



2017

# Perceptions of Wellness Among Community Dwelling Older Adults

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## Recommended Citation

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Perceptions of Wellness among Community Dwelling Older Adults

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A Scholarly Project

Submitted to the Occupational Therapy Department

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Master of Occupational Therapy

Grand Forks, North Dakota

May

2017

This Scholarly Project Paper, submitted by Sara Johnson and April Schmiesing in partial fulfillment of the requirement for the Degree of Master of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

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4-19-17  
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PERMISSION

Title Perception of Wellness among Community Dwelling Older Adults  
Department Occupational Therapy  
Degree Master of Occupational Therapy

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## **ACKNOWLEDGMENTS**

We would like to take this opportunity to thank those who have given us support throughout this project. Our advisor, Scinda Janssen, has been a strong advocate and asset to this project through encouragement, flexibility, and expert on community dwelling older adults. We would also like to thank the OT department faculty for their support throughout our education. Another person that deserves recognition is Marilyn Klug, who provided expert opinion and assistance with the data analysis through the use of SPSS.

## **ABSTRACT**

Most older adults prefer to age in place where they are more likely to experience greater health benefits and cost savings as opposed to living in skilled care facilities. Literature supports the role of occupational therapy in community-based wellness programming that helps older adults age in place; however, there is a need to conduct needs assessments to inform wellness program topics and activities. This study explores health and wellness needs of older adults living in a low-income, senior housing complex in order to inform current health and wellness programming provided at this site.

Researchers used a non-experimental, cross-sectional survey study design addressing the needs of community-dwelling older adults who have low incomes across 2015 and 2016. The data were analyzed using a mixed-methods approach. Quantitative methods, in the form of SPSS, were used to develop descriptive statistics, Spearman's rho, Pearson's Correlation, Mann-Whitney U-test, and Non-Parametric Independent t-test. Qualitative methods were used to address the additional wellness program information in the 2016 survey. Thirty-one residents, ages 63 to 87 years old, living in a low-income, senior housing complex participated in the survey.

Results of the survey indicated that physical, mental, and social health factors influence overall health, while dietary health is not correlated to overall health in this specific population. The most significant finding of this survey was the correlation between boredom, social health, and overall health. Participants who indicated they



regularly experience boredom and social isolation had poorer social health, which correlated significantly with poor overall health.

The influence of boredom and social isolation on overall health represents the need for occupation-based wellness programming and justifies a significant role for occupational therapy in community-based wellness programs. It is imperative that occupational therapists conduct needs assessments at wellness program locations in order to address the specific needs of the populations served.

As aging in place is becoming more prevalent, this study focuses on the needs of older adults as they were addressed by a needs assessment. This information was then specifically used to guide the current health and wellness programming by occupational therapists at a low income housing complex for older adults. This study highlights the importance of occupational therapy's role in health wellness and programming in community dwelling older adults.

## **CHAPTER 1**

### **INTRODUCTION**

By the year 2050, the population of people aged 65 years and older in America is projected to be near 80 million, over double that population from 2012 (United States Census Bureau, 2014). As the baby boomer generation ages, one in five people will be elderly in the United States (United States Census Bureau, 2014). As the population ages, individuals will experience a decline in the various aspects of health (Clark et al., 2012). Therefore, medical care providers should shift their focus to address the wellness needs of community dwelling older adults to avoid the health issues and costs that accompany an aging population. It is crucial that the health care industry focus some energy into wellness programming for older adults to modify behaviors to increase longevity, promote quality of life, keep them in their homes, and help them age successfully (Clark et al., 2012). Occupational therapists are trained in addressing both the increasing wellness needs as well as the environmental barriers to assist these individuals in successfully aging in place in the community. Occupational therapists also have a distinct stance on enhancing one's quality of life through addressing the whole person through systematic assessment and by identifying strengths or barriers to increase client occupational participation in meaningful activities.

## **Rationale and Importance of the Study**

Conducting this study will help guide future development of wellness programming and prevention for community dwelling older adults by targeting the specific wellness needs of the intended population. With the baby-boomer generation aging, it becomes increasingly prevalent to observe, survey, and address the needs of older adults to assist with aging in place. Jackson, Carlson, Mandel, