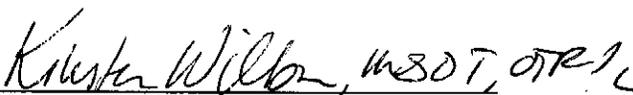


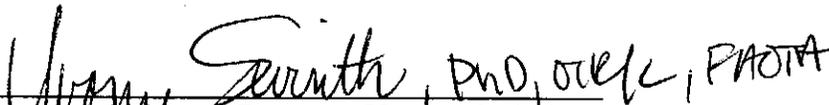
Aging in Place: Older Adults' Current Practices and Future Desires

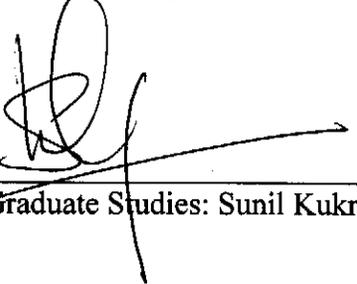
May, 2013

This research, submitted by Lauren Anderson-Connolly and Olive Oyango, has been approved and accepted in partial fulfillment of the requirements for the degree of Master of Science in Occupational Therapy from the University of Puget Sound.


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Abstract

Occupational therapy focuses on helping individuals or populations to regain or maintain independence, function, and a fulfilling life; the American Occupational Therapy Association has named productive aging as a key societal need in the 21st century. Many older adults wish to stay in their homes and communities as they age but may face challenges doing so due to age-related changes. This study, using mixed methods via a quantitative survey and a qualitative interview, attempted to identify the current practices, attitudes, and future desires that may impact occupational engagement, as reported by U.S. community-dwelling adults age 65 and older who were aging in place. The majority of study participants desired to remain in their homes. They reported relatively good health, financial stability, ties to their communities, high engagement in occupation, and plans for the future. The results emphasized that health and wellness, the ability to age in one's home at a relatively low cost, and planning for the future are crucial elements to be considered for successful aging. Overall, the study reinforced the notion of the power of occupation in the aging population, confirming that engagement in meaningful activities is typically an important component of successful aging.

Aging in place: Older adults' current practices and future desires

In 2030, 72 million Americans, constituting 20% of the population, are projected to be at least 65 years old (Federal Interagency Forum on Aging-Related Statistics, 2010).

Comparatively, this population was 39 million in 2008. Although this group will stabilize at around 20% of Americans, the absolute number will continue to increase and, most importantly, the 85 years and older age group is then projected to increase to 19 million in 2050 (from 5.7 million in 2008). Should death rates decrease even slightly more than the US Census Bureau projects (as many researchers believe will occur), this group of adults will grow even larger (Federal Interagency Forum on Aging-Related Statistics, 2010). As baby boomers (individuals born between 1946 and 1964) began to turn 65 in 2011, major changes corresponding to the aging years had already begun, and the concept of productive aging is becoming increasingly relevant to numerous social science and healthcare fields, including occupational therapy (OT) (Wilmoth & Longino, 2006; Federal Interagency Forum on Aging-Related Statistics, 2010).

Because of these projections, the American Occupational Therapy Association (AOTA) in its Centennial Vision (AOTA, 2007) declared productive aging a primary societal need. Productive aging, as opposed to simply “aging,” places an emphasis on quality of life, something for which OT has strived since its inception. Kerschner (1998) defined the concept by stating that older adults are repositories for wisdom, assets to society economically and/or socially, relatively healthy, and capable and deserving of purposeful and meaningful roles. Kerschner (1998) presented a productive aging model based on older adults' participation in work, volunteerism, leisure and travel, education, fitness, consumerism, and political activism. Kerschner's model is compatible with the second edition of the Occupational Therapy Practice Framework (OTPF): Domain and Process (AOTA, 2008).

To date, most of the research on the role of OT in aging in place has focused on defining the trend, evaluating its success in specific communities and within certain racial and/or ethnic groups, and determining its effect(s) on the health of older adults (Tang & Lee, 2011). AOTA has published evidence, position papers, and guidelines regarding OT's role in topics related to aging, ranging from client factors to its role in geriatric settings. Some examples include fall prevention, arthritis, driving and community mobility, health promotion, palliative care, and practice in senior centers. Consequently, aging in place, as an emerging practice area, provides a unique opportunity for innovation, as well as for adding to the current body of knowledge.

Background

Aging. In order to support the adults who wish to age in place, it is essential to understand the aging process. It is important, however, to remember that large variation is seen across the older adult population and that many declines are not solely linked to aging, rather they are a result of many interrelated factors (Bello-Haas, 2009). It is also key, and encouraging, to know that improvements can be made in the internal or external context of the person throughout the lifespan. The following cardiopulmonary, sensory, muscular, and cognitive changes discussed are those related to typical aging, i.e. not as part of a pathological process.

With age, the smooth muscle of the small airways of the pulmonary system lose their elasticity. Without normal recoil and with the decreased alveolar surface area and volume, there is uneven ventilation and closure, air trapping, and less effective gas exchange. This, and the barrel-shaped chest associated with aging, reduces the maximum force produced by the diaphragm and can lead to an increased risk of aspiration. Similarly to the diaphragm, cardiac muscle no longer functions at its prior level, and fibrotic changes in the nerve conduction system lead to irregularities that may make prior activities uncomfortable or unsafe. Also of note is that

many adults take one or more medications, many of which have side-effects impacting the cardiovascular system (Dean & Dornelas De Andrade, 2009). Should a deconditioned older adult fall below the cardiovascular and/or pulmonary threshold for activities of daily living (ADL), s/he may no longer be able to perform the personal care considered necessary for independent living. With regard to participation in occupation, older adults may fatigue more easily than they did when they were younger, and activities that become difficult may be completed less frequently.

Age-related changes are seen across all senses, but of particular interest is vision, due to its primary influence on engagement in occupation and in its role in falls (proprioception will be covered under neuromuscular function). Decreased elasticity and tone of the eye and supporting structures leads to skin redundancy or malposition of the skin of the eyelids, which results in difficulty with upward gaze and convergence. An inelastic lens cannot change shape (accommodate) as necessary to focus on objects at different distances. This requires many older adults to use bifocals or trifocals. With age, less light reaches the retina due to increased rigidity of the cornea and lens, cloudiness in the lens, and decreased iris dilation leading to an overall smaller pupil. In conjunction with decreasing rod density, older adults have difficulty with low light situations, light and dark adaptation, and glare (Hooper & Bello-Haas, 2009). Older adults often require additional time to become familiar with their surroundings during transition to/from indoors and outdoors.

Musculoskeletal and neuromuscular age-related changes are seen in muscle strength, muscle power, bone density, connective tissue, flexibility, balance, and coordination. A muscle cross-section from an older adult would demonstrate sarcopenia: age-associated loss of both muscle mass and number of fibers (as opposed to only mass as is the case with disuse). Bone

density decreases with age, and especially in post-menopausal females, leading to micro- and potentially major fractures. Cartilage becomes denser and loses protein and water, resulting in decreased movement of nutrients and waste. This is particularly noticeable in weight-bearing joints, which feel stiff, and contributes to the loss of flexibility. In the spine and ankle, these deteriorations can lead to increased risk for falls. Such physical changes and the resultant compensation may lead to kyphotic posture, difficulty with visual exploration and obstacle avoidance, and impede strategies for static and dynamic balance control. Changes in the nervous system delay reaction times in older adults, another factor in impaired balance (Bello-Haas, 2009). In combination with environmental factors, such as poor lighting or people rushing alongside an older adult, these changes can lead to an adult being unable to maintain balance in a situation in which s/he would have previously been able (see discussion on falls below). Participation in occupations which require physical capacities (e.g. strength) greater than that of the individual may lead to inactivity and deconditioning and possible injury.

Although cognitive function is difficult to evaluate, and bias can be introduced into the assessment tool, some age-related declines are consistently reported. First, a cognitive slowing and inefficiency with problem-solving and abstract reasoning has been documented. Cognitive inflexibility is also seen with increasing age, as is difficulty with encoding data to be stored as memories. Functionally, these impairments affect learning and recall, and cause older adults to complain of poor memory in daily life. Older adults will also need more time to learn new information and skills (Riley, 2009).

Aging in place definition and meaning of home. Aging in place refers to the increasingly popular concept of adults remaining in their homes and communities as they age, rather than moving into unfamiliar settings such as assisted living facilities, retirement homes, or

with relatives (Arvidson & Cartner-Novotni, 2011). Older adults, especially those who have lived in the same place for most of their lives, often have strong social and emotional ties to their home and community, and breaking such ties can be disruptive (Stevens-Ratchford & Diaz, 2003). Much of the existing research on aging in place emphasizes the value of familiar surroundings in contributing to overall well-being and life satisfaction, and facilitating successful aging (Andresen, Runge, Hoff, & Puggaard, 2009; Arvidson & Cartner-Novotni, 2011; Stevens-Ratchford & Diaz, 2003; Tang & Lee, 2011).

“Place” and “home” are broad, complex terms imbued with unique meaning and dynamic physical, social, and psychological components throughout the lifespan. A convenience sample of four residents in the Washington, D.C. defined home as a safe haven that is a source of security, stability, and pride (Stevens-Ratchford & Diaz, 2003). As adults age, many spend increasing periods of time in their homes – possibly as a result of retirement, deteriorating health and/or mobility, and other changes in life circumstances. Their sense of security and freedom may therefore be strongest in this place where they feel most familiar. In discussing the effects of relocation as it pertains to successful aging, Stevens-Ratchford and Diaz (2003) described the home as “a source of security and psychosocial well-being” (p. 21), and not just a physical structure. Additionally, the home can be considered a base for activities and social connections that nurture continued engagement in life. Regardless of what home means to different individuals, current gerontological research indicates that as adults live longer, many wish to remain in their homes as they age (AARP, 2000).

Health and aging in place. Among the documented benefits of aging in place are continued independence, financial stability, psychosocial and physical health, and social/familial support (Tang & Lee, 2011). These factors contribute to one’s overall well-being, and can be

advantageous to society in terms of reduced healthcare costs. Studies have shown that older adults who are able to age in familiar surroundings are more content (AARP, 2000; Gilleard, Hyde, & Higgs, 2007; Gitlin, 2003; Oswald et al., 2007; Tang & Lee, 2011). Gilleard et al. (2007) wrote that “personal community networks have important complex implications for supporting and/or protecting the well-being of old people” (p. 591). The relationship between health and home, specifically in relationship to aging in place, is therefore one that deserves consideration as Americans (and other populations worldwide) age in larger numbers than ever before (Federal Interagency Forum on Aging-Related Statistics, 2010).

