who have had at least one year of experience working with older adults across all nations of the world. Community-dwelling older adults are individuals aged 65 years or older who reside within their own home or in the community. Participants voluntarily completed an online survey made through Survey Monkey. OTs participated in the survey when it was posted on the Facebook page, Twitter page, and website associated with the World Federation of Occupational Therapists (WFOT). OTs participated in the survey from a link posted on the Productive Aging Special Interest Section and survey request pages of CommunOT, a community forum for American Occupational Therapy Association (AOTA) members to network and share information about OT practice (AOTA, 2018). WFOT and CommunOT are professional and credible organizations affiliated with OT.

**Inclusion criteria.** The participants for the current study were required to meet the inclusion criteria to proceed onto the online survey. The participants needed a current OT license or required licensure specific to where they practice. Participants needed to understand the English language and be available through viral contact to complete the online survey. The participants needed to have at least one year of experience working with community-dwelling older adults.

**Exclusion criteria.** The participants for the current study were excluded if they did not have current, required licensure specific to where they practice, and if they could not read and comprehend English. They were also excluded if they were unavailable through viral contact to access the survey, and if they did not have at least one year of experience working with community-dwelling older adults.

### **Procedure**

Student researchers conducted a comprehensive literature review using the Grand Valley State University library database, the American Journal of Occupational Therapy, and the AOTA website. Search terms included international occupational therapy, older adults, aging, successful aging, health promotion, and wellness. Research focused on aging and health promotion in OT practice for community-dwelling older adults residing in nations across the world. The student researchers drafted the background, purpose, and significance of the proposed study.

Student researchers contacted the Grand Valley State University Office of Research Compliance and Integrity (GVSU RCI) to confirm if recruiting participants using social media

was acceptable and within human subjects protection. After permission was granted, the student researchers contacted WFOT and AOTA asking if the administrators of the Facebook pages would be willing to post a link to the survey for OTs to take voluntarily. The executive director of WFOT granted permission to post the link on the WFOT Facebook and Twitter pages and offered to waive the \$90 fee to host the survey on the WFOT website for two months.

A representative from the AOTA social media organization declined the request to post the survey on the AOTA Facebook page; however, they recommended the student researchers post the link on CommunOT, which is an online forum for AOTA members. The student researchers received assistance from the GVSU Statistical Consulting Center on April 4, 2018 to tailor survey questions to fit the aims of the research study, and to use consistent language for ease of comprehension.

The survey remained open for two weeks for participants to complete. One student researcher posted the survey to the survey request page of CommunOT on July 13, 2018. A week later on July 20, 2018, the student researcher posted the survey to the Productive Aging Special Interest Section to gather more participants. A reminder to complete the survey was posted under the survey request page on the same day. The survey was posted to the WFOT website on July 13, 2018, and to the WFOT Facebook and Twitter pages on July 14, 2018. The survey closed on July 27, 2018.

### **Instrument**

The survey for the current study was made through Survey Monkey, including 10 Likert-style and numeric matrix questions and three open-ended response questions. An electronic survey is a logical choice for expansion of the potential sample size, accessibility for participation, and efficiency of data collection. The Internet provides access to survey participants that could not otherwise be acquired (Taylor, 2017). The survey was a continuation of a survey developed by graduate students from a previous study titled “Community Based OT’s Perceptions of the Applications of Blue Zone Principles with Older Adult Clients” (Lysaught et al., 2017).

The beginning of the survey included a cover letter with consent informing the participant about the research project, and a question to include or exclude the participant from continuing with the survey based on the inclusion and exclusion criteria. Participant confidentiality was maintained, as the only information disclosed to student researchers was the participant's country of practice, professional title, and responses to questions. Refer to Appendix A to view the cover letter.

The student researchers modified the original survey to consider global OTs, instead of OTs residing in the Midwestern United States (Lysaught et al., 2017). Omitted questions from the original tool included numbers 4, 6, and all three qualitative questions, due to irrelevance for the current study. New questions include the inclusion/exclusion question, questions number 4, 6, and all three qualitative questions. Lastly, question numbers 2, 3, 5, and 7 were modified to fit the scope of the current research. Questions preserved from the original survey are questions 1, 8, 9, and 10, due to relevance to the current study. The survey included drop-down menus,

numeric-style matrices, and free-response sections for participants to answer questions (Lysaught et al., 2017). Refer to Appendix B to view the survey.

