

Educational Website for Village Volunteers

May 2012

This project, submitted by Kara McClanahan, has been approved and accepted in partial fulfillment of the requirements for the degree of Master of Occupational Therapy from the University of Puget Sound.

Project Chair: Tatiana Kaminsky, PhD., OTR/L

Project Course Instructor: Lucretia A. Berg, MSOT, OTR/L

Director, Occupational Therapy Program: George S. Tomlin, PhD., OTR/L

Dean of Graduate Studies: Sarah Moore, PhD

Abstract

The majority of older adults prefer to stay in their own homes and “age in place.” But older adults report they need assistance with chores, transportation, and social participation to increase their quality of life, safety, and success in performing daily activities. Supportive programs may provide adults with these opportunities to continue to live in their homes successfully. The purpose of this project is to provide an educational website for volunteers of North East Seattle Together (NEST), which is a community-based village providing older adults with volunteer assistance, educational programs, and social resources. This website serves as a tool where volunteers may gain more information about the aging process and strategies they may use to be more effective in serving the members of NEST, which will allow members more success in daily function. The website includes sections about age-related changes, the impact these changes have on daily function, simple home modifications, energy conservation strategies, communication strategies, and ethical situations that volunteers may face and how best to proceed through those situations.

Purpose Statement

The purpose of this project was to provide an educational website which informed NEST volunteers about the various characteristics of the aging process, how these age-related changes impact function and instrumental activities of daily living (IADL) tasks, and simple changes and effective strategies that can be used to provide quality assistance to the members.

Background/ Literature Review

Introduction

The population of older adults in the U.S. continues to grow rapidly, and, according to the Aging in Place Initiative (2011), approximately 71.5 million Americans will be older than 65 after 2030. In addition, about 70% of these older adults will remain in the same place where they lived when they were 65 years old (Senior Resource, 2011). According to an American Association of Retired Persons (AARP) survey (2010), about 86% of adults 45 and older wished to live in their homes and communities. When these adults were asked why they want to stay in their homes, the two main reasons were to remain close to friends and family and that their homes were in close proximity to the places they want to go, such as doctor offices and grocery stores (AARP, 2010). These trends indicate that the 65 and over population is growing with a vast majority of these adults having a desire to stay in their homes, where they have spent most of their lives, despite potentially increasing personal care needs.

Aging in Place

“Aging in place” is the process by which older adults are able to peacefully age in their own homes and communities, where they have grown accustomed to living over the years (Black, 2008; Kunstler, 2002; Stevens-Ratchford & Diaz, 2011; Tang & Lee, 2010). In order for older adults to age in place, it is essential they have a support system set up for them to maintain

their health, independence, and quality of life (Black, 2008; Kunstler, 2002). U.S. Congress has passed legislation to help provide older adults with assistance and new programs. One example is The Older American Act (OAA), passed in 1965, which introduced new programs that would assist older adults in retaining their self-respect and well-being (Department of Social and Health Services, 2010, p. 15-16). This Act established many Area Agencies on Aging (AAA) for each state. These AAA's offer a wide range of services to support older adults by promoting health, emotional well-being, and social participation (Department of Social and Health Services, 2009). The Community Innovations for Aging in Place Initiative (CIAIP) was added to the OAA in 2006 to help the public provide services to older adults so they can receive the help they need to stay in their homes as they age (Community Innovations for Aging in Place Initiative, 2011). This important legislation, which affects adults 65 and over, suggests a need for services that will help older adults effectively stay in their homes through programs that encourage health, education, and social participation (Community Innovations for Aging in Place Initiative, 2006).

Aging in place impacts the quality of life of older adults in many dimensions: physically, socially, and emotionally. Stevens-Ratchford and Diaz (2003) found that aging in place creates a sense of meaning and well-being for older adults, because it promotes occupations within the home. Aging in place allows older adults to maintain their habits and routines, because they are able to stay in a familiar environment, therefore increasing their contentment (Shank & Cutchin, 2010; Cutchin, Owen, & Chang, 2003). Some studies have shown that older adults who were able to age in place are more involved in and connected to their community through their relationships with neighbors, nearby family, and local volunteer programs, which increased overall wellness and quality of life for these individuals. In addition, these older adults are more

willing to go out in the community and make friends knowing they will remain in their homes (Sabia, 2011).

Supports to Help Older Adults Age in Place

Services for older adults in the community can help with various tasks and allow older adults to receive programs they need, such as transportation, chores around the house, or home repair services to decrease safety hazards (Black, 2008). It is vital to set up transportation to both practical and social activities where older adults can engage in educational classes and other meaningful activities that promote overall wellness and empowerment. This is especially important since lack of transportation is a common barrier to participation for older adults (M. Williams, personal communication, February 23, 2011).

Another service that can be provided is education about various compensation and energy conservation strategies, which make tasks easier and increase functionality (Stevens-Ratchford & Diaz, 2003; Tang & Lee, 2010). Studies have shown that home modifications increase overall daily function and safety within the home environment (Gitlin et al., 2006; Petersson, Lilja, Hammel & Kottorp, 2008; Stark, Landsbaum, Palmer, Somerville, & Morris, 2009). For instance, educating older adults on eliminating clutter can decrease fall potential (Stevens-Ratchford & Diaz, 2003; Tang & Lee, 2010). When paired with other strategies, knowledge of compensation strategies proved to be beneficial. A randomized control trial, performed by Gitlin et al. (2006), found that a multicomponent intervention composed of occupational therapy assessments, home modifications, education in compensating strategies, and training in fall recovery showed decreases in IADL difficulty, home hazards, and fear of falls compared to the control group that did not receive these services.