Health and engagement in occupation. The principal goal of occupational therapy, as expressed in the OTPF (AOTA, 2008) is “supporting health and participation in life through engagement in occupation” (p. 626). Over the years, several studies have examined the relationship between social participation and engagement in occupation, some relating these factors specifically to aging in place (Dahlin-Ivanoff, Haak, Fänge, & Iwarsson, 2007; Rosel, 2003; Stevens-Ratchford, 2011; Stevens-Ratchford & Diaz, 2003; Tang & Lee, 2011; Wangmo & Teaster, 2009). For example, Stevens-Ratchford (2011) found statistically significant correlations between productive aging and life satisfaction and the continuity of long-standing productive occupation in a convenience sample of 292 residents of Maryland, Virginia, and North Carolina.

A systematic review of research on the benefits of engagement in occupation among older adults substantiates its positive impact on health and quality of life for community-dwelling older adults (Stav, Hallenen, Lane, & Arbesman, 2012). Although areas of occupation and their resulting health benefits vary among people, current evidence is strongly supportive of the positive correlation between them. Across research approaches and participant

characteristics, it has been found that continued engagement in meaningful occupation and social participation are vital to the health and well-being of older adults.

Social roles and relationships. In addition to having longer life expectancies, contemporary retirees, particularly baby boomers, “have a lot of living left to do, and a lot of giving,” and are eager to continue full participation in all aspects of their lives, more so than their predecessors (Arvidson & Carter-Novotni, 2011, p. 10) . Many want to stay involved in activities and occupations that are meaningful to them including volunteering, mentoring, leisure and travel, education, fitness, consumerism, political activism, and, for some, working. In doing so, they help sustain their communities and contribute to multigenerational atmospheres, which may, in turn, make them feel younger (Arvidson & Carter-Novotni, 2011). Stevens-Ratchford (2011) reported that for older adults, continued participation in valued and productive activities not only helps them to feel useful, but also to “engender feelings of positive self-worth” (pp. 145-146). These social roles and relationships with the public are often invaluable to those aging, in addition to those with their friends, neighbors, and families (Rosel, 2003).

Community. Familiarity of surroundings is an overarching theme of aging in place, and it is therefore fitting to include community as a central element of an individual’s environment (Rosel, 2003). Part of the meaning of home is living in a familiar neighborhood (Dahlin-Ivanoff et al., 2007). Communities, particularly those which are considered aging-friendly, can provide both formal and informal support networks to facilitate the process of aging in place, such as opportunities for participation in recreational, cultural, and other social activities. Moreover, they can help ensure the availability of affordable and accessible housing and businesses for seniors who reside in the community (Tang & Lee, 2011). In a phenomenological study of elders who had lived in their homes for an average of 45 years and had extensive community ties, Rosel

(2003) concluded that shared knowledge about the neighborhood added value to aging in place for those in their communities (pp. 88-89).

Independence. Most adults are largely independent, and rely primarily on themselves to perform the functions and tasks necessary for them to live satisfying and fulfilling lives (Dahlin-Ivanoff et al., 2007). Aging, however, tends to be accompanied by a host of personal (as discussed above) and environmental changes, many of which make it challenging for older adults to complete ADL without assistance. As people age, many experience serious or chronic health conditions, such as arthritis, hypertension, hearing impairments, heart disease, and cataracts, which increase the risk of functional limitations that could affect their life (Wilmoth & Longino, 2006).

Older adults may also experience cognitive deficits, sometimes secondary to an illness or major health event such as a stroke, further putting them at risk of losing their independence (Katz, Averbuch, & Bar-Haim Erez, 2012). In addition to having cognitive processing issues, older adults may be physically slower, which could greatly affect their participation in activities. As health and abilities decline, many seniors – even those who are still mentally alert – are faced with a loss of autonomy over their daily lives, which may further exacerbate poor health. Andresen et al. (2009) reported that older adults who maintain a sense of control over their own activities have better outlooks than those who are fully dependent on others (such as nursing home staff) for assistance with participation in meaningful life activities.

The maintenance of independence as part of the process of aging in place appears to resonate with several researchers in the field. Empowering community-dwelling adults to remain in their current and preferred settings as they age is an essential component of the process for both aging individuals and their communities (Cutchin, 2003; Tang & Lee, 2011). Cutchin

(2003) viewed it as “a fundamental aspect of aging in place” (p. 1078). Similarly, Stevens-Ratchford and Diaz (2003) theorized that the disruption of a person’s independence can lead to decreased physical, cognitive, and social engagement, and subsequently negatively impact participation in life activities (p. 22). In addition to a loss of independence, many older individuals who move out of their homes and communities are affected physically and/or psychologically due to feelings of helplessness and despair (Andresen et al., 2009).

Economic/financial implications. As populations age, the related healthcare costs increase, placing an economic burden on society as a whole, by way of dwindling publicly-funded programs (Wiener & Tilly, 2002). While some older adults receive financial assistance from family, others do not have relatives to help support them. Governments, international aid agencies, and local communities therefore must develop sustainable options to provide assistance to financially strained older adults (Wangmo & Teaster, 2009). Alternatives such as nursing home care are not always viable, due in part to increased costs – particularly in comparison to the lower costs associated with aging in the home – as well as reportedly low standards of care that may be found in such facilities (Cutchin, 2003; Tang & Lee, 2011).

A growing aging population, like that which is occurring worldwide, increases the dependency ratio (those not in the workforce compared to those in the workforce) and places a strain on age entitlement programs such as Medicare and Social Security in the U.S., thereby affecting society as a whole (Olshansky, Goldman, Zheng, & Rowe, 2009). Additionally, the current healthcare system may not be able to cope with the health care demands of older adults. Stav, Hallenen, Lane, and Asbesman (2012) surmise that OT can lessen future burdens on healthcare by improving older adults’ health via engagement in occupation. The financial burden

associated with a growing aging population can be relieved by supporting adults to live healthy and fulfilling lifestyles as they age.

Home mobility and modifications. As aging adults spend increasing amounts of time in the home, the need for this environment to be safe and functional becomes more important yet more difficult. In the United States, 74% of older adults live independently in a home or apartment, and only 4% of their same age peers live in nursing home facilities (Gitlin, 2003). Research to date has focused primarily on specific impairments, leaving those who work with adults across a wide range of functioning without an understanding of the impact of home environments at different stages of a person's life. The literature provides suggestions for home modification related to specific impairments, but occupational therapists require a thorough understanding of the home environment across the lifespan. Although modifications such as improved lighting, handrails, grab bars in the bathroom, and non-slip shower strips are common (Chippendale & Bear-Lehman, 2010), their contribution to higher level functioning needs further assessment (Gitlin, 2003).

As falls are the most common reason for older adults to visit the emergency room (Chippendale & Bear-Lehman, 2010), a primary focus of older adults' mobility is fall prevention. Fall prevention interventions have been found effective whether aimed at the person or environment (and particularly at both), reducing risk by approximately 30% to 40%, with greater results seen in individuals with an established high risk for falling (e.g., Clemson, Mackenzie, Ballinger, Close, & Cumming, 2008; Markle-Reid et al., 2010; Waters, Hale, Robertson, Hale, & Herbison, 2011; Wong, Lin, Chou, Tang, & Wong, 2001). With older adult clients, occupational therapists should determine where the intervention/modification is most appropriate considering the dynamic person-environment interaction. As physical capacities for

most individuals can be improved throughout the lifetime, implementing a home program (e.g. to increase endurance) may be an appropriate OT intervention. Instead, or in addition, changes can be made to the environment to increase safety and/or ease of use (e.g. increasing lighting or remodeling an entrance to the home).

Community mobility. In addition to home mobility, community mobility provides continued independence and opportunities for participation in social roles for aging adults. Driving, an occupational enabler, requires complex sensory and processing capabilities (Ekelman, Stav, Baker, O'Dell-Rossi, & Mitchell, 2009). These capacities, such as vision and reaction time, decline with age (as discussed above). Due to the potentially fatal threat motor vehicle crashes pose to anyone involved, but especially older drivers, occupational therapists who work with older adults frequently discuss driving. The impact of recommending an older driver to no longer drive must be carefully weighed and other community mobility options explored, as it can lead to a dramatic loss in independence and participation in personal and social occupations.

Due to typical age-related declines in vision, muscle power, flexibility, and reaction time (as discussed above), barriers to community access such as uneven sidewalks, high curbs, and other obstacles not only restrict participation but also increase the risk for injury. Based on their knowledge of sustainable development theory and aging in place, Landorf, Brewer, and Sheppard (2008) used qualitative and directed content analysis to review urban sustainable development tools. They found that aging in place criteria were not being addressed as part of sustainable urban environments. Sustainable development consists of economic, environmental, and social sustainability. Social sustainability in a community is evaluated as equity, empowerment, accessibility, participation, sharing, cultural identity, and institutional stability.

Occupational therapists working with older adult individuals and particularly with populations can evaluate and advocate for the necessary community changes.

Purpose of the study. In a landmark study of occupational therapy for older adults, the Well Elderly Study, Clark et al. (1997) completed a large randomized control trial with independent-living seniors age 60 years and older. The participants were randomly allocated to an OT group, a social activity control group, or a non-treatment control group for a nine month duration. On measures of physical and social function, self-rated health, life satisfaction, and depressive symptoms, the OT group showed improvement whereas the two control groups declined. This study clearly demonstrated the potential that preventive OT has for an aging society. Subsequently, follow-up research confirmed preventative OT for relatively healthy, community-dwelling, older adults to be successful in enhancing their mental and physical health, occupational functioning, and life satisfaction, in addition to being cost-effective over the long term (Jackson, Carlson, Mandel, Semke, & Clark, 1998; Clark et al., 2012).

Given that occupational therapy focuses on helping people regain or maintain independence, function, and live a fulfilling life, supporting aging in place is a natural fit for many OT practitioners (Dahlin-Ivanoff et al., 2007). The desires of the increasing older adult population must be well known in order to deliver high quality, client-centered care. This practice involves determining the individual's or population's beliefs, values, and current trajectory of aging so that the therapist and the client establish accurate and realistic goals. By appreciating the goals and ongoing adaptations of the well elderly, occupational therapists will be able to more effectively evaluate and comprehend the relevant deficits, as well as successful strategies, of clients from this age group, thus better supporting them in aging in place. The purpose of this study, therefore, was to describe current practices, attitudes, and future desires as

reported by U.S. community-dwelling adults age 65 and older who were aging in place. The variables that were addressed included health, meaningful occupation, social roles and relationships, independence, home and community mobility, safety and security, economic costs, and desires regarding future care.

Method

Research design

In an attempt to obtain both detailed information and a larger amount of data regarding older adults' practices, attitudes, and desires, the research design was a mixed methodology of qualitative interview and quantitative survey. A survey allowed for a relatively large number of participants' responses to be considered. This was especially needed in this study as a wide range of topics (e.g. health, meaningful occupation, social roles and relationships, independence, home and community mobility) were touched upon and only a few questions were allotted to each. The qualitative interview enhanced the validity of the study because the researchers were then able to go into depth on these topics with some of the survey respondents. Both the ranking questions on the survey and the interview responses indicated where further research should occur.