### **Reliability and Validity**

Because the survey was developed and only used once in the previous study, reliability and validity had not been established. The existing tool was developed using a literature review of evidence-based practice and it has more reliability and validity than creating a new tool (Lysaught et al., 2017; Taylor, 2017). Making modifications to the previous survey increased the potential for reliability and validity for use in future research studies.

To increase the reliability and validity of the survey, two student researchers met with the Grand Valley State University Statistical Consulting Center to modify questions to ensure statistical quality. Modifying questions allowed for organized, statistical analysis after data collection. Strengths of the survey included its accessibility via Internet, its usage in a previous study, and having it posted on reputable, professional organizations affiliated with OT. Survey responses may not be generalizable to all global OTs, participants may have been bypassed from having the survey posted to few online platforms, and participants may have been missed from lack of Internet access.

Qualitative research considerations included trustworthiness of the research tool and analysis of findings. Following the administration of the survey, student researchers used triangulation of data analysis to increase trustworthiness of results (Taylor, 2017). The student researchers themed the qualitative data to increase intercoder agreement, and to further increase trustworthiness, reliability, and validity (Creswell & Poth, 2018). Validity was increased by connecting and describing themes using thorough description to provide a comprehensive understanding of the research topic (Creswell & Poth, 2018). Efforts to increase reliability was addressed by assessing intercoder agreement between student researchers (Creswell & Poth, 2018).

## **Results**

### **Data Analysis**

Student researchers analyzed quantitative data using a Wilcoxon rank sum test comparing survey participants' years of experience (those with 10 years of experience or more compared to those with one, two, six, seven, and eight years). Student researchers coded the qualitative data individually and agreed upon the following themes: perception of older adults, safety (extrinsic and intrinsic environmental factors for fall reduction), expanding the role of OT, and preventive versus reactive healthcare.

### **Characteristics of Participants**

Fifty-four participants initiated the survey. Eighteen participants terminated the survey early or did not complete the survey, leaving the remaining sample size of 36 participants. Data were included if participants completed either the qualitative, quantitative, or both sections. Countries represented in the sample included the United States, Canada, England, Germany, and Ukraine. All participants had experience working in the United States. Three participants (two

from the United States and one from Germany) did not complete the qualitative questions; therefore, only quantitative data were collected for these individuals.

Participants' years of experience working as OTs and the percentage of representation in the sample include: one year (2.7%), two years (2.7%), six years (5.5%), seven years (11%), eight years (8.3%), and 10 or more years (69.4%). Settings included inpatient rehabilitation, outpatient rehabilitation, skilled nursing facility, home health, community-based setting, acute care, adult day program, and private practice.

### **Quantitative Findings**

Descriptive statistics was the most appropriate style of analysis for the current research study because of the unequal group distribution. Groups were compared based on years of practice due to the small sample size. Quantitative data was analyzed using a Wilcoxon rank sum test. The question "*How frequently do you address spirituality in treatment sessions with each client?*" was statistically significant ( $p = .032$ ;  $p < .05$ ). Refer to Table 1 in Appendix C for quantitative results regarding topics addressed in OT practice.

### **Qualitative Themes**

**Perceptions of older adults.** The first theme that emerged was the perceptions of older adults in the United States. Participants described a shared opinion that people generally view older adults negatively in the United States. One survey participant described an overall negative perception of older adults in the United States, calling attention to the role of the media in perpetuating misconceptions about aging: "[The] US does not respect the aged... [they are] looked at negatively in terms of advertising and messages in television, movies, and mass media" (United States).