Importance of Occupational Therapy in Aging in Place

It is important for occupational therapists to assess older adults and their homes for safety, independence in daily routines, overall function, and health maintenance, which are essential determinants of successful aging in place (Clark et al., 2001; Steultjens et al., 2004). The Well Elderly study, conducted by Clark et al. (1997) found that preventative occupational therapy (OT) for nine months resulted in enhanced quality of life, health, and independence for 361 community dwelling adults aged 60 and older from diverse backgrounds. The occupational therapy treatment in this study was adapted to each individual and the daily routines that person perceived as meaningful and health promoting (Clark et al., 1997). Treatment included teaching the participants about topics such as energy conservation, home and community safety, joint protection strategies, use of adaptive technology, and utilization of community services that the patient saw as valuable to their lifestyles. This study found that OT intervention was more successful in improving independence, physical health, and emotional well-being compared to social activity. Follow-up was conducted with the participants six months after the completion of the study to assess the long-term effects of the OT intervention (Clark et al., 2001). Preventative OT had greater long-term benefits than the social activity or non-treatment control groups six months later. In addition, this study found the OT interventions that were most meaningful and important in older adults' daily lives were the most successful in making longstanding lifestyle changes, which resulted in increased health promoting practices (Clark et al., 2001).

Another benefit to occupational therapy treatment is that it is cost-effective. A study by Hay et al., (2002) used the Well-Elderly study and telephone interviews to find that a nine month preventative occupational therapy intervention was cost-effective and resulted in a decrease of medical spending for the 163 older adults involved in this study. The cost for this OT intervention was about \$548 per person. Medical costs were less for the OT group, which cost

\$967, compared to the social activity group and the non-treatment group, which cost \$1,726 and \$3,334, respectively (Hay et al., 2002). Ultimately, these studies show the benefits of engagement in occupation for improving overall health while decreasing medical costs.

Barriers to Aging in Place

There are barriers to older adults aging in place over the long-term. One barrier to aging in place is the more at risk population of older adults were unaware or they failed to admit they needed services required to live safely in their home, thus, making it more difficult to provide these programs to these individuals (Cohen-Mansfield & Frank, 2008; Tang & Lee, 2010). In addition, the layout of the home may pose hardships and safety concerns for an older adult, who may have limited function and mobility (Horowitz, 2002). Adults may also be resistive to modifying their home because of increased expenses, disruption of habits, or lack of awareness of current and future limitations (Horowitz, 2002; Cohen-Mansfield & Frank, 2008). According to AARP's home and community preferences of the 45+ population survey (2010), fewer than half of the adults in the study reported having an entry without stairs (36%), lever door handles as an alternative to knobs (34%), or wider than average doorways (27%). Also, studies and surveys completed through AARP identified a lack of transportation options for adults that allow them to participate in standard activities to remain in their homes, which poses as a barrier to aging in place (Degood, Goldberg, Donohue, & Shoup, n.d; Ritter, Straight, & Evans, 2002; Skufca, 2008). Issues such as transportation and home modifications are made more difficult because of their costs, which are often out of pocket for the older adults (Howell, Silberberg, Quinn, & Lucas, 2007). Many states' budgets support nursing homes but not aging in place programs further impeding aging in the home (Howell et al., 2007). There are differing views about the benefits of institutional care versus long-term care in the home (Howell et al., 2007).

Cost and feasibility are also issues because of the varying needs between the different age brackets of older adults and the fact that these needs are continually changing. For example, an older adult who is 95 years old has different needs than an adult who is 65 years old but both are considered “older adults.” These micro-populations likely have differences in their home care, social, and educational needs. Therefore, programs have to be adapted to fit these different age groups and changing needs (Black, 2008; Berg-Warman & Brodsky, 2006; Horowitz, 2002).

In addition, older adults face many barriers due to the aging process. There are changes in neuromuscular structure and movement function as a person ages. Older adults experience a loss of muscle mass, an increase in stiffness, a decrease in mobility of the tissues, and some even experience common pathologies such as osteoarthritis or osteoporosis (Bello-Haas, 2009). Additionally, there are changes in sensory function, including declines or losses in vision, hearing, taste, smell and superficial sensation, which all either result from the normal aging process or pathologically from impairments or diseases (Hooper & Bello Haas, 2009). Many of these various sensory impairments, in combination with neuromuscular changes, cause declines in balance, which create an increased fall-risk (Tideiksaar, 2009). Further adding to this increase fall risk, is that older adults may experience neurological changes causing reaction time, gait, and balance to be affected (Tideiksaar, 2009). Cardiovascular changes, which cause a decrease in blood flow to the brain, may result in dizziness, also increasing the risk of a fall (Dean & Dornelas De Andrade, 2009). In addition, older adults may undergo changes in mental functioning, such as declines in verbal performance, psychomotor perceptual abilities, memory, and attention, which further create safety concerns (Riley, 2009).

All of these age-related changes make living alone in the home a safety concern, because a person’s physical functioning may make it more difficult to complete functional tasks in the

home if there is a discrepancy between the person's ability and their environmental demands. A defective match between a person and their environment increases the risk for falls or injury within the home. It is vital for older adults to safely and independently perform daily activities so that they may remain in their homes, unless they are able to receive outside assistance or obtain caregivers. This is why community support would greatly assist older adults, because services that adults are unable to safely and independently complete such as carrying laundry upstairs, changing light bulbs, and yard work could be provided (Black, 2008; Cohen-Mansfield & Frank, 2008; Tang & Lee, 2010). These services are also important, because they provide socialization for older adults and allow volunteers to check on these older adults to make sure of their safety and wellness (Tang & Lee, 2010).