Participants

The population of interest was U.S. adults aged 65 and older who were aging in place in their communities. The accessible population for a study of this scope was the adults who met these criteria and were accessible to the researchers through personal networks. A convenience sample was acquired through the researchers' personal contacts including schoolmates, faculty, friends, church members, and other local community sources, by asking them to convey information about the study to parents, grandparents, family friends, and other people they know who fit the study criteria. Initial contact of potential research participants was made by the

referral source to ascertain their level of interest in the study, while protecting their confidentiality. Those who indicated an interest were given the option to contact the researchers for the official informed consent process, or have the researchers contact them.

Inclusion criteria for participation were the same as the characteristics of the population of interest listed above. Participants were literate, spoke English and lived in their home but were not home-bound. The single exclusion criterion that would have disqualified a person who met the aforementioned conditions was if the adult had lived in the community but received more than five hours per week of outside caregiving assistance. This assistance included completion of activities of daily living (ADL) and instrumental activities of daily living (IADL), such as meal preparation, because receiving home-based support services may have indicated that an individual had medical concerns far exceeding the majority of adults in the U.S. who are aging in place. IADL such as yard care and housecleaning services were not taken into account. The researchers attempted to involve participants from different demographic backgrounds, taking into account age, gender, race/ethnicity, socioeconomic status, marital status, as well as factors such as job or career history, in an effort to increase variety in the participant pool. The survey sample comprised 105 participants, with 4 of those participants living in the Puget Sound area composing the interview sample.

Instrumentation

Both instruments included questions to gather the following demographic information: age, gender, marital status, living arrangement/type of dwelling, and health status, including chronic illnesses or issues.

Quantitative survey. The survey contained primarily close-ended or partially close-ended questions on the variables listed in the purpose statement above (i.e., health, meaningful

occupation, social roles and relationships, independence, home and community mobility, safety and security, economic costs, and desires regarding future care), all of which are based on the OTPF (AOTA, 2008). Although it may constrict validity because the author limited the available responses, asking fewer open-ended questions provided the consistency required for greater reliability. (See Appendix A for the survey).

Qualitative interview. The qualitative interviews provided the researchers an opportunity to investigate more in-depth using open-ended questions, to obtain more detailed information. In addition to drawing on the OTPF (AOTA, 2008) as well as the existing research and texts on this topic, survey and interview questions were also informed by the Well Elderly Study (discussed above) and a follow-up study, *Occupation in Lifestyle Redesign: The Well Elderly Study Occupational Therapy Program* (Jackson et al., 1998).

The interviewer conducting the qualitative research used the above-stated variables as a guide for follow-up questions to probe deeper into these subject areas, allowing greater discussion of topics that appeared to be most valuable and/or complex to the study participants. The grand tour question, “Tell me about your experience aging in place,” was followed with, “What does aging in place mean to you?” if the participant needed clarification or to prompt further discussion. If the information uncovered through the more unstructured conversation did not address the above areas, follow up questions were asked to gather details about activities that were meaningful to participants, social relationships, life changes they may have experienced due to aging, health concerns, and their desires for the future, related to aging in place.

Depending on the participant’s knowledge about OT and the research topic, the researcher briefly explained occupational therapy, provided an overview of the purpose of the study in

relation to OT, and explained the phrases “aging in place” and “productive aging,” as needed (see Appendix B for the Interview Guide).

Procedures

As part of the recruitment process, both researchers simultaneously approached their personal networks of contacts to identify a pool of potential participants who fit the study criteria. The researchers provided an overview/description of the study, talking points, explained participant inclusion and exclusion criteria, data collection methods, and outlined participant time commitments as well as a timeframe and timeline for the study.

Quantitative survey. Following approval from the university Institutional Review Board (IRB), the survey was piloted, revised, and sent to participants. Close-ended questions were presented as Likert scales and partially close-ended as either multiple choice questions or Likert scales with an option for respondents to write in an answer. Space at the end of the survey was provided for additional comments. The survey was reviewed by the research committee and piloted on a knowledgeable individual who was 1-year younger but otherwise fit the inclusion criteria. This individual timed herself and wrote down questions or concerns as the survey was completed to provide feedback to the author for further refinement.

Upon completion, the instrument was mailed to the sample with a cover letter and business return envelope. The cover letter explained who the researcher was, the importance of researching aging in place, and that the results would be kept confidential. The letter also stated that their completion of the survey indicated their informed consent to participate in the study. Identification numbers were on each survey as well as on a separate key with the corresponding names. A week and a half after the first mailing, a second mailing went out to the entire sample on a postcard thanking those who responded and requesting that the others do so promptly. A

third mailing with a replacement survey was sent a week and half after the postcard to those who still had not responded. Data were entered into Microsoft Excel as they were received and data collection ended approximately five weeks from the first mailing.

Data analysis. The variables health, meaningful occupation, social roles and relationships, independence, home and community mobility, safety and security, economic costs, and desires regarding future care were described by descriptive statistics such as mean, standard deviation, range, frequency distribution, and cross-tabulation. IBM SPSS Statistics was used.

Qualitative interview. Upon receiving IRB approval, a practice interview was conducted with a person who fit the participant demographics and study criteria and was knowledgeable about the topic. This rehearsal interview was conducted in the presence of the project's faculty research advisor and co-researcher, and the feedback obtained from observers on the process and interviewer's technique, helped improve the researcher's skills. Based on this input, the researcher revised the interview to refine the questions, and finalized the study protocol. During this period, the researcher also contacted seven potential participants via personal contacts, and provided information about the study to those who fit the criteria and expressed interest in participating. The researcher strove to include participants from various demographic backgrounds in the study - taking into account factors such as age, gender, race or ethnicity, socioeconomic status, and marital status - in an effort to increase the diversity of participants. Four respondents expressed interest in participating in the study.

After identifying and making initial contact with potential participants, the researcher scheduled appointments to conduct interviews with them in their home(s) or a place of their choosing. On the day of the interviews, the researcher obtained each participant's informed consent, specifically an interview consent form, which included an audio recording consent

clause. The consent form documented each participant's willingness to participate in the study, and gave explicit permission for the interviewer to record all interview sessions (see Appendix C for the Consent Form). All four interviews, each 45-60 minutes, were conducted over the course of 11 weeks. Three took place in the participants' homes, and the fourth in a private room at a coffee shop. During these initial interviews, participants were alerted of follow-up sessions and fully apprised of the required time commitment. They were also given an opportunity, at the end of the interview, to ask any questions about the study or related to the research process.

The individualized nature of qualitative research means the process and results are sometimes colored by a researcher's predispositions and expectations. To counteract potential personal biases, the researcher kept a journal throughout the data collection process, noting reflections on prior opinions about aging in place, as well as personal thoughts immediately before, during, and after each interview - as a way to leave an auditable trail on the management of personal subjectivity.

Data analysis. After the interviews were conducted, the researchers used professional services to transcribe the recorded audio files. The resulting transcripts were examined, compared, and analyzed to identify themes that emerge from the data. Content analysis was used to categorize common themes across participants' responses. Hsieh & Shannon (2005) define qualitative content analysis as "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (p. 1278). The researcher employed a directed content analysis approach, using the research findings to guide initial codes (Hsieh & Shannon, 2005).

All interview data from the transcripts and field journal was coded by hand and analyzed for recurring themes. Code-recode techniques were utilized to enhance credibility of the results.

Methods to examine the data included peer examination - with a member of the research committee verifying the accuracy of the transcript coding; field journaling; triangulation with the study's survey results; and member-checking, in the form of a 20-30-minute follow-up in-person interview with each participant to ensure the accuracy of the data interpretation. Given that the qualitative portion of the study attempted to provide depth for the survey portion, the survey results were also analyzed to provide triangulation for interview findings.

The researcher manually created a semantic network of themes. Patterns identified, as well as relationships between categories, aided the researcher in drawing conclusions from the data. The results obtained from the study provided key insights into participants' current practices, attitudes, and future desires with respect to aging in place. Enhancing occupational therapists' knowledge and understanding of this trend may improve this population's overall health and occupational well-being. However, due to nature of the sample pool - specifically in terms of geographic constraints and size, its generalizability to a larger population, e.g., the U.S., remains unknown.

Survey Results

The survey response rate was 95 out of 105 (90%). Respondents' ages ranged from 66 to 96 with a mean of 75 +/- 6 years. Respondents were 69% female. Of those who recorded their marital status ($n = 86$), 12.8% ($n = 11$) were single, 76.7% ($n = 66$) were with a partner, and 10.5% ($n = 9$) were widowed. Eighty-three percent ($n = 78$) lived in an urban, as opposed to a rural, setting. The majority (54.3%, $n = 57$) were from Washington, followed by Minnesota (15.8%, $n = 15$) and Arizona (6.3%, $n = 6$) (see Table 1).

Aging in Place and the Meaning of Home

The majority of respondents (58%, $n = 55$) lived with family member(s) and owned their homes (81%, $n = 77$). Overall, respondents felt “just as safe as [they] always have in [their] home and community,” (89%, $n = 83$). Fifty-six percent ($n = 52$) of respondents wished to stay in their homes forever (see Table 2).

Health and Aging in Place

Eighty-eight percent ($n = 83$) of respondents stated that their health was “good” or “excellent.” No respondent reported that his/her health was “very poor.” When asked about their agreement with “I approach my healthcare in a preventative way,” 97% ($n = 92$) of participants reported they “strongly agree” or “agreed.” No respondents stated that they “strongly disagreed” with the statement. Eighty-two percent ($n = 78$) stated they engage in physical activity for at least 20 minutes in a row three or more times per week. The rate of respondents who had “good” or “excellent” health and had made no structural changes to their homes (61.3%, $n = 80$) was comparable to those who reported “average” or “poor” health (58.3%, $n = 12$) (see Home Mobility and Modification, below) (see Table 3 for participants’ health information).

Health and Engagement in Occupation

Fewer than half of respondents were able to rank the importance of different types of occupation (ADL, Education/Work, IADL, Leisure, Social participation). Many commented that the areas of occupation were interdependent and/or equally important. Of those who did rank, 60% ($n = 39$) ranked ADL as most important and 6% ($n = 4$) as least, 17% ($n = 11$) ranked education/work as most important and 52% ($n = 34$) as least, 43% ($n = 28$) ranked IADL as second most important, and leisure and social participation were ranked across the scale except they were less likely to be ranked more important than any other occupation. Respondents

reported a variety of means used “to remember day-to day things” (see Figure 1) to help them accomplish their occupations.

Social Roles and Relationships

Fifty-two percent ($n = 46$) of respondents agreed or strongly agreed that most of their communication with others (whether in person or electronically) occurred within the home, compared to 40% ($n = 35$) who disagreed or strongly disagreed and 8% ($n = 7$) who were not sure. Respondents were approximately split when asked their agreement with “family provides the bulk of my social support,” with 48.4% ($n = 45$) strongly agreeing or agreeing, 46.3% ($n = 43$) disagreeing or strongly disagreeing, and 5.4% ($n = 5$) being unsure. Seventy-five percent ($n = 70$) reported that they agreed or strongly agreed that “it is important to [them] to have someone to do the things [they] like with [them],” compared to 18% ($n = 17$) who disagreed and 7% ($n = 6$) who were not sure. Thirteen percent ($n = 12$) stated that they agreed with “I do most of my activities alone,” whereas 80% ($n = 74$) said they disagreed or strongly disagreed, and 7% ($n = 6$) were not sure.

Community

Eighty-one percent ($n = 77$) of respondents agreed or strongly agreed that they “know many people in [their] community,” compared to 13% ($n = 12$) who disagreed or strongly disagreed and 6% ($n = 6$) who were not sure. When asked to select their agreement with “I have one or more social outing(s) every week,” 56% ($n = 52$) of respondents strongly agreed, 38% ($n = 35$) agreed, and 7% ($n = 6$) disagreed. Fifty-two percent ($n = 47$) of respondents strongly disagreed or disagreed that “most of [their] communications with others occurs on the phone or electronically (e.g. email or Facebook),” whereas 35% ($n = 32$) strongly agreed or agreed and 13% ($n = 12$) were unsure. A greater proportion (88.3%, $n = 77$) of respondents who reported

knowing many people in their communities also reported “good” or “excellent” health, compared to 83.3% ($n = 18$) of those who were not sure or disagreed that they had such community ties.

Independence

Participants were asked to select all that applied from “I am independent,” “I currently receive assistance from a friend or family member,” “I currently pay for service,” “I am considering getting help,” and “N/A” for a list of occupations. The highest level of assistance was recorded, if applicable, which was ranked from paying for the service, receiving assistance from a friend/family member, considering getting help, to independent. If a participant were to select multiple options, it was to provide the researcher with context for his/her response; however, too few respondents selected more than one option to draw conclusions.

The occupations listed were: transportation, yard work, self care, financial support, community errands, housework, handy work, and other (write-in). “I am independent” was the most commonly selected response for all, other than handy work, which was most commonly paid for (44%, $n = 38$). If a respondent was *not* independent in transportation (93% were independent, $n = 88$), s/he was most likely to receive assistance from a friend or family member (5%, $n = 5$). One respondent paid for transportation and one found the service not applicable. Yard work was paid for by 26% ($n = 24$) of respondents, for 18% ($n = 17$) it was done with assistance from family/friends, and was completed independently by 38% ($n = 36$). Two percent ($n = 2$) were considering getting help and 16% ($n = 15$) selected not applicable (most of whom lived somewhere where it was completed by the facility).

One-hundred percent ($N = 95$) of respondents were independent in self care. Eighty-four percent ($n = 80$) were independent in their finances, 13% ($n = 12$) received assistance from a friend or family member, and 3% ($n = 3$) paid for the service. Community errands, for example

grocery shopping, pet care, and laundry, were completed independently by 92% ($n = 87$) of respondents and with assistance from a friend or family member for the remaining 8% ($n = 8$). Housework like cooking, cleaning, and taking out the trash/recycling was completed independently by 72% ($n = 68$), with informal assistance by 16% ($n = 15$), and was paid for by 10% ($n = 9$), with the remainder of respondents (3%, $n = 3$) considering getting help. As mentioned, handy work was most commonly paid for (44%, $n = 38$), followed by respondents who were independent (28%, $n = 24$) and received assistance from a friend/family member (21%, $n = 18$). One percent ($n = 1$) was considering getting help and 6% ($n = 5$) selected NA (as with yard work, many stated they lived where the facility completed handy work). The only write-in response was management of medical care, in which the respondents ($n = 2$) were independent.

Respondents who reported knowing many people in their community were more likely to receive assistance with yardwork from a friend or family member than those who did not (21.1%, $n = 76$ and 5.6%, $n = 18$, respectively). This was consistent with handywork (22.9%, $n = 70$ and 12.5%, $n = 16$, respectively).

Economic/Financial Implications

Eight percent ($n = 7$) of respondents agreed that “it has cost a lot to keep [their] home accessible to [them].” Seventy-one percent ($n = 66$) agreed they “have budgeted for a potential decline in health,” 16% ($n = 15$) did not agree and 13% ($n = 12$) were not sure. Three percent ($n = 3$) reported they did not always have enough money to buy the food they need and the remainder of respondents disagreed ($n = 91$). Twelve respondents reported that they still worked, two of whom agreed it was hard on them, but they continued to do so to support themselves/their family. One of the two commented that he would be retiring the following year. Ten of the 12

workers reported good or excellent health. Nine of the 12 agreed that they had budgeted for a potential decline in health.

Fifty-seven percent ($n = 52$) reported having a long-term plan for their care, whereas 34% ($n = 31$) did not and 10% ($n = 9$) were not sure. If the respondents ended up needing care, 44% ($n = 41$) would want a relative or close friend to be their caregivers, 24% ($n = 23$) disagreed, and 32% ($n = 30$) were not sure. Twenty-three percent ($n = 21$) agreed they would want a hired caregiver who they do not know, 44% ($n = 41$) disagreed and 33% ($n = 31$) were not sure.

Home Mobility and Modification

Survey respondents lived in multi-story homes (42%, $n = 40$), single-story homes (34%, $n = 32$), and single-story homes with basements (15%, $n = 14$). Eight percent ($n = 8$) reported living in a duplex and another 8% ($n = 8$) reported living in an apartment. Most respondents reported that no structural or non-structural changes had been made to their home (61%, $n = 56$ and 62%, $n = 58$, respectively). Thirty-three ($n = 30$) and thirty-four percent ($n = 32$) stated that “some” structural and non- structural changes had been made, respectively. Three percent ($n = 3$) reported “many” non-structural changes and 7% ($n = 6$) reported “many” structural changes. Those who had a budgeted for a potential health decline had a similar rate as those who did not when considering who had made structural changes to their homes (39.7%, $n = 63$ and 37%, $n = 27$, respectively). Similarly, those who reported having a long-term plan for their care had made structural changes at approximately the same rate as those who did not (38%, $n = 50$ and 38.5%, $n = 39$, respectively). See Figures 2 and 3 for reported structural and non-structural changes, respectively.

Community Mobility

Twenty-six percent ($n = 22$) of respondents disagreed or strongly disagreed with the statement “I am comfortable using the bus/subway system.” Forty-seven percent ($n = 40$) agreed or strongly agreed and 27% ($n = 23$) were not sure. As mentioned in reference to home safety, 89% ($n = 83$) agreed or strongly agreed to feeling “just as safe as [they] always have in [their] home and community,” 5% ($n = 5$) disagreed or strongly disagreed, and 5% ($n = 5$) were not sure. Seventy-three percent ($n = 68$) “took care to not rush around in and outside [their] home,” 27% ($n = 25$) did not or were not sure.

Interview Results

The four participants who expressed interest in being interviewed for the study included one male and three females, all European American. They ranged in age from 68-83 and all lived (or had a home where they planned to age) in the Puget Sound area of Western Washington. In order to maintain their confidentiality, all respondents are referred to using pseudonyms (see Table 4).

Sara worked part-time as a nurse. She had a number of minor health issues, none which excluded her from the study. She and her husband had two homes (both condominiums), and at the time of the study, they primarily lived in another state for most of the year. The home in which she was interviewed was a single story condominium that she and her husband planned to move to permanently upon retirement. Charles, the lone male participant, was recently retired and lived in a multi-story home with his wife. He did not have any serious health issues either, although he said that he needed to lose weight. The third participant, Judy, had been retired for more than 25 years, and reported being fit and in good health. She was a widow, and could not imagine living anywhere other than in her single-level home that she and her husband had built

with their aging years in mind. Ellen, who also lived in a single story home alone, was a former occupational therapist. She too was fit and active, and did not report any significant health issues.

Following repeated review of the interview transcripts and field notes, four compelling themes, with subthemes, emerged from the data. The first theme was staying connected, with the following subthemes: family relationships, and friendships and community. The second category was engagement in occupation, which included staying fit and healthy, and modifying/adapting activities. The third theme, planning ahead, covered finances and home/environmental modifications. Fourth, attitude addressed staying positive and being aware of one's limitations. At least three of the four themes resonated throughout all the participants' responses, albeit to varying degrees.

Staying Connected

All four participants expressed the importance of maintaining strong relationships with their loved ones. The nature of these relationships differed among the respondents, but was no less important regardless of how long or often they spent time with family and friends, or how close they lived to them.

Family relationships. Of the three of the respondents, Charles spent the most time with various members of his immediate and extended family. He and his wife intended to always live close to one of their two children, even if that meant moving to a different state. He recalled his mother's passing with regret, determined to have a different experience.

I felt sorry for my mother, because she was not near anybody she was close to at the end. She had a nice house, but she didn't live near any relatives that she could get to easily...I wish my mother had moved closer. I wish the family had consolidated themselves in one area before she grew so old and became used to the house way over on the other side of

the state before she kind of lost contact with everybody, and then she lost contact with reality. I don't want that to happen to us.

Judy lived next door to one of her two adult children; the other lives a little less than two hours away. She said it was nice to know she has family close by if she needed them. Her pride in them was evident when she described her relatives as a “wonderful family,” and “one that makes all the difference.” However, she cherished her privacy and independence, and felt that it was important to maintain some distance, stating, “We don’t quarrel. I don't think we’ve ever had a fight in the family at all.”

Sara and her husband had homes in two states, one in the same city where their two daughters lived. Since they both still worked – Sara, part time – at the time of the study, they spent holidays, including part of the summer, at their second home. She was a grandmother, always volunteering to babysit her three granddaughters whenever she could. Sara and her husband were the “older generation” in their family, both sets of parents, as well as uncles and aunts on either side, having passed away. Her extended family was scattered across the country, so she did not see them often; however, she and her husband purchased their second home with their daughters in mind, knowing they would want to move close to them, and their grandchildren, when they retired.

Ellen, who was widowed, did not have any biological children, but raised four with a previous partner, two of whom had since passed away. She had brothers and sisters who she talked with and visited regularly – at least once a month, and described her relationship with her nieces and nephews as being close, often having taken vacations with them. Both her parents and her husband died after long illnesses. Her high regard for family and aging in place was evident when she described the experience of putting her father in a nursing home, “I had to break the

news to him that I had to move him to a group home. That was one of the hardest things I have ever had to do...and he died three months later. I think the noise is what got to him.” That experience with her father had a lasting impact on Ellen; her husband remained in their home throughout his illness, receiving hospice care at the end.