Two other participants further implored the reader to change the perception of older adults who wish to age in place by promoting inclusion in social, spiritual, and leisure activities: We need to change the perception of older adults moving into mini continuums to age in place. Many of these communities offer care from independent condominiums to full skilled care. The benefits within these settings are advantageous for social participation, spirituality, activities and leisure, and community service to name a few. (United States)

The population is aging, so we are seeing that older adults still have value and can actively engage in life, their communities, etc. Most people seem to understand that older adults "have value". The trick now is to have people recognize that our oldest [adults] (>80) can also still have value and should be included in family and community events, not treated as relics of ancient days with nothing of value to add to an event, activity, or conversation. And sometimes, those oldest of the old need assistance recognizing that, too. "I'm too old, so it doesn't matter." (United States)

**Safety: extrinsic and intrinsic factors for fall reduction.** Safety was a prevalent response within qualitative findings. Falls can occur due to intrinsic factors (e.g. weakness or dizziness), extrinsic factors (e.g. a trip hazard or lack of environmental support), or a

combination of both. Providing safety measures in the form of home modifications, preventive measures, and education to increase awareness to prevent falls were common responses. Home modifications (e.g. adding grab bars and railings) and preventive measures (e.g. removing throw rugs) can be useful to help prevent falls and lead to safety at home. Provision of education on fall prevention can be provided in verbal, written, or modeled demonstrations. A participant suggested how the OT profession could adapt by discussing the importance of patient education: “We can help to individualize general concepts (re: falls, activity, home modifications) to the specific patients we see, even if the referral does not read, ‘fall prevention’, etc.” (United States).

Not only were the extrinsic or environmental factors of safety discussed, but physiological factors were considered as well. One participant went beyond environmental factors and discussed how the changing sensory system and aging body should be taken into consideration for safety when implementing interventions for healthy aging: “Education and implementation of safety strategies/modifications, increasing balance, functional activity tolerance and strength, low vision mods, social engagement, education re: diet, hydration and meds” (United States).

**Expanding the role of OT.** Participants identified the need for more education about the OT profession and advocacy for using OT services in more practice settings to adapt to the increasing aging population:

I feel that our country influences occupational therapy’s approach to healthy aging because often times people do not understand the role of occupational therapy and what we are trained/educated to do in our schooling. I feel that it is important to continue advocating for our profession and our role in healthy aging of older adults. (United States)

One participant’s quote highlights the need for OT to be in more practice settings to meet the needs of the growing adult population: “Staff OTs in all sorts of practice areas from ICU to acute care, inpatient to outpatient rehabilitation, and community and mental health settings” (United States).

**Preventive versus reactive care.** A theme that was represented in all questions was the idea of preventive versus reactive approach to care. Participants indicated the United States uses a reactive approach rather than a preventive one. One participant discussed that the United States society is dependent on the use of drugs and medical procedures instead of taking preventive action such as modifying diet or physical activity:

U.S. society, healthcare system and insurance are reactive rather than proactive or preventive, we wait for a problem/illness/accident to happen rather than modifying lifestyle to prevent or adjust to changes in health as we age. Our society is more dependent on drugs and medical procedures to solve issues rather than action, such as changing diet, activity or mindset. Insurance does not pay for preventive OT safety or physical assessments, our treatment is typically only after someone has suffered an illness or traumatic event. (United States)

Another participant compared the United States' healthcare to other countries' healthcare, indicating that England and Canada better support older adults in healthy aging. The public health systems were also better because there was more group therapy leading to positive outcomes:

Having worked in 3 countries, I think England probably had the best approach of the three with supporting their elders to stay living in their chosen home environment as long as possible. Also, the public health care system in England (and Canada) allowed greater opportunities for group format for therapy without having to worry about billing. I saw very positive outcomes for varieties of groups (falls, Parkinson's Disease, Fibromyalgia). (England, United States, & Canada)

### **Discussion**

The purpose of this study was to examine how occupational therapists use health promotion and wellness approaches to facilitate healthy aging with community-dwelling older adults in a global context. The research question was: how do global occupational therapists and occupational therapy assistants working with community-dwelling older adults address health promotion and wellness in the OT process? Four themes emerged from responses to qualitative survey questions to address this question.