Activities of daily living (ADL) are tasks that are necessary to survival and involve caring for one self. There are various activities of daily living that an older adult needs to perform in order to safely age in the home. Some of these essential daily tasks include dressing, eating, and toileting (American Occupational Therapy Association [AOTA], 2008). A study by Tang & Lee (2010) showed that older adults' quality of life significantly increases if adults received assistance with ADL in their home compared to not receiving these services or getting this assistance outside of the home.

It is also vital for adults to be able to perform instrumental activities of daily living (IADL), which are more complicated maintenance tasks that allow them to safely live in their home. These are tasks that need to be done to interact in society and live independently. These tasks include shopping, paying bills, and preparing meals, (AOTA, 2008). Tang and Lee (2010) found that community dwelling older adults report a need for help with a variety of tasks, such as chores around the house and transportation for errands outside of the home. Additionally, Berg-

Warman & Brodsky (2006) surveyed 200 older adults living in “supportive communities” in Israel and found that half of the responders reported needing assistance with grocery shopping, getting medications, and setting up doctor appointments. In addition, Black (2008) found there were differences between the needs of older and the younger populations of older adults. The oldest population of older adults reported that to successfully live by themselves they needed more assistance with shopping, meal preparation, and transportation, which indicates that different types of programs are needed to address different needs older adults face at different points in their lives and that these requirements are always changing (Black, 2008; Tang & Lee, 2010). These studies indicate a need for older adults to receive IADL services to aid in them staying in their homes. A few minor services could help towards keeping older adults as independent as possible and remain in their home. These services could be set up in the community to support older adults in their homes through volunteer services.

Home and Community Based Services

Home and community-based services (HCBS) have become more common and consist of programs to support older adults in their homes and communities by providing services such as meal service delivery, transportation, home healthcare, adult day centers, etc. (Howell et al., 2007; Tang & Lee, 2010). Some studies have shown these programs to be successful in allowing older adults to stay in their homes with an increased quality of life for as long as possible (Howell et al., 2007; Tang & Lee, 2010). In a study that compared residents living in a nursing home to residents involved in an aging in place program receiving supportive community-based services, researchers found that nursing home residents had an increase in depression and a decrease in cognition and ADL performance, while aging in place residents improved or were less rapidly deteriorating in these categories (Marek et al., 2005).

Livable Communities

AARP is an important U.S. organization that plays a huge role in the lives of older adults and also for aging in place by providing support to older adults in their homes. AARP's mission statement is that it "helps people age 50 and over have independence, choice and control in ways that are beneficial and affordable to them and society as a whole, ways that help people 50 and over improve their lives" (AARP, n.d.). One of AARP's many goals is designed to help older adults age in livable communities. The growing population, increased housing costs, and lack of transportation are causing livable communities to be more popular all over the U.S. AARP defines a livable community as "one that has affordable and appropriate housing, supportive community, features and services, and adequate mobility options, which together facilitate personal independence and the engagement of residents in civic and social life" (2005, p. 4). Livable communities may offer a wide range of activities for older adults to foster a sense of wellness social, emotional, and physical wellness (Berg-Warman & Brodsky, 2006). These livable communities may offer older adults educational classes, social events, and physical activities. In addition, these livable communities offer a wide array of services, such as transportation to and from the home, volunteers to assist with ADL/IADL, meal delivery, home repair, and much more, to help these adults successfully stay in their homes. (Berg-Warman & Brodsky, 2006; Kunstler, 2002).

Village Models

One type of livable communities are village models, which are nonprofit organizations that connect neighborhoods together, allow for neighbors to assist each other, and provide volunteers and services to their members. Village models also bring home and community based programs to the home, which assist older adults in the process of remaining in their homes.

Village models were created to help with the growing older adult population by allowing their members to age in their homes. The main purpose of a village is to organize and distribute services and other resources to all the members in a given community (Village to Village Network, 2011). Each village model is different in design, size, services, and operation because each is adapted to fit its community's needs (Accius, 2010). The residents in these communities pay dues to become members and receive these services offered by the village. (Village to Village Network, 2011). The villages usually are run by a board of directors and have volunteers or paid staff to carry out the services. One successful village is the first village in the United States, located in Boston and called Beacon Hill Village, which was developed in 2001, when a group of residents came together because of common needs (Accius, 2010). This village led to the development many more villages in the U.S. Now there are about 50 villages with many more villages under development (Accius, 2010).

North East Seattle Together (NEST)

One of these villages that became operational in the spring of 2012 is called North East Seattle Together (NEST), which is striving to create a livable community that follows the village model and allows for older adults to age in place by offering support for members in their homes, social programs, and educational activities as well as providing an outlet that allows members to advocate for their needs (North East Seattle Together, 2011). NEST is a local organization that seeks to provide support to older adults who wish to remain in their own homes. NEST serves people in a group of neighborhoods in Seattle, Washington by offering volunteers, social programming, and access to a vetted vendor list. Additionally, social activities and education for its members will be provided. Volunteers will be used to provide many services to older adults, such as help around the home, assistance with grocery shopping, meal delivery, home repair, and

transportation services (North East Seattle Together, 2011). NEST is also interested in providing education to their volunteers so they can better serve the older adult population living in their boundaries (T. Kaminsky, personal communication, March 21, 2011).

Educational Tools for Volunteers at NEST

Black (2008) highlights the importance of training programs for volunteers, because they enrich social interactions between the volunteers and the people they serve, ultimately improving the services provided. An educational tool for volunteers is an important part of this training. The training should include the various characteristics of the aging process, how these age-related changes affect daily function, key ADLs/IADLs that older adults may need help with, ways to make tasks easier, simple home modifications to reduce risk of falling and increase performance in daily activities, effective ways to communicate with older adults, and possible ethical dilemmas that volunteers may face (Black, 2008; Stevens-Ratchford and Diaz, 2003). This training program will consist of a website to guide current volunteers in recognizing the most effective ways to help older adults in their homes or community so that the older adults are able to accomplish the tasks that need to be done such as grocery shopping, mowing the lawn, or cleaning the house.

Currently, NEST has a basic manual for volunteers to follow, but does not have a website that is easily accessible. Volunteers will benefit from additional training that better enables them to assist the older adults in accomplishing everyday tasks and could greatly impact the lives of older adults living in the Seattle community. More education for volunteers could help them to more easily identify the needs of older adults, which will then enable the volunteers to better serve the older adults and support them in having increased independence within their homes. Therefore, providing education to volunteers serving older adults will ideally help the older

adults to stay in their home, which saves on costs, increases their quality of life, and creates social opportunities.

Procedures

The Nest Volunteer guide is an educational website for volunteers to assist them in providing quality services for NEST members. Numerous steps were taken to complete this website and are as follows:

- Conducted a needs assessment and assessed current trends related to older adults, aging in place, and virtual villages.
- Collaborated with Michele Williams, who is the supervisor at Lighthouse Senior Center, to conduct a needs assessment regarding the older adult population within her community.
- Researched aging in place, livable communities, and village models
- Researched age-related changes and how they influence function
- Researched common IADL and errands in which older adults need assistance
- Researched energy conservation strategies and simple home modifications that will allow older adults to more safely and functionally perform daily activities
- Researched and composed common ethical dilemmas, possible solutions, and a guiding checklist to follow.
- Researched the methods to create a website and possible website designers.
- Met with reference librarian for information regarding copyright images.
- Met with website designer to learn important features of designing a website
- Purchased web design features, pictures, domain name, and hosting from godaddy.com

- Designed and formatted website through website tonight with godaddy.com
- Selected pictures through godaddy.com or took pictures
- E-mailed godaddy.com to make sure images are appropriate for use.
- Created post-test and surveys for feedback about the effectiveness of the website.
- Submitted website to project chair for editing
- Contacted NEST to pilot website.
- Revised website based on feedback from surveys and post-tests
- Key players that were involved in the production of this website were Tatiana Kaminsky, PhD, OTR/L (professor and project chair), Judy Kinney, MSW (executive director for NEST) and Danielle McClanahan (Designer)

Description of the Final Project

This website provided volunteers with knowledge about age-related changes and how they affect function. By using and reading the website, NEST volunteers gained new skills for effective communication, strategies to assist older adults with IADLs, and skills for problem solving ethical dilemmas. This information assisted volunteers to be more knowledgeable and confident in providing these services for the older adult population. The website is located at www.villagevolunteerguide.com and is composed of the following sections (see Appendix for sample website pages):

Introduction: General overview of aging in place, the importance of person-environmental fit in relation to fall prevention, and community supports.

Age-related Changes: Lists age-related changes split up into 3 categories: physical changes, cognitive changes, and sensory changes. Provides information on how these age-related changes impact function, case studies, and recommendations for volunteers.

Energy Conservation Strategies: Lists energy conservation strategies that enable older adults to be more functional, while reducing fatigue at the same time.

Home Modifications: Lists simple home modifications split up into 3 categories: home modifications by room, home modifications by item, and home modifications dealing with the safety aspect.

Communication Strategies: Gives a general overview of communication strategies, active listening strategies, examples of effective communication, and solutions to communication barriers. Additionally, communication techniques are given when interacting with individuals with low vision, hearing loss, cognitive difficulties or memory loss, and physical limitations.

Ethical Dilemmas: Lists possible ethical dilemmas, solutions, and a guiding checklist to assist the volunteers in solving ethical dilemmas. Scenarios regarding each dilemma are included with solutions the volunteer should follow, such as calling 911 or informing the director.

References: List of referenced texts and articles.

Survey and Post-test: The survey is composed of simple questions regarding ease of use and quality of information that the volunteers can answer. This allows for constructive feedback to enhance the volunteers' learning. The post-test asks multiple choice and true or false questions to measure the volunteers' learning of the material and effectiveness of the website.

Contact Us: This link allows the volunteers to contact the website manager with comments or feedback.

Outcomes/Goals/Objectives

The desired outcome of this project was to provide an educational resource to NEST volunteers to increase the knowledge of age-related changes and how they impact function, home modification/energy conservation strategies to allow members to be more functional in their

homes, communication strategies to be more effective in serving members, and possible ethical situations volunteers may experience and solutions to these dilemmas. A survey was included on the website for volunteers to rate the usability and effectiveness of the website. It also allowed volunteers to provide feedback about the website and offer suggestions for improvement. A post-test was also included to measure the volunteers knowledge of the sections included in the website, which examined if the website was an effective learning tool. This post-test was completed by five individuals, and these data were studied to determine the success of the website and necessary adjustments were completed.

Goal 1: After the NEST volunteers read the sections of the website, they learned age-related changes that older adults experience and how these changes impact their occupations and IADL.

This goal was met.

Objective 1: After the NEST volunteers read the website, they were able to identify three physical age-related changes. *This objective was met.*

Objective 2: Upon reading over the website, the volunteers were able to identify three cognitive age-related changes. *This objective was met.*

Objective 3: After reading the website, the volunteers were able to identify three sensory age-related changes. *This objective was met*

Objective 4: Upon reviewing the website, the volunteers were able to identify 3 ways that age-related changes affect older adults' occupations. *This objective was met.*

Goal 2: After the various sections of the website were read, volunteers at NEST were informed of the various IADL tasks that older adults may need help with in their homes and strategies to successfully complete these tasks. *This goal was not met because the project evolved in a way to not include this section. Instead, common IADL examples were included in scenarios and how*

age-related changes affected these tasks. Common strategies to assist in the completion of these IADL were also included.

Objective 1: After volunteers read the website, they were able to identify 3 of the most common IADL that older adults need assistance. *This objective was not met because the project evolved in a way to not include this section. Instead, common IADL examples were included in scenarios and how age-related changes affect these tasks.*

Objective 2: After reading over the website, the volunteers were able to identify 3 strategies that can be used to help older adults successfully complete their IADL tasks. *This objective was not met because the project evolved in a way to not include this section. Instead, common IADL examples were included in scenarios with common strategies to assist in the completion of these IADL.*

Goal 3: After the volunteers read the various sections of the website, they demonstrated an increased awareness of the various strategies to effectively communicate with NEST members. *This goal was met.*

Objective 1: After the volunteers read over the website, the volunteers were able to name three techniques they can use to engage socially with the older adults they serve. *This objective was met.*

Objective 2: After the volunteers read over the website, they were able to identify two reasons why effective communication is important. *This objective was met.*

Goal 4: Upon reviewing the website, volunteers with NEST were educated about the various types of simple home modifications and energy conservation strategies to help enhance NEST member's daily performance and increase their safety. *This goal was met.*

Objective 1: After the volunteers reviewed the website, they were able identify the 3 most common types of simple home modifications/energy conservation strategies they can use to help support NEST members' functioning in their homes. *This objective was met.*

Objective 2: Upon reading over the website, the volunteers were able to explain 2 reasons why these energy conservation strategies and home modifications will help the NEST members. *This objective was met.*

Goal 5: Upon reviewing the website, NEST volunteers were educated of difficult situations in which they may need to ask for more help or inform the executive director, and reasons why. *This goal was met.*

Objective 1: After volunteers reviewed the website, they were able to articulate 2 situations where they need to seek more help and inform the executive director. *This objective was met.*

Objective 2: After volunteers read the website, they were able to explain one reason why they need to ask for more assistance. *This objective was met.*

Implications for Occupational Therapy

Aging in place creates a sense of meaning and well-being for older adults, because it promotes occupations within the home (Stevens-Ratchford & Diaz, 2003). For older adults to age in place, it is vital they have a support system set up to maintain their health, independence, and quality of life. To develop this support system, it is essential to know the daily tasks that older adults report they need, such as chores around the house and transportation for errands outside of the home (Tang & Lee, 2010). Occupational therapists are aware of instrumental activities of daily living, and have knowledge about the aging process and how these age-related

changes affect occupational performance within the demands of the environment. Occupational therapists are educated to know home modifications and compensation strategies that will enable older adults to live safely and independently in their homes (Fänge & Iwarsson, 2005; Stark et al., 2009). In addition to these strategies, occupational therapists are aware of the importance of social aspects involved with aging in place, and studies have shown that social participation increases overall wellness and quality of life for older adults aging in place (Sirven & Debrand, 2008).

One of the goals of this project is to give NEST volunteers information and strategies on how to better serve older adults within their home environment. Volunteers will be educated about IADLs, simple home modifications, and social interaction strategies, which will create a supportive environment that meets the needs of older adults. As a result, this project allows older adults to safely remain in their own neighborhoods, therefore, enhancing their independence and quality of life.

Occupation-Based Model

The Ecological of Human Performance (EHP) is the model and used as a framework to help me reason through this project. The EHP model suggests there is a dynamic relationship among the person, task, and context or environment, which helps to understand a person's performance (Brown, 2009; Dunn, Brown, & McGuigan, 1994). An essential component of the EHP model is the essential interaction between the person's abilities, the task, and contextual demands, which is important in a person's ability to have successful occupational performance. The context is composed of all the physical, social, cultural, emotional, and temporal aspects that surround people and affects their performance (Brown, 2009; Dunn et al., 1994). An intervention of this model is to modify the context to support people's abilities to meet the

demands of their daily tasks, which will then increase their performance in many occupational areas. (Dunn et al., 1994). Another intervention is to establish and restore skills so that people can improve their skills and abilities to perform tasks (Dunn et al., 1994). Prevention is also important to this model and uses the above interventions to prevent negative occurrences from happening (Brown, 2009). It is because of the relationship between these constructs that this model applies to this project.

Older adults undergo many age-related changes or face various disorders that create physical limitations to living in their homes. These have an effect on IADL and social participation in the context of their daily lives (Christiansen, Haertl, & Robinson, 2009). The implementation of an educational tool for NEST volunteers would help volunteers modify the environment to create a more supportive context that could meet the needs of older adults. This educational tool is filled with information and strategies to better serve older adults with IADLs and simple compensation strategies, therefore establishing and restoring skills that will assist older adults to be more functional and safe in their homes. These interventions will play a role in the prevention of negative occurrences such as falls or having to move from the home due to functional decline. As a result, this context modification and skill restoration will allow the members of NEST to safely remain in their homes where they are able to participate in meaningful tasks, which will ultimately enhance their quality of life and daily performance.