Friendships and community. When it comes to friendships, Sara and Charles admitted that they were not very social, preferring to stay home, or spend time with their respective spouses. In contrast, the two widowed participants led active social lives. Judy described her friendships as important to her, and considered them to be another source of support, if she should ever need it. “Keep in touch with friends. Don’t kind of drift away from them because you are older and think you can’t do something, because there are always people to help you.”

Of the four respondents, Ellen is far and away the most involved in her community. She was a community activist of sorts, often leading the charge to discuss relevant issues, helping tend a community garden, soliciting donations for homeless and other projects, advocating for people in her neighborhood with the city or other entities, educating community members on various issues, working with law enforcement to help keep peace in the community, and even finding the time to teach a young immigrant woman how to drive. She prided herself on being tolerant and open-minded towards people of all ages, as well as different racial, ethnic, and socio-economic backgrounds, describing herself as often “softening” what people say to members of her community, to keep the peace. Ellen’s involvement in her community “keeps her going” and she intended to continue as long as she could, using her [prior] experience as an occupational therapist to “get people to work together.”

Engagement in Occupation

Engagement in meaningful occupations is a cornerstone of occupational therapy, and it appeared to be a key element of all four respondents' lives. Judy kept busy, meeting friends and a church group at least once a month, and occasionally going to a casino. "I like to get out every day, even if it is just going around the grocery store. I play bridge twice a month...I sing in the choir...I play bells. We have choir practice and bell practice every week." She also worked on projects at home, claiming to "spend too much time on the computer," playing games and working on a family genealogy project.

In contrast Sara, who is also quite active, cautioned those who were newly-retired, or soon would be, against filling their proverbially empty plate(s) with too many activities.

Don't immediately jump into things. Don't immediately volunteer for this, volunteer for that, volunteer for the other thing. Just take a deep breath and let things come to you.

Because that way you will be able to kind of pick and choose what really sounds like it would be fun to pursue, or, you know, unless you have actual plans, it's better just to do a little Zen kind of stuff and let it come to you. Because you will end up being busy.

Believe me. Things do have a tendency to, you know, mushroom...take it slowly. Don't expect too much when you first retire.

Staying fit/active. In keeping with the study inclusion and exclusion criteria, none of the interviewees had significant health issues. The three females, particularly, maintained healthy lifestyles. Sara started her days with a morning exercise routine she referred to as her "Pilates, yoga, old people exercise physical therapy routine." Ellen said she was in "perfect health" and exercised regularly. "I walk six days a week. I go to the gym. I do yoga. I bowl. I don't ski anymore, but that's mainly because I just kind of gave it up."

Charles, who admitted that he needed to lose weight, also discussed the importance of exercise, and saw staying in one's home as a benefit, saying, "So you probably need to stay in your home so there is a yard that will challenge you to do some work. So the responsibilities of taking care of a home are important for you to have to be put on your shoulders so that you maintain...you stay active."

Modifying/adapting activities. Given that most aging bodies cannot do tasks as well as younger ones, the interviewees had several examples of things they did differently, now that they were older. They discussed these adjustments being worth it, if it meant being able to stay in their homes, and be independent for as long as possible. In addition to making use of stepstools and tools to reach things, open jars, etc., Sara, who loved to garden, had developed a coping strategy that kept her low to the ground,

In the garden I do a lot of crawling. I didn't used to. I used to get up and down and up and down and up and down. Instead, I crawl from one place to another. If I am down, I stay down. If I am up, I stay up. I also have been using a little stool so that when I am pulling weeds in the garden instead of squatting and bending over from there, I sit...I have a nice young man that comes for the pruning of the big branches so that I'm not doing something that's too difficult for me.

She added,

I actually grow less than I used to. I don't cover as wide an area and tend to plant plants that don't need a lot of care that I can just leave in the ground and clean up now and then, but they continue to produce rather than planting and re-planting annuals every year. So I am going more to perennial plants.

In addition to changing how she gardened, Sara, who had osteoarthritis, lamented how it has affected her ability to exercise – particularly yoga, which she had done for years. “I can’t even do a handstand anymore because my wrists are too weak and too painful. So I have to do a modified handstand on my elbows, instead.”

Sara said she no longer drives at night if she could help it, due to worsening night vision and because the glare bothered her. However, as with the other age-related changes she was experiencing, she was taking it all in stride, and with a sense of humor,

I don't like to drive very much anymore. So I am learning about public transportation. I intend to always live in a place where I can have some kind of public transportation, and if that means calling a taxi, well, you know, I'll spend my children's retirement or inheritance and pay for the taxi.

Being a nurse, Sara knew these changes were likely to continue, stating, “So far my husband, who is a little younger than I am, has no problem driving at night. At some point, he probably will too. So then we will have to do some more adjusting.”

Similar to Sara, Ellen had learned to modify activities, and how she used her body, based, in part, on advice from her yoga instructor,

Adapt what you are doing. Don't do something you can't do. Don't do something stupid. Like, in the back I had the tree – I needed part of the tree pruned. I bought myself a power saw. I cut down half the backyard...but, I knew at this one part of this tree, that I would probably kill myself. So the guy across the street came over and helped me, and we did that. I just know common sense. I wouldn't have done it when I was 40 and I won't do it now. You know, I have all my digits.

In addition to modifying activities and her environment as she aged, Judy also gave up certain pastimes, having acknowledged that she could no longer participate in them the way she previously had.

I quit golf...I suppose I could golf if I really wanted to...my husband passed away and things got kind of rough and so I dropped that...my friends...would have to wait for me to catch up to them, so I decided not to do that.

Planning Ahead

All four respondents demonstrated foresight in planning for their futures. When they retired, Sara and her husband planned to sell the home they currently live in for most of the year – a larger two-story property that was much harder to take care of compared to the small single level condominium that was close to their daughters. They already kept a vehicle at their second home in preparation for when they moved there permanently. She planned to continue gardening, albeit on a small scale.

I don't have any garden space here, which is a problem. And if I am still able to garden, my girls have promised that I can come and stake out a piece in one of their yards to take care of. So that will be good. And I can do a couple of container things out here, I think.

Finances. Sara worried about the unknown, which is why she and her husband had a will and long-term care insurance. She anticipated either her or her husband continuing to handle their finances as long as one of them was still cognitively functional, and hoped these arrangements ensured they would not be a burden to their children in the future. If she were to fall ill, Sara preferred to stay and “die in her own home...if it’s possible.”

Charles approached retirement finances differently, admitting that dabbling in the stock market had long been a passion of his, over his wife’s objections. She wanted them to buy long-

term care insurance, to which his response was, “I think you are just going to waste your money on something you may not even use. You may die before you use it. Why don’t I just pay for it when I get there?” He envisioned buying another home to rent since he believed “they are cheap right now” – a single-story one that they can move into in the future, since they currently live in a multi-level house. He emphasized the importance of protecting one’s money “from both others and yourself” to age in place successfully, keeping in mind home repairs and similar expenses.

Judy saw her approach to finances as “common sense” and underscored the importance of living within one’s means. Although she did not discuss her finances at length, she appeared confident that she had enough to maintain her independence, even though she admitted, “I have never thought too much about money.” Similarly, Ellen was not overly-concerned about finances for retirement, but was comfortable in the knowledge that she had some savings and received social security benefits.

Modification to home environment. All four participants had considered their physical (home) environments in planning for the aging years. Sara and her husband made sure that their retirement home was accessible. It was a ground floor unit, in a building with an elevator, and did not have any thresholds or steps. The small condo was easy to keep clean, and was within walking distance to several amenities. Judy and her late husband thought ahead to their aging years, and built a smaller, single-level house “for the purpose of moving in as they got older,” deeding their previous two-story home to their son. Among the amenities built into the new home was a walk-in shower with grab bars, a handrail next to the steps to/from the garage, and raised toilet seats. Additionally, Judy removed any small rugs that were around the home, to reduce trip hazards.

Ellen says the knowledge afforded by her OT background was instrumental in her selection of a single-level house. Her house still bore the hallmarks of changes she made to accommodate her husband during his illness, including rug- and clutter-free floors; she also wore a Life Alert[®] bracelet that was his, which she kept active since she lived alone.

While Charles had thought at length about changes he would have liked to make, none of them had come to fruition yet, which he saw as problematic,

As you get older you get more fragile and it's harder for you to make home repairs and things like that. I have a real doubt whether I should live in a two-story home and I would like to trade it for a one-story home. The bathtub where you step into it is nice instead of stepping over as you get older and clumsier. I am clumsier. And we need to move into a house with no stairs to a basement. No stairs to a second story. We need to move into a flat house that's easy when you fall, there is less chance of hurting yourself. I mean, if we fall down those stairs, we may really hurt ourselves now at this age, or very soon. If we are not fragile yet, we are on the verge.

Attitude

The importance of a good attitude was a definite theme among the female respondents. In speaking about her health, Judy said, "I think attitude is a lot to do with it. If you are sitting there feeling sorry for yourself, that is no good, because people get tired of listening to you complain. I guess keep smiling and doing the best you can." She expressed similar sentiments about the aging process, saying, "I think you just got to keep looking out and smiling on the bright side. You can't let yourself get all down in a tizzy. Because there is nothing you can do about it." Despite her age, Ellen did not see herself as "aging" or old, which was perhaps the best attitude of all.

Being aware of limitations. Sara's outlook on attitude was both realistic and humorous. She offered some heartfelt advice to women who were embarking on this phase of their lives, I would say to women – working women who have been doing it all, you know – wife, mother, house, career, you know, 110%, moving all the time – ignore the myths that say, “Oh, when you are retired, when you are in your 60s, you will suddenly get this tremendous, you know, burst of creative energy and you can go be an artist and you can be a musician, or you can do this, or you can do that. For a select few, that may be true. But for most of us, that's putting the same expectations on yourself that you had when you were 30 and 40 and could do it all. I found out that I was just relieved and tired. And I had no need to go out and do it all. Or wait around for this creative burst of energy.... It's really OK just to stop and smell the roses. It feels really good. If you just relax and don't expect so much of yourself.

In revisiting her previously discussed coping strategy of crawling on the ground when necessary, she showed that she is taking her limitations in stride, and could laugh at herself, even in public,

The other thing that is hard is grocery stores...I never could reach the top shelf because I am kind of short. So I was used to asking people to help on the top shelf. The bottom shelf, you get down there to get it, and then you can't get back up. And if you can't hang on something to pull yourself up, you end up going over on your hands and knees in the middle of the grocery store, and then pushing up from there. Which looks a little strange. Why is that old lady crawling around on the floor in the grocery store? ...without a sense of humor, it would be a lot harder.

Charles recommended establishing habits early, being careful, and being aware of one's limitations, and taking steps to prevent and/or overcome them. He used an example about bathtub [slippery] surfaces to make a point, "You probably need to take showers – one of those walk-in showers where you can close the door and turn it into a bathtub.... That will take care of that problem. That's as good as you can do."