First, participants expressed that there is a generally negative perception surrounding older adults, particularly in the United States, which curtails the inclusion and acceptance of older adults in activities that promote health and wellness. Some participants suggested that changing this negative perception to one that is more positive could yield more beneficial health outcomes in older adults. Research supports that positive perceptions of aging are associated with successful recovery from disease and positive health outcomes (Levy et al., 2002; Levy, 2003). OTs can address aging stereotypes and influence the healthy aging practices of older adults by providing education to direct caregivers, facilitating intergenerational interactions, encouraging productive roles in meaningful activities (e.g. volunteering), and adapting or modifying the environment to enhance occupational engagement (Ory et al., 2003).

Second, participants suggested that increasing and enhancing safety is pivotal to facilitate healthy aging. Strategies to promote safety included home modifications to reduce environmental hazards and the use of education for fall prevention. Research shows that modifying components of the home environment positively influence health and well-being (Chan et al., 2016; Hammarström & Torres, 2012). Based on the cost and frequency of fatal falls, there is room for improvement for safety and opportunities for OTs to step in to use different intervention strategies (WHO, 2018; Florence et al., 2018; Leland et al., 2012). Relating to EHP, OTs can alter the context by using home modifications, preventing maladaptive behaviors, and creating opportunities for new skill acquisition through education.

Third, participants indicated that there is limited understanding among the general population about the role of OT in the aging process for community-dwelling older adults. Raising awareness of OT's role in this setting included advocacy for the profession and the expansion of OT to more settings that serve older adults. Clemson and Laver (2014) suggested

methods to redefine the role of OT in active aging, which are congruent with participants' attitudes in the current study. Lobbying for organizational change and instating new and innovative ways to better manage the practice of OTs working with community-dwelling older adults may be effective solutions in asserting the role of OT in the aging process (Clemson & Laver, 2014). Furthermore, increasing the performance range and subsequent occupational engagement of older adults could be a positive byproduct of reaffirming OT's role in healthy aging.

Lastly, participants expressed that the United States healthcare system emphasizes treating the injury or illness rather than the cause. This reactive approach contrasts the preventive approach that is characteristic of other countries, such as England and Canada. The participants expressed the need for the United States to adopt a preventive approach instead of continuing to use the ineffective reactive approach. Using a preventive approach can promote a healthier daily routine for older adults (Karlin et al., 2014). Promoting preventive healthcare, such as lifelong exercise, can avert the onset of common cardiovascular diseases seen in the older adult population (Bhella et al., 2014). OTs can adapt or modify healthy habits such as exercise to fit into the daily routine for older adults.

Results of the study concluded that participants with 10 or more years of experience addressed spirituality more often than those with fewer years of experience. OTs can use the EHP intervention strategy of create to establish an environment that freely encourages older adults to use their spirituality to help cope with and make sense of their illness or impairment (Koenig et al., 2004).

### **Application to OT Practice**

Intervention strategies that participants considered as important to continue included home modifications, fall prevention, and education. OTs use a variety of intervention strategies to reduce potential falls for older adults including environmental modifications, exercise, and multicomponent interventions (Leland et al., 2012). OTs and older adults can collaboratively use the Home Safety Self-Assessment Tool to identify fall risks in the home and home modifications that can be made to reduce fall risk (Tomita et al., 2014).

Comparisons between practices in different countries support the need for preventive care for community-dwelling older adults. Participants expressed that the reactive approach to care used by the United States is ineffective, thus supporting additional research about the benefits of using preventive care to facilitate healthy aging for older adults (Karlin et al., 2014). Through participants' views of care and findings from research, there is an opportunity for the inclusion of preventive strategies throughout the OT process through direct intervention and education. Introducing and providing education on these strategies in early adulthood can help prevent the onset of conditions and diseases common in older adults (Bhella et al., 2014; Karlin et al., 2014).

The mixed societal perceptions of older adults educate OTs about their clients' cultural experiences. Societal perceptions could alter an older adults' self-perception of health and wellness. Additional research warrants the opportunity for OTs to be aware of potential stereotypes to promote health and wellness (Levy et al., 2002; Levy, 2003; Marques et al., 2014).



Intergenerational socialization increases self-esteem and self-confidence, which influences self-perceptions (Teater, 2016). These findings advance the knowledge for OT practice with older adults and provides insight for how the OT profession can adapt to meet the needs of the growing aging population.