Application of the Occupational Therapy Practice Framework

The Occupational Therapy Practice Framework acts as a guide for the profession of occupational therapy by defining and helping therapists conceptualize the various aspects that influence occupational functioning. It also guides therapists through the evaluation and treatment process (AOTA, 2008). The Framework also explains the importance of occupational

therapy, and its key role in health promotion and engagement in meaningful activities, which aids in communicating with various audiences (AOTA, 2008). The Framework includes all occupations that are essential and meaningful to people including areas of occupation such as self-care, social participation, work, and leisure (AOTA, 2008). The Framework emphasizes the significance of these daily activities for all people and the impact it has on their lives when these occupations are interrupted. Occupational therapy is important because it addresses IADL tasks, and considers a variety of factors that can impact performance in IADL, along with other areas of occupation. These factors include client factors, performance skills, and task demands. Optimal functioning in these areas allows a person to participate in valued activities, therefore, improving a person's quality of life and independence (AOTA, 2008).

This project considers client factors, which are qualities that make each person unique, including, values, beliefs, spirituality, body functions, and body structures (AOTA, 2008). Older adults face many changes as they enter the aging process, which have an impact on client factors such as mental, sensory, cognitive, and neuromusculoskeletal body function, ultimately, influencing their ability to perform daily activities (American Occupational Therapy Association, 2008).

Additionally, this project addresses performance skills, which are the abilities individuals exhibit to perform their occupations, including, motor and praxis, cognitive, and sensory perceptual skills (AOTA, 2008). The aging process has an impact on these performance skills. Motor and praxis skills may be affected by muscular, sensory, and neurological changes which make it difficult to carry out skilled and purposeful movements, such as bending and reaching for household tools, adjusting body position in response to environmental changes, and coordinating body movements to complete household tasks (AOTA, 2008; Bello-Haas, 2009; Hooper & Bello

Haas, 2009). Cognitive skills may also be impacted because of declines in psychomotor perceptual abilities, memory, and attention, which cause difficulty in sequencing, multitasking, and organizing household activities (AOTA, 2008; Riley, 2009). Also, the aging process may have an effect on sensory perceptual skills because of declines in various sensations, such as vision, audition, proprioception and tactile sensation making it difficult to locate household items and position the body to perform IADL (AOTA, 2008; Hooper & Bello Haas, 2009). In addition, psychomotor perceptual abilities, memory, and attention may be affected by the aging process, which makes it difficult to remember and organize these sensations (AOTA, 2008; Riley, 2009). It is important for older adults to demonstrate the performance skills necessary to remain in the home safely and independently. If older adults do not possess these skills they may not be successful in remaining in their homes. It is vital to determine which skills they struggle with to be able to provide that assistance to them.

Instrumental activities of daily living (IADL) and social participation are areas that this project covers. IADLs are necessary for a person to function at an adequate level in society and are multi-dimensional compared to activities of daily living (American Occupational Therapy Association, 2008). Furthermore, this project also covers activity demands. Activity demands are the features of the occupation such as objects, space, social demands, sequencing, performance skills, and body functions that are essential to carrying out an activity (American Occupational Therapy Association, 2008).

The educational tool assists NEST volunteers in understanding the importance of IADL and how to better serve the NEST members. These IADL consist of whatever the NEST members need to be able to safely stay in their homes, including but not limited to factors such as community mobility, home management, and shopping (American Occupational Therapy

Association, 2008). Also, this project educates volunteers about client factors, which are the age-related changes that are affecting the NEST member's performance. This project informs the volunteers about simple compensation strategies and easy home modifications to teach the NEST members that deal with client factors. This information allows for greater safety and increase in daily task performance, because these are the ways to increase the NEST member's performance skills and adapt the environment to meet the activity demands of remaining in the home. This project educates volunteers on how to better interact with the members of NEST, therefore, increasing the social participation of the members. Through this intervention, the members of NEST are provided with the scaffolding to remain safely in their homes, thereby, increasing their independence and quality of life.

Project Limitations

If this project were to be replicated, some changes would be made. First, the web page layout should have been established earlier, instead of complete text that needed to be reduced to fit into a website format. Second, the website should have been completed earlier to allow for more feedback from volunteers and to have more time to make revisions based on their insight. This earlier time frame may have allowed for feedback from members about changes in the services from volunteers or responses from the members about what types of information they would like included in the website. Also, some feedback came from other website users other than volunteers with NEST, which may cause differences in the feedback because they may not be as familiar with NEST or working with older adults. Last, there was a lack of resources and funding to hire a website designer. If the author of this website were to do it again more research would have been completed to find a designer to help with the process.

Future Steps and Sustainability

It is important for the sustainability of this project to evaluate the website, examine if it is an effective learning tool for volunteers, and whether it makes a difference in the services provided to NEST members. The survey and post-test on the website are methods for gathering this data to measure the success and usability of this website. In the future, it would be important to include post-tests after each age related change section to allow the volunteers to test their knowledge. In addition, more pictures and stories should be included to increase volunteer interest and understanding of the material.

In addition, it is essential to reflect on the sustainability component of this project when creating a website. The use of a website permits for easy of access for volunteers at any time. Other individuals may have access to this website since it has been placed on the Internet so it may reach others besides the target volunteer audience. Another consideration is that websites in general cost money to secure a domain name and hosting, which is renewed annually. The OT student has decided to finance and maintain the website for up to 3 years after it is published. The website account and password may be left with the director of NEST so that she can make changes and adjustments as necessary, as she receives feedback from volunteers, to ensure the continued success of the project.