Ellen frequently declined invitations to spend night(s) in friends' homes that had two or more levels, or insists on sleeping downstairs. To her, it is not worth the risk, "I am not going to take the chance – I am afraid of steps. I had steps growing up. I never fell down the steps. There is no reason. But I don't want to take a chance." With both her parents and husband having died relatively old, but after illnesses, her take on facing one's limitations was quite pragmatic,

If I got to the point where I had to have a cane, I would do that. If I had to have a walker – my dad had a walker. My husband wouldn't. My husband had a cane. He wouldn't use it. My dad used to fall a lot. My husband used to fall a lot. I think as an OT I am aware of what can happen, but I am not afraid of it, and I will just get help.

Discussion

The purpose of this study was to describe current practices, attitudes, and future desires as reported by U.S. community-dwelling adults age 65 and older who were aging in place. The variables that were addressed included health, meaningful occupation, social roles and relationships, independence, home and community mobility, safety and security, economic costs, and desires regarding future care. These overlapped to a great degree in terms of the adults' practices, attitudes, and desires; therefore, the variables will be discussed as the participants' responses were structured.

Both avenues of this study revealed that a majority of the respondents were independent in most, if not all areas of their lives. Many valued community involvement, or, at the very least, their relationships with friends and/or family. Survey and interview participants also responded similarly on the importance of having an accessible home. Several people reported having made changes to their homes, including some structural, to accommodate their limitations due to age. Reaching out to this population for insight therefore provided a unique, and much-needed, perspective into the trend of aging in place.

Social Roles and Relationships

Survey respondents were essentially split as to whether family provided the “bulk of [their] social support.” This reinforced the interview findings that it did not necessarily matter to older adults whether key relationships were familial or with friends, but rather that social support was there when needed, as Judy described. Like Ellen, but unlike Sara and Charles, survey participants reported knowing many people in their community, having one or more social outings a week, and considered it important to have someone to do the things they liked with them. Agreement on whether social communication occurred within the home or not or in person or electronically was not a pattern found among survey or interview participants. Aging in place enabled participants to maintain and continue to build upon ongoing relationships, whether they were with friends, family, or both.

Health and Engagement in Occupation

As with the interviewees, the majority of survey respondents reported good or excellent health (88%) and exercised three or more times per week (82%). Nationwide, only about 22% of older adults have been found to engage in regular physical activity (Federal Interagency Forum on Aging-Related Statistics, 2010). Due to the inclusion/exclusion criteria and the topic of aging

in place, it may be that the participants were healthier than the entire older adult population. Although occupations among interviewees were not discussed in categories as they were listed on the survey (i.e. ADL, IADL, social participation, education/work, and leisure), results from both methodologies indicated that occupations for older adults could not easily be categorized and considered independently. As Ellen's discussion of cutting down the tree in her yard demonstrated, it is difficult to categorize independence, as she was clearly capable of maintaining her yard, yet she received assistance from a neighbor for a particularly difficult task.

Being independent, as to be expected from a population aging in place, was by far the most common scenario for the participants. Ellen's motto of "don't do something you can't do," provides a potential explanation for yard work being an occupation most commonly paid for by survey respondents. Some respondents clarified that their living facility (e.g. condo or retirement community) completed those tasks. "Don't do something stupid," as she continued, may translate to many respondents paying for that service to preserve themselves and focus their time, energy, and abilities on more meaningful occupations. Overall, this study's findings supported the previous research, discussed above, that continued engagement in occupation is important to the health and well-being of older adults (e.g. Dahlin-Ivanoff, Haak, Faänge, & Iwarsson, 2007; Rosel, 2003; Stevens-Ratchford, 2011; Stevens-Ratchford & Diaz, 2003).

Planning Ahead

Although the majority of survey respondents said they had budgeted for a potential decline in health, only slightly more than half stated they had a long-term plan for their care. It appears the majority of both survey and interview participants had the financial means to live out their lives; however, the extent of the plans may have been limited, as they may not considered themselves as "aging" or "old," as discussed under "attitude." This was also supported in that

one-third of survey respondents were unsure if they would want a hired caregiver and/or a family member or close friend to provide their care, should it be needed. More respondents would want a hired caregiver than a friend/family member, but the extent to which they had planned for the financial, or other, requirements of these situations is unknown.

Both interview and survey respondents appeared to have financial means greater than the average older adult populations, which does not fully reflect the well-established increase in the nation's dependency ratio (Federal Interagency Forum on Aging-Related Statistics, 2010; Olshansky, Goldman, Zheng, & Rowe, 2009). In 2010, the median income for older men in the United States was \$25,704 and was \$15,072 for older women. Nine percent of older Americans were living below the poverty level at that time (Federal Interagency Forum on Aging-Related Statistics, 2010). Given the relatively inexpensive home modifications made by this study's participants to enable them to safely remain in their homes, aging in place could provide a cost-effective solution for older adults. It may also provide an avenue for society as a whole to be able to economically support this growing population.

Home and Community

Overall, survey respondents seemed to be less prepared with their physical surroundings than the interviewees (56% wished to stay in their homes forever, 14% did not, and 30% were unsure). Eight percent reported it had cost them a lot to keep their homes accessible to them, which may indicate that aging-in place, while cheaper than institutionalized care, had the potential to be expensive for even a relatively healthy population. However, the most common modifications, such as installing grab bars, increasing lighting, moving items closer, and installing an accessible telephone, were free or relatively inexpensive, especially considering the

high percentage who had budgeted for a decline in health and the financial security of most participants.

Interview participants had also made similar changes, and Ellen, with her OT background, found these adaptations effortless and natural, without much conscious planning. Additional inexpensive changes, such as removing/securing rugs, rearranging furniture, putting down non-slip surfaces, and removing cords, could be suggested prior to an incident, particularly as part of fall prevention education or intervention. Occupational therapists can use their knowledge of the person-environment dynamic to do a needs-assessment and recommend common modifications such as improved lighting, handrails, grab bars in the bathroom, and non-slip shower strips (Chippendale & Bear-Lehman, 2010; Gitlin, 2003).

The majority of survey respondents and all four interview participants planned to stay in their homes forever. Although the survey respondents did not report this desire at the level that AARP research indicated (90% wished to remain in their homes and 80% believed this was in their current residence) (Farber, Shinkle, Lynott, Fox-Grage, & Harrell, 2011), the discrepancies may be due in part to this study's respondents indicating their willingness to consider alternatives based on the level of care needed in the future. Interview results demonstrated that the meaning of home was tied to the social connections it provided. This is in accordance with the findings of Stevens-Ratchford and Diaz (2003) that rather than being solely a physical structure, home was a "source of security and psychosocial well-being" (p. 21). Moreover, the community which surrounded their homes facilitated engagement in social outings, assistance with home maintenance, as needed, and provided an avenue for older adults to contribute some way – socially, emotionally, financially, etc. – to their social and family networks.

Implications for Occupational Therapy

American society is aging, and coupled with lower birth rates and even slightly higher death rates, this trend is likely to continue in coming years. Baby boomers, who constitute approximately 20% of the population, are generally projected to have longer life expectancies than previous generations, and are also far more likely to remain in their homes as they age (Federal Interagency Forum on Aging-Related Statistics, 2010). An examination of older adults' current practices, specifically with regard to aging in place, is prudent in order to anticipate how OT can address the future needs of this population.

The interviewees, particularly Sara and Ellen - who worked in healthcare, had valuable advice for occupational therapists to help them, and their counterparts, age as independently as possible in their homes. Sara's take on it was,

Help us do the things that we are used to doing, as long as we can with, you know, the tools that will help. To continue to work with our hands as long as we can, independently. As far as low vision is concerned, helping us with arranging our homes so we can get rid of the obstacles and the safety things that we can't see anymore, or can't navigate around anymore. But yeah, making our homes safer and so that we continue to cook in our own kitchens. We can continue to open and close things. We can continue to get in and out.

Ellen emphasized...

Really paying attention to what the consumer wants, but I also think that you all need to kind of sneak in info about, you know, you have low vision, you have arthritis – I have arthritis in both hands. You have arthritis in both hands, have you thought about changes that might come in your life, in your environment?

Moreover, based on both the survey and interview responses, it would be helpful for occupational therapists to have the knowledge about simple, inexpensive home modifications. This will help clinicians serve diverse client populations, including those with varied socioeconomic, racial/ethnic, and other backgrounds. Given the importance of engagement in meaningful activities, and its effect on overall health and well-being (Stevens-Ratchford, 2011; AOTA, 2008), occupational therapists are uniquely qualified to offer suggestions, and help clients find resources to support their continued involvement in occupation.

Limitations

This study had a number of limitations, the first being that neither component was carried out using a random sample. All participants/respondents were solicited through the researchers' personal contacts, which likely accounts for the high survey response rate. Unfortunately, the nature of the sample limits the generalizability of the study results to a larger population, e.g. the aging population in the U.S. as a whole. In addition to drawing from a limited participant pool, the interview sample particularly was quite homogenous, with no racial or socio-economic diversity. Due to financial, temporal, and other constraints, participants were limited to a particular (small) geographical area, which further limits the results' applicability to a wider group. Furthermore, this study did not take into account the different lifestyles prevalent in society today, that may impact life choices, including those related to aging. Lastly, a more even mix of various races and ethnicities may likely have increased the results' overall rigor.

Future Research

There were a number of opportunities for future research in this area that could potentially enhance the current knowledge base of OT practitioners, and provide additional resources for them to utilize when working with older clients. Due to the nature of this study's

sample, the results were likely not representative of the full spectrum of values, needs, and desires older adults may have with regard to aging in place, both across the U.S. and worldwide. Exploration of this topic on a larger scale, perhaps even globally, could be informative about aging trends in other countries, and provide further insight into OT's role with this population.

The aging population from a rural area may not have had their values and beliefs adequately represented in this particular study. Technology today offers myriad alternatives to provide services to people who may not otherwise have access to them. Additional studies could further explore the needs of adults in such settings, and investigate the use of tele-health and other options, for example, communal villages, to help support older adults from a distance as they age in their homes. Furthermore, the advent of smart homes, which incorporate built-in technology to automate/control various systems and provide options to support safe and successful living and aging in one's home (Storey, 2010), is an avenue that can add a wealth of information to occupational therapy's evidence base.

Conclusions

This study reinforced the notion of the power of occupation in the aging population, confirming that engagement in meaningful activities is typically an important component of successful aging. It also emphasized health and wellness, highlighting forward thinking as a crucial element to be considered for successful aging. This could be in the form of preventative health care/management on an individual basis or in a population, such as health promotion through wellness programs. In keeping with OT's client-centered philosophy, the researchers sought to elicit information from people currently aging in place, and who are therefore the most qualified to provide information about their lives. OT practitioners may use this information to

better enable them to match the person, environment, and occupation, all the while advocating for older adults' needs - be it individually, or on a population level.