According to Moxey et al. (2011), community-dwelling older adults with greater spirituality perceive their social support as an effective mechanism to help cope with illness and multiple comorbidities. While OTs gather an occupational profile, addressing spirituality allows them to explore which occupations their clients find meaningful to progress through the OT process (Eriksson et al., 2011). Addressing spirituality during an initial evaluation promotes an environment that allows clients to openly share about how they cope with illness and comorbidities, which facilitates client-centered care (Moxey et al. 2011; Koenig et al., 2004).

### **Limitations**

There were several limitations in this study. First, a limited sample size of 36 participants prevented the student researchers from generalizing the results to the larger population of global OTs. Second, all participants reported having practiced in the United States and four additional countries. Consequently, there was a lack of diverse perspectives from OTs practicing in countries beyond the United States. Third, participants did not consistently identify notable differences or similarities in their country of practice, if different from (or in addition to) the United States. This limitation could be the result of open-ended survey questions being unclear due to language barriers or different understandings of terminology. Fourth, the student researchers used two social media platforms to share the survey, which limited the pool of participants able to complete the survey. Lastly, several participants initiated the survey but did not complete it.

### **Future Research**

Further research should focus on increasing the number of participants, recruiting more OTs outside the United States, and improving the quality of the survey tool. First, future research should include a larger sample size to increase the likelihood of obtaining results that are generalizable to the larger population. Expanding the pool of participants should include OTs who practice exclusively outside of the United States to obtain more diverse perspectives. Second, open-ended survey responses should include explicit directions for the participants to clearly state their country of practice for comparison purposes. This will allow prospective researchers to connect responses with specific countries.

### **Conclusion**

The results of this study add to the growing area of research of how culture may affect OT practice; specifically, how a country's culture may affect practice with community-dwelling older adults. The mixed perceptions of older adults highlight the need to increase awareness of perceptions and stereotypes. Understanding these, OTs can be respectful when working with older adults while simultaneously promoting positive perceptions in their community. The major improvement is to focus on preventive care instead of reactive care. Focusing on preventive care, being aware of cultural influences, and understanding the perceptions and stereotypes of

community-dwelling older adults can help global OTs provide improved quality of care throughout the OT process.

#### Appendix A

Thank you for agreeing to participate in this survey. The following questions are being collected by occupational therapy students from Grand Valley State University for the study titled “Global Aging: A Survey of Occupational Therapists’ Use of Health Promotion and Wellness Approaches with Community-Dwelling Older Adults.”

You are asked to voluntarily provide specific information to this website. You may skip any question or stop participating at any time. The information collected will be used for the stated purposes of this research project only and will not be provided to any other party for any other

reason at any time except and only if required by law. You should be aware that although the information you provide is anonymous, it is transmitted in a non-secure manner. There is a remote chance that skilled, knowledgeable persons unaffiliated with this research project could track the information you provide to the IP address of the computer from which you send it; however, your personal identity cannot be determined.

## Appendix B

Inclusion Question. Are you currently or have you in the past worked with older adults in the community as an occupational therapist or occupational therapy assistant?

Yes

No

1. How long have you been an occupational therapist or occupational therapy assistant?

2. How long have you been working with community-dwelling older adults?

3. In which settings have you worked with older adults as a registered occupational therapist/certified occupational therapy assistant? (check all that apply)

- Inpatient Rehabilitation
- Outpatient Rehabilitation
- Skilled Nursing Facility
- Home Healthcare
- Community-Based Setting
- Other (please specify)

4. In which country/countries have you practiced occupational therapy working with the older adult population?

Professional Opinion Question 5. Please rate the following on a scale of 0-9 (0 being not important at all and 9 being extremely important).

	0	1	2	3	4	5	6	7	8	9
In your professional opinion, how important is social participation when developing and implementing treatment for your community-dwelling older adult clients?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Frequency Questions 6-10. Please rate the following on a scale of 0-9 (0 being never and 9 being always).

	0	1	2	3	4	5	6	7	8	9
How frequently do you address safety (e.g., home modifications , fall prevention strategies) with your older adult clients to maintain independence in the home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How frequently do you participate in spirituality in treatment sessions with each client?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How frequently are strategies and resources for improving community mobility discussed during treatment sessions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How frequently do you encourage your clients to make movement or exercise an integral part of the daily routine?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How frequently do you instruct your clients on techniques or the importance of reducing stress in their lives?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. In your opinion, how does your country/culture influence occupational therapy’s approach to healthy aging?