References

- American Association for Retired Persons (AARP). (2005). Beyond 50.05: A report to the nation on livable communities: Creating environments for successful aging. *AARP*, pp. 1-108. Retrieved from http://assets.aarp.org/rgcenter/il/beyond_50_communities.pdf
- American Association for Retired Persons (AARP). (2010). Home and community preferences for the 45+ population. *AARP*, pp. 1-19. Retrieved from <http://assets.aarp.org/rgcenter/general/home-community-services-10.pdf>
- American Association for Retired Persons (AARP). (n.d.) Who we are. *American Association for Retired Persons*. Retrieved from <http://www.aarp.org/about-aarp/>
- Accius, J. (2010). The village: A growing option for aging in place fact sheet. *AARP Public Policy Institute*. Retrieved July 15, 2011, from <http://assets.aarp.org/rgcenter/ppi/liv-com/fs177-village.pdf>
- American Occupational Therapy Association. (2008). Occupational therapy practice framework: Domain and process (2nd ed.). *American Journal of Occupational Therapy*, 62, 625-683.
- Aging in Place Initiative. (2011). Aging Facts. *Aging in Place Initiative*. Retrieved from http://www.aginginplaceinitiative.org/index.php?option=com_content&task=view&id=16&Itemid=45
- Bello-Haas, V. (2009) Neuromusculoskeletal and movement function. In B. R. Bonder, & V. Bello-Haas (Eds.), *Functional performance in older adults* (3rd ed., pp. 130-176). Philadelphia, PA: F.A. Davis.
- Berg-Warman, A., & Brodsky, J. (2006). The supportive community: A new concept for enhancing the quality of life of elderly living in the community. *Journal of Aging & Social Policy*, 18(2), 69-83.

- Black, K. (2008). Health and aging-in-place: Implications for community practice. *Journal of Community Practice, 16*(1), 79-95.
- Brown, C. (2009). Ecological models in occupational therapy. In E. B. Crepeau, E. S. Cohn, B. A. B. Schell (Eds.), *Willard & Spackman's occupational therapy* (11th ed., pp. 435-445). Philadelphia, PA: Lippincott Williams & Wilkins.
- Christiansen, H., Haertl, K., & Robinson, R. (2009) Self-care. In B. R. Bonder, & V. Bello-Hass (Eds.), *Functional performance in older adults* (3rd ed., pp. 267-289). Philadelphia, PA: F.A. Davis.
- Clark, F., Azen, S., Carlson, M., Mandel, D., LaBree, L., Hay, J.,... Lipson, L. (1997). Occupational therapy for independent-living older adults: A randomized controlled trial. *Journal of the American Medical Association, 278*, 1321- 1327.
- Clark, F., Azen, S., Carlson, M., Mandel, D., LaBree, L., Hay, J.,... Lipson, L. (2001). Embedding health-promoting changes into the daily lives of independent-living older adults: Long-term follow-up of occupational therapy intervention. *Journal of Gerontology: Psychological Sciences 56B*(1), P60-P63.
- Cohen-Mansfield, J., & Frank, J. (2008). Relationship between perceived needs and assessed needs for services in community-dwelling older persons. *The Gerontologist, 48*, 505-516.
- Community Innovations for Aging in Place Initiative (2006). CIAIP Overview. *Community Innovations for Aging in Place Initiative Resource Center*. Retrieved from <http://www.ciaip.org/>
- Cutchin, M. P., Owen, S. V., & Chang, P. F. (2003). Becoming "at home" in assisted living residences: Exploring place integration processes. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences, 58*, 234-243.

- Dean, E., & Dornelas De Andrade, A. (2009) Cardiovascular and pulmonary function. In B. R. Bonder, & V. Bello-Hass (Eds.), *Functional performance in older adults* (3rd ed., pp. 65-100). Philadelphia, PA: F.A. Davis.
- Degood, K., Goldberg, D., Donohue, N., & Shoup, L. (n.d.) Aging in place, stuck without options: Fixing the mobility crisis threatening the baby boom generation. *Transportation for America*. Retrieved from <http://t4america.org/docs/SeniorsMobilityCrisis.pdf>
- Department of Social and Health Services (2009). Agencies that help. *Aging and Disability Services Administration*. Retrieved from <http://www.aasa.dshs.wa.gov/pubinfo/help/agencies.htm>
- Department of Social and Health Services. (2010). Washington State Plan on Aging. 2010-2014. *Washington Department of Social and Health Services*. Retrieved from [http://www.google.com/url?sa=t&rct=j&q=department%20of%20social%20and%20health%20services.%20\(2010\).%20washington%20state%20plan%20on%20aging.%202010-2014.%20washington%20department%20of%20social%20and%20health%20services.%20&source=web&cd=1&ved=0CE0QFjAA&url=http%3A%2F%2Fwww.adsa.dshs.wa.gov%2Fsurvey%2FOAA%2Fdocuments%2FWashington%2520State%2520Plan%2520on%2520Aging.doc&ei=gVvFT5aCCoS42gX0_anqAQ&usg=AFQjCNEg3NXyoskMQ3xfgTz3rXM0Kfil_g&sig2=bu-x13ZWRO8TJRd14fhSiQ](http://www.google.com/url?sa=t&rct=j&q=department%20of%20social%20and%20health%20services.%20(2010).%20washington%20state%20plan%20on%20aging.%202010-2014.%20washington%20department%20of%20social%20and%20health%20services.%20&source=web&cd=1&ved=0CE0QFjAA&url=http%3A%2F%2Fwww.adsa.dshs.wa.gov%2Fsurvey%2FOAA%2Fdocuments%2FWashington%2520State%2520Plan%2520on%2520Aging.doc&ei=gVvFT5aCCoS42gX0_anqAQ&usg=AFQjCNEg3NXyoskMQ3xfgTz3rXM0Kfil_g&sig2=bu-x13ZWRO8TJRd14fhSiQ)
- Dunn, W., Brown, C., & McGuigan, A. (1994) The Ecology of Human Performance: A framework for considering the effect of context. *American Journal of Occupational Therapy*, 48, 595-607.