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Table 1

Survey Participant Demographics

	Number of respondents	Percentage
Sex	93	
Female	64	69
Male	29	31
Age	74	
66-74	36	49
75-84	29	39
85-96	9	12
Marital Status	86	
Married/partnered	66	77
Single/divorced	11	13
Widowed	9	11
Geography	94	
Urban	78	83
Rural	16	17
State Residency	95	
Washington	57	60
Minnesota	15	16
Arizona	6	6
California	4	4
New Jersey	2	2
Oklahoma	2	2
Oregon	2	2
Utah	2	2
Florida	1	1
Hawaii	1	1
New England	1	1
Nevada	1	1
Pennsylvania	1	1

Note. There were 95 total respondents. Percentages were calculated using the number of respondents per question.

Table 2

Aging in Place and Meaning of Home

	Number of respondents	Percentage
Living situation	76	
With family	55	58
With non-family	5	5.3
Alone	16	16.8
Home ownership	82	
Owned	77	81
Rented	5	5
Feeling of safety at home and in community	93	
Strongly agreed or agreed	83	89
Strongly disagreed or disagreed	5	5
Not sure	5	5
Desire to remain in home	93	
Strongly agreed or agreed	52	56
Strongly disagreed or disagreed	13	14
Not sure	28	30

Note. There were 95 total respondents. Percentages were calculated using the number of respondents per question.

Table 3

Health and Aging in Place

	Number of respondents	Percentage
Health status		
Excellent	30	32
Good	53	56
Average	9	10
Poor	3	3
Very poor	0	0
Preventive approach to health		
Strongly agree	44	46
Agree	48	51
Not sure	2	2
Disagree	1	1
Strongly disagree	0	0
Exercise episodes of at least 20 minutes per week		
5 or more	37	39
3 – 4	41	43
1 – 2	15	16
0	2	2

Note. All 95 respondents answered the above questions regarding health.

Table 4

Interview Participant Demographics

Participant	Pseudonym	Age	Gender	Marital Status
1	Sara	70	Female	Married
2	Charles	70	Male	Married
3	Judy	83	Female	Widowed
4	Ellen	68	Female	Widowed

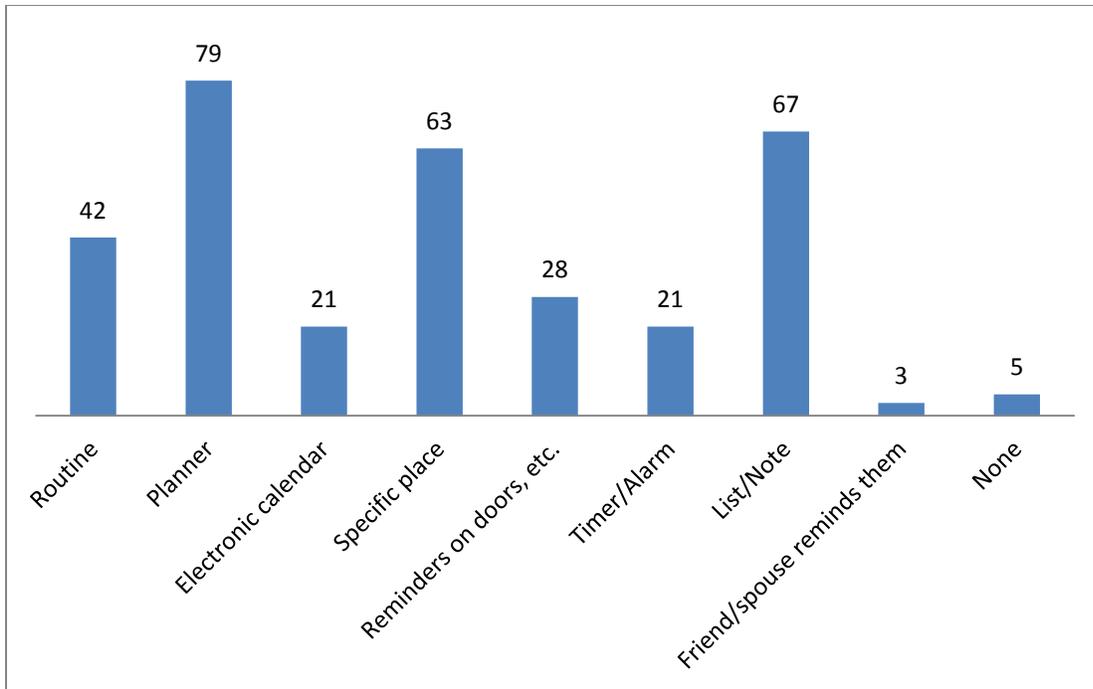


Figure 1. Number of participants ($N = 95$) who reported the use of each device/strategy to aid them in accomplishing their day-to-day occupations. Respondents were instructed to select all that apply.

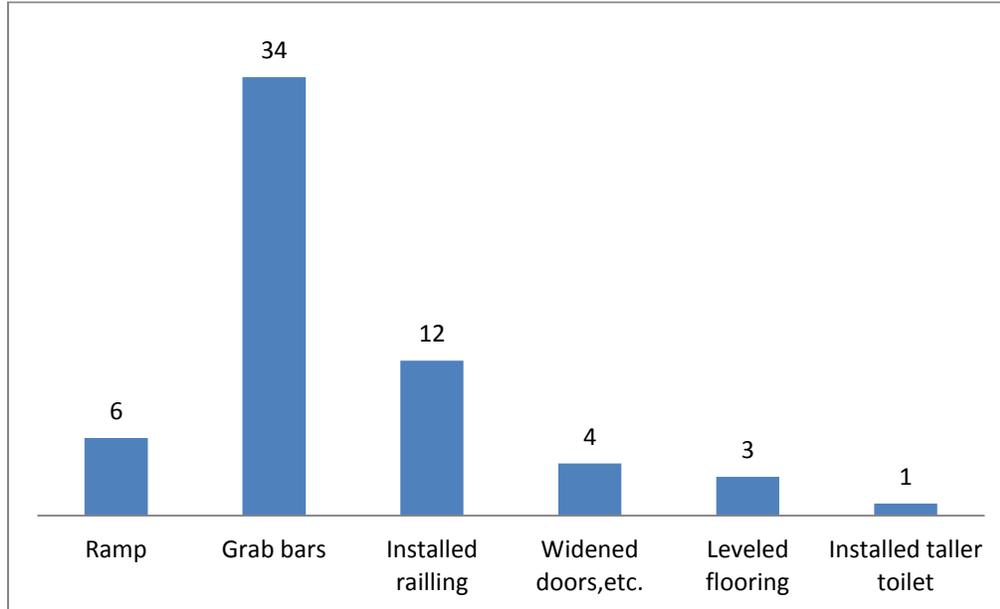


Figure 2. Number of structural changes participants reported to have made to their homes. Thirty-eight percent ($n = 36$) of participants indicated that they had made structural changes. Participants were instructed to select all that apply.

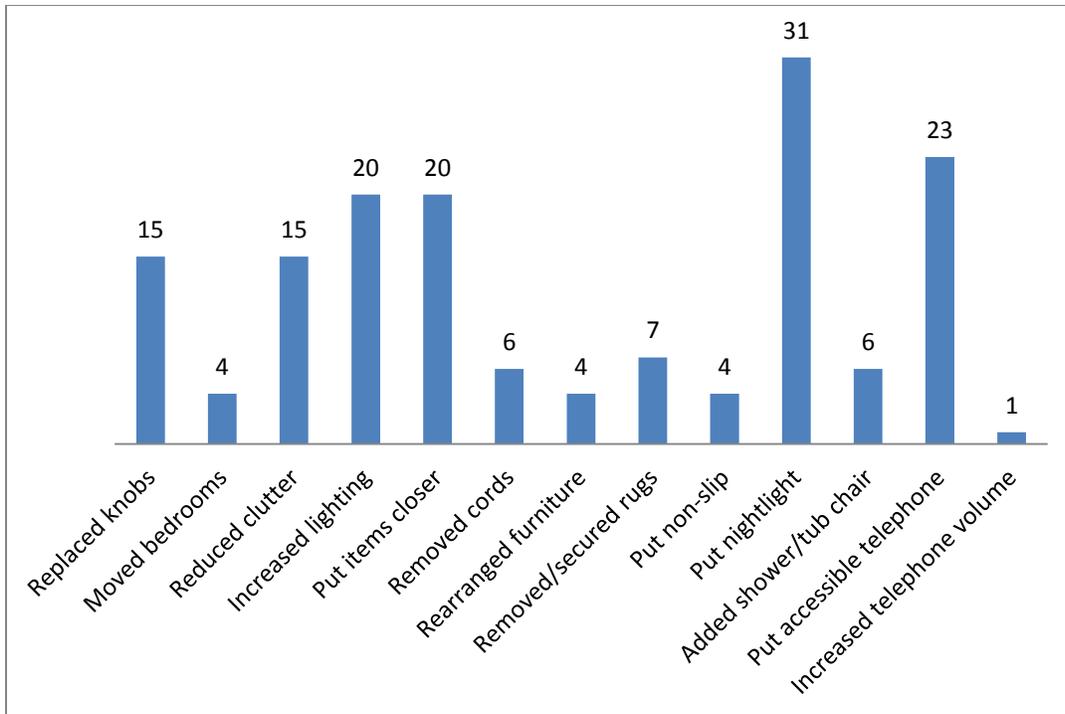


Figure 3. Number of non-structural changes participants reported to have made to their homes. Thirty-seven percent ($n = 35$) of participants had made non-structural changes. Respondents were instructed to select all that apply.

Appendix A: Survey

March 5, 2013

Dear Participant:

My name is Lauren Anderson-Connolly. I am a graduate student at the University of Puget Sound. For my Master's thesis, I am examining "aging in place." Aging in place is the current trend of adults staying in their homes and communities as they age. Because you are 65 or older and live in your home and community in the United States, I am asking you to join in this research study by filling out the following survey.

The survey will require about 20 minutes to fill out. There is no compensation for responding nor is there any known risk. In order to keep the information confidential, please do not include your name. The survey has an identification number and the key matching your name and number will be stored in a secured file drawer in my advisor's office. It will be shredded once all the surveys are collected. There will be no way to connect you with the answers. You do not have to answer any questions you do not want to. If you choose to participate in this project, please return the completed questionnaire promptly in the provided stamped envelope. Filling out and returning the survey means you agree to participate. The results of my study will be in my thesis and shared with my department, campus community, and possibly published in a journal or presented at a conference.

Thank you for taking the time to assist me in my research. If you want more information or have questions, please contact me by the email address below or at 253-879-3514. Questions about your rights as a research participant may be directed to the Office of the Associate Deans at 253-879-3207.

Sincerely,

Lauren Anderson-Connolly
Occupational therapy student
landersonconnolly@pugetsound.edu

Tatiana Kaminsky, PhD, OTR/L
Associate Professor of Occupational Therapy
tkaminsky@pugetsound.edu

Rank (1 through 5) your completion of the following categories from most to least important.