12. What intervention strategies do you most frequently use with community-dwelling older adults to promote healthy aging?

13. How can the field of occupational therapy adapt to the needs of the increasing older adult population?

Appendix C

Table 1: Significance of Spirituality in Practice with Community-Dwelling Older Adults

## References

- American Occupational Therapy Association. (2018). AOTA forums (OT Connections). Retrieved from <https://www.aota.org/Practice/Manage/SIS/Listservs.aspx>
- American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process (3rd ed.). *American Journal of Occupational Therapy*, 68(Suppl. 1), S1-S48. doi:10.5014/ajot.2014.682006
- Bhella, P. S., Hastings, J. L., Fujimoto, N., Shibata, S., Carrick-Ranson, G., Palmer, M. D., . . . Levine, B. D. (2014). Impact of lifelong exercise "dose" on left ventricular compliance and distensibility. *Journal of the American College of Cardiology*, 64(12), 1257-1266. doi:10.1016/j.jacc.2014.03.062
- Buettner, D. (2012). *The blue zones: 9 lessons for living longer from the people who've lived the longest* (Second ed.). Washington, D.C.: National Geographic.
- Chan, A., Chan, H., Chan, I., Cheung, B., & Lee, D. (2016). An age-friendly living environment as seen by chinese older adults: A "Photovoice" study. *International Journal of Environmental Research and Public Health*, 13(9), 913. 10.3390/ijerph13090913
- Clemson, L. M., & Laver, K. E. (2014). Active ageing and occupational therapy align. *Australian Occupational Therapy Journal*, 61(3), 204-207. doi:10.1111/1440-1630.12125
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Dunn, W., Brown, C., & McGuigan, A. (1994). The Ecology of Human Performance: A framework for considering the effect of context. *American Journal of Occupational*

- Therapy*, 48(7), 595-607. doi:10.5014/ajot.48.7.595
- Eriksson, G. M., Chung, J. C. C., Beng, L. H., Hartman-Maeir, A., Yoo, E., Orellano, E. M., . . . Baum, C. M. (2011). Occupations of older adults: A cross cultural description. *OTJR: Occupation, Participation and Health*, 31(4), 182-192. 10.3928/15394492-20110318-01
- Florence, C. S., Bergen, G., Atherly, A., Burns, E., Stevens, J., & Drake, C. (2018). Medical costs of fatal and nonfatal falls in older adults. *Journal of the American Geriatrics Society*, 66(4), 693-698. doi:10.1111/jgs.15304
- Garza, A. (2016). The aging population: The increasing effects on health care. *Pharmacy Times*. Retrieved from <http://www.pharmacytimes.com>
- Hammarström, G., Torres, S. (2012). Variations in subjective well-being when 'aging in place' - A matter of acceptance, predictability and control. *Journal of Aging Studies*, 26(2), 192-203. 10.1016/j.jaging.2011.12.004
- He, W., Goodkind, D., & Kowal, P. (2016). An aging world: 2015 international population reports. *United States Census Bureau*. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2016/demo/p95-16-1.pdf>
- Karlin, N. J., Weil, J., Saratapun, N., Pupanead, S., & Kgosidialwa, K. (2014). Etic and emic perspectives on aging across four countries: Italy, Thailand, Botswana, and the United States. *Ageing International*, 39(4), 348-368. doi:10.1007/s12126-014-9198-7
- Koenig, H. G., George, L. K., & Titus, P. (2004). Religion, spirituality, and health in medically ill hospitalized older patients. *Journal of the American Geriatrics Society*, 52(4), 554-562. doi:10.1111/j.1532-5415.2004.52161.x
- Leland, N. E., Elliot, S. J., O'Malley, L., & Murphy, S. L. (2012). Occupational therapy in fall prevention: Current evidence and future directions. *American Journal of Occupational Therapy*, 66, 149-160. doi:<http://dx.doi.org/10.5014/ajot.2012.002733>
- Levy, B. R. (2003). Mind matters: Cognitive and physical effects of aging self-stereotypes. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 58(4), 203-211. doi:10.1093/geronb/58.4.P203
- Levy, B. R., Slade, M. D., Kunkel, S. R., & Kasl, S. V. (2002). Longevity increased by positive self-perceptions of aging. *Journal of Personality and Social Psychology*, 83(2), 261-270. doi:10.1037/0022-3514.83.2.261
- Levy, B. R., Slade, M. D., Murphy, T. E., & Gill, T. M. (2012). Association between positive age stereotypes and recovery from disability in older persons. *Journal of the American Medical Association*, 308(19), 1972-1973. doi:10.1001/jama.2012.14541
- Lysaught, J., Schmaltz, K., & Zalar, K. (2017). *Community based OT's perceptions of the applications of Blue Zone principles with older adult clients*. Unpublished manuscript, Department of Occupational Science and Therapy, Grand Valley State University, Grand Rapids, Michigan.
- Mackenzie, L., Coppola, S., Alvarez, L., Cibule, L., Maltsev, S., Loh, S. Y., . . . World Federation of Occupational Therapists. (2017). International occupational therapy



- research priorities: A delphi study. *OTJR: Occupation, Participation and Health*, 37(2), 72-81. doi:10.1177/1539449216687528
- Marques, S., Lima, M. L., Abrams, D., & Swift, H. (2014). Will to live in older people's medical decisions: Immediate and delayed effects of aging stereotypes. *Journal of Applied Social Psychology*, 44(6), 399-408. doi:10.1111/jasp.12231
- Moxey, A., McEvoy, M., Bowe, S., & Attia, J. (2011). Spirituality, religion, social support and health among older Australian adults. *Australasian Journal on Ageing*, 30(2), 82-88. doi:10.1111/j.1741-6612.2010.00453.x
- Ory, M., Kinney Hoffman, M., Hawkins, M., Sanner, B., & Mockenhaupt, R. (2003). Challenging aging stereotypes: Strategies for creating a more active society. *American Journal of Preventive Medicine*, 25(3), 164-171. doi:10.1016/S0749-3797(03)00181-8
- Rogers, J. C., & Holm, M. B. (1994). Assessment of self-care. In B. R. Bondar & M. B. Wagner (Eds.), *Functional performance in older adults* (pp. 181-202). Philadelphia: F. A. Davis Company.
- Sargent-Cox, K. A., Anstey, K. J., & Luszcz, M. A. (2012). The relationship between change in self-perceptions of aging and physical functioning in older adults. *Psychology and Aging*, 27(3), 750-760. doi:10.1037/a0027578
- Taylor, R. R. (2017). *Kielhofner's research in occupational therapy: Methods of inquiry for enhancing practice* (2nd ed.). Philadelphia: F. A. Davis Company.
- Teater, B. (2016). Intergenerational programs to promote active aging: The experiences and perspectives of older adults. *Activities, Adaptation & Aging*, 40(1), 1-19. doi:10.1080/01924788.2016.1127041
- Teeters Myers, C. (2006). Exploring occupational therapy and transitions for young children with special needs. *Physical & Occupational Therapy in Pediatrics*, 26(3), 73-88.
- Tomita, M. R., Saharan, S., Rajendran, S., Nochajski, S. M., & Schweitzer, J. A. (2014). Psychometrics of the Home Safety Self-Assessment Tool (HSSAT) to prevent falls in community-dwelling older adults. *American Journal of Occupational Therapy*, 68(6), 711-718. doi:10.5014/ajot.2014.010801
- Townsend, E. (Ed.). (2002). *Enabling occupation: An occupational therapy perspective*. Ottawa, ON: Canadian Association of Occupational Therapists.
- Waite, A. (2015). OT around the world: Profiles of occupational therapists in South America, Europe, the Middle East, Africa and Asia. *OT Practice*, 21(1), 8-12.
- World Health Organization. (2018). Falls. Retrieved from <http://www.who.int/news-room/fact-sheets/detail/falls>
- Yerxa, E. J. (1998). Health and the human spirit for occupation. *American Journal of Occupational Therapy*, 52, 412-418.