- Fänge, A., & Iwarsson, S. (2005). Changes in ADL dependence and aspects of usability following housing adaptation -- a longitudinal perspective. *American Journal of Occupational Therapy, 59*, 296-304.
- Gitlin, L. N., Winter, L., Dennis, M. P., Corcoran, M., Schinfeld, S., & Hauck, W. W. (2006). A randomized trial of a multicomponent home intervention to reduce functional difficulties in older adults. *Journal of the American Geriatrics Society, 54*, 809-816.
doi: 10.1111/j.1532-5415.2006.00703.x
- Hay, J., LaBree, L., Luo, R., Clark, F., Carlson, M., Mandel, D.,...Azen, S. (2002). Cost-effectiveness of preventative occupational therapy for independent-living older adults. *American Geriatrics Society 50*, 1381-1388.
- Hooper, C. R., & Bello-Haas, V. (2009) Sensory function. In B. R. Bonder, & V. Bello-Hass, (Eds.), *Functional performance in older adults* (3rd ed., pp. 101-129). Philadelphia, PA: F.A. Davis.
- Horowitz, B. (2002). Occupational therapy home assessments: Supporting community living through client-centered practice. *Occupational Therapy In Mental Health, 18*(1), 1-17.
- Howell, S., Silberberg, M., Quinn, W., & Lucas, J. (2007). Determinants of remaining in the community after discharge: Results from New Jersey's nursing home transition program. *The Gerontologist, 47*, 535-547.
- Kunstler, R. (2002). Therapeutic recreation in the naturally occurring retirement community (NORC): Benefiting "aging in place." *Therapeutic Recreation Journal, 36*, 186-202.
- Marek, K., Popejoy, L., Petroski, G., Mehr, D., Rantz, M., & Lin, W. (2005). Clinical outcomes of aging in place. *Nursing Research, 54*, 202-211.

- North East Seattle Together. (2010). About us. *North Seattle Together*. Retrieved from <http://www.nestseattle.org/about.html>
- Petersson, I., Lilja, M., Hammel, J., & Kottorp, A. (2008). Impact of home modification services on ability in everyday life for people ageing with disabilities. *Journal of Rehabilitation Medicine, 40*, 253-260.
- Riley, K. P. (2009). Mental function. In B. R. Bonder, & V. Bello-Hass (Eds.), *Functional performance in older adults* (3rd ed., pp. 177-192). Philadelphia, PA: F.A. Davis.
- Ritter, A. S., Straight, A., & Evans, E. (2002). Understanding senior transportation: Report and analysis of a survey of consumers age 50 +. *AARP*. Washington D.C.: AARP. Retrieved from http://assets.aarp.org/rgcenter/il/2002_04_transport.pdf
- Sabia, J. (2011). There's no place like home: A hazard model analysis of aging in place among older homeowners in the PSID. *Research on Aging, 30*(3), 3-35.
- Senior Resource. (1996-2011). Aging in Place. *Senior Resource*. Retrieved from <http://www.seniorresource.com/ageinpl.htm>
- Shank, K., & Cutchin, M. (2010). Transactional occupations of older women aging-in-place: Negotiating change and meaning. *Journal of Occupational Science, 17*(1), 4-13.
- Sirven, N., & Debrand, T. (2008). Social participation and healthy ageing: An international comparison using SHARE data. *Social Science & Medicine, 67*, 2017-2026.
- Skufca, L. (2008). Is the cost of gas causing Americans to use alternative transportation? *AARP*. Washington D.C.: AARP.
- Stark, S., Landsbaum, A., Palmer, J. L., Somerville, E. K., & Morris, J. C. (2009). Client-centered home modifications improve daily activity performance of older adults. *Canadian Journal of Occupational Therapy, 76*, 235-245.

Steultjens, E., Dekker, J., Bouter, L., Jellema, S., Bakker, E., & Van den Ede, C. (2004).

Occupational therapy for community dwelling elderly people: A systematic review. *Age & Ageing*, 33, 453-460.

Stevens-Ratchford, R., & Diaz, T. (2003). Promoting successful aging through occupation. An examination of engagement in life: A look at aging in place, occupation and successful aging. *Activities, Adaptation & Aging*, 27(3), 19-37.

Tang, F., & Lee, Y. (2010). Home- and community-based services utilization and aging in place. *Home Health Care Services Quarterly*, 29(3), 138-154.

doi:10.1080/01621424.2010.511518

Tideiksaar, R. (2009). Falls. In B. R. Bonder, & V. Bello-Haas (Eds.), *Functional performance in older adults* (3rd ed., pp. 193-214). Philadelphia, PA: F.A. Davis.

Village to Village Network. (2011). About VtV Network. *Village to Village Network*. Retrieved from

http://www.vtvnetwork.org/content.aspx?page_id=22&club_id=691012&module_id=651

Human Resources

Michele Williams, Supervisor at Lighthouse Senior Center

(253) 591-5080

mwilliam@ci.tacoma.wa.us

Tatiana Kaminsky, PhD, OTR/L

NEST Volunteer and former Board Member

tkaminsky@pugetsound.edu

(253) 879-3520

Appendix