- _____ Personal care (e.g. bathing, dressing, eating, toileting)
- _____ Education and/or work
- _____ Home maintenance such as cooking, cleaning, grocery and other shopping
- _____ Leisure activities
- _____ Social activities

How much do you agree with the following statements? Select the *best* response.

Strongly agree Agree Not sure Disagree Strongly disagree

Most of my communication with others occurs within my home (either in person or through technology).

--	--	--	--	--

I know many people in my community.

--	--	--	--	--

It is important to me to have someone to do the things I like with me.

--	--	--	--	--

I have one or more social outing(s) every week.

--	--	--	--	--

Family provides the bulk of my social support.

--	--	--	--	--

I do most of my activities alone.

--	--	--	--	--

Most of my communication with others occurs on the phone or electronically (e.g. email or Facebook).

--	--	--	--	--

The following are services commonly required to remain at home. Please

I am I I I am N/A
independent currently currently considering

read the items and check *all* the appropriate boxes.

	receive assistance from a friend or family member	pay for service	getting help
Transportation			
Yard work			
Self care (e.g. medication management, bathing, dressing)			
Financial support (e.g. paying bills, completing taxes)			
Community errands (e.g. grocery shopping, pet care, laundry)			
Housework (e.g. cleaning, taking out trash and recycling, cooking, pet care, laundry)			
Handywork (e.g. home repair or modification)			
Other (specify): _____			

Have *structural* changes been made to your home to make it easier to live there? Some examples are handrails, grab bars, and ramps.

- A** No, none. **B** Yes, some. **C** Yes, many.

Have *non-structural* changes been made in your home to make it easier to get around? Some examples are securing or removing carpets and rugs, enhancing lighting, and putting frequently used items within closer reach.

- A** No, none. **B** Yes, some. **C** Yes, many.

Select all of the following structural and non-structural changes that have been made in and around your home to make it easier to get around (check all that apply):

- added a ramp
- widened doors, hallways
- leveled floors
- increased lighting
- rearranged furniture
- put in nightlights
- installed grab bars
- replaced knobs or handles with lever handles
- moved into a more accessible bedroom
- put items on shelves, in cupboards, or in closets in closer reach
- removed or secured rugs
- used a shower chair or tub bench
- installed railing
- lowered countertops/shelving
- reduced clutter
- removed cords from floor
- put down non-slip strips
- put in readily accessible telephone(s)
- other (please specify):

Select the best response.

I am comfortable using the bus/subway system.

I feel just as safe as I always have in my home and community.

I take care to not rush around in and outside my home

I have difficulty opening some doors in my home (including if locked).

I can and do access the light switch or lamp from bed.

If something bad were to happen, I feel I would be ready to think, to move, and/or to scream at a moment's notice.

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
I am comfortable using the bus/subway system.					
I feel just as safe as I always have in my home and community.					
I take care to not rush around in and outside my home					
I have difficulty opening some doors in my home (including if locked).					
I can and do access the light switch or lamp from bed.					
If something bad were to happen, I feel I would be ready to think, to move, and/or to scream at a moment's notice.					

Select the best response.

It has cost a lot to keep my home

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
It has cost a lot to keep my home					

accessible to me

I have budgeted for a potential decline in my health

I keep an eye out for free activities I might enjoy

I don't always have enough money to buy the food I need.

ONLY IF YOU WORK: It is hard on me but I continue to work to support myself/my family.

Select the best response.

Strongly disagree Disagree Not sure Agree Strongly agree

I have a long-term plan for my care.

I wish to stay in my home forever.

If I ended up needing care, I would want a relative or close friend to be my caregiver.

If I ended up needing care, I would want a hired caregiver who I do not know.

Please use the space below to explain any of your selected responses, to expand upon your health/living status, or to provide general comments about the survey. Thank you very much for your participation.

Appendix B: Interview Guide

Qualitative interview outline

I. Demographic information

- a. Age: _____
- b. Gender: _____
- c. Marital status: Married Divorced Widowed Single (never married)
- d. Living arrangement/type of dwelling: _____
- e. Do you live alone? Yes No
 (If no) Who do you live with? _____
- f. Children: Yes No _____ Daughter(s) _____ Son(s)
 - f.i. If yes, how many? _____
 - f.ii. If yes, where do they live? (City, ST [list])

- g. Health status – chronic illnesses/issues, etc. _____

II. Background

- a. **Briefly explain occupational therapy (OT) [if necessary]**
Health care profession that helps people regain or maintain independence, function, and live a fulfilling life, by participating in activities (occupations) that are meaningful to them.
- b. **Provide overview of study/purpose; connection to OT**
The purpose of this study is to describe current practices, attitudes, and future desires of U.S. community-dwelling adults age 65 and older who are currently aging in place. Many Americans want to remain in their homes as they age – for as long as possible – and given that OT is a client-centered profession, i.e. clients and their families are

an integral part of the therapeutic/intervention process, it is important to understand their perspective on the topic, to be able to help them age safely in their homes, while still enjoying a good quality of life.

c. Explain phrases “aging in place” and “productive aging”

***Aging in place** refers to the increasingly popular concept of adults remaining in their homes and communities as they age, rather than moving into unfamiliar settings such as assisted living facilities, retirement homes, or with relatives.*

***Productive aging**, as opposed to simply “aging,” places an emphasis on quality of life.*

III. Grand tour question: **Tell me what it’s been like getting older** (i.e. about experience(s) aging in place). (Follow-up question, if needed, to prompt further discussion: **What does aging in place mean to you?**)

IV. Follow-up questions (these will only be asked if the information they address is not uncovered through the more unstructured conversation):

a. Tell me about the activities that are most important to you.

a.i. Are you still able to do these activities?

a.ii. Have you had to modify them in any way?

a.iii. Do you work [outside the home]?

a.iii.1. *(if yes)* How many hours?

a.iii.2. *(if no)* Did you work previously?

a.iii.2.a. *(if yes)* When did you retire? How long did you work?

a.iv. Tell me about the time you currently spend with members of your family.

b. Did you make changes in your life and environment as you aged to enable you to stay in your home? What were the most important considerations as you planned for this time of your life?

b.i. Home modifications/renovations

b.ii. Social, community relationships

b.iii. Financial

c. Did/do you have health concerns that may affect your ability to continue to stay in your home?

d. What does a typical day look like for you?

d.i. Are there days that are significantly different from what you have described?

What do you do on those days?

V. Summary:

- a. What advice would you give to other older adults (say in their 50s and 60s) who are getting ready to age in place?
- b. What would you say is most important for occupational therapists (and/or other healthcare service providers) to know in order to support you as you age in your home and community?

Appendix C: Consent Form

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Consent to Act as a Subject in a Research Study

TITLE: Aging in place: Older adults' current practices and future desires

INVESTIGATORS: Olive Oyango, OTS Tatiana Kaminsky, Ph.D., OTR/L
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School of Occupational Therapy
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Tacoma, WA 98416
Ph: (253) 879-3514

DESCRIPTION: You are being asked to participate in a study about “aging in place.” The focus of the study is on how you are currently living, as well as your plans and wishes for the future. Topics will include: your health; independence; social roles and relationships; home and community; activities that are important/meaningful to you; economic costs, financial implications; safety and security; and desires regarding future locations of care. The study consists of two in-person interviews approximately 2-3 weeks apart. The first will take 45 minutes to an hour, and the second about 30 minutes. You will get to choose where the interviews take place.

RISKS AND BENEFITS: Participation in this study involves minimal risk, i.e. no more risk than you would encounter in your daily life. Some questions are of a personal nature and may be uncomfortable for some people. However, if you find any of the questions to be too sensitive, you do not have to answer them. Benefits of participation include the potential for increased insight into your own personal characteristics and health habits, as well as the opportunity to gain additional knowledge and insight into the process of aging in place.

COSTS AND PAYMENTS: There are no costs for participating in this study. You will not be paid for your participation.

AUDIO RECORDING: As part of your participation in the above titled research study, you will be interviewed (in person) by a student researcher on two separate occasions. These interviews will be recorded using audio recording equipment to enable the researcher to capture all your responses accurately. The recordings will then be transcribed by a professional transcriptionist to facilitate data analysis.

APPROVAL TO USE AND DISCLOSE HEALTH INFORMATION: Federal and state laws require care providers to protect the privacy of your health information.

Volunteering to participate in this study means that your health information that relates to this study may be collected, used and disclosed to carry out the study. This includes health information about you that was collected prior to, and in the course of the study. Information may be collected from you by interviews or from your medical records. Examples of the health information that may be collected include, but are not limited to, personal information (such as name, address, gender, age, etc.), your medical history, personal habits, and physical tests and measures.

By signing this consent form, you are authorizing the research team to have access to your study-related health information. The research team includes the investigators listed on this consent form only. Your health information will be used only for the study purpose(s) described in this research consent form. Your health information will be shared, as necessary, with any other person or agency as required by law. The information from this study may be published in scientific journals or presented at scientific meetings, but your identity will be kept strictly confidential.

By signing this study consent, you are authorizing the research team to use and share your study-related health information until the end of the research study. The study records will be confidentially shredded for your security when storage is no longer required.

You may withdraw your approval to use and share your study related health information at any time by contacting the Principal Investigator in writing. If you withdraw this approval, you may no longer participate in this study. The study related health information that has already been collected may still be used to preserve the integrity of the study, including a disclosure to account for your withdrawal from the study. However, the use or sharing of future health information will be stopped.

CONFIDENTIALITY: I understand that any information about me obtained from this research, including answers to interview questions, history, or audio tapes will be kept strictly confidential. Information with personal identifying material will be kept in locked files. I do understand that my research records, just like hospital records may be subpoenaed by court order. It has been explained to me that my identity will not be revealed in any description or publication of this research. Therefore, I consent to such publication for scientific purposes.

RIGHT TO REFUSE OR END PARTICIPATION: I understand that I am free to refuse to participate in this study or to end my participation at any time and that my decision will not adversely affect me in any way. Additionally, I may refuse to answer any question or set of questions in the interview(s) if I choose to do so, without any adverse impact on my participation in this study.

VOLUNTARY CONSENT: I certify that I have read the preceding or it has been read to me and that I understand its contents. Any questions I have pertaining to the research will be answered by Olive Oyango (253-879-3514). Any questions or concerns I have regarding my rights as a research subject will be answered by the Office of the Associate Dean (253-879-3207). A copy of this consent form will be given to me. My signature below means that I have freely agreed to participate in this study.

Participant's signature

Date

INVESTIGATOR'S CERTIFICATION: I certify that I have explained to the above individual the nature, potential benefits, and possible risks associated with participating in this research study, have answered any questions that have been raised, and have witnessed the above signature.

Investigator's signature

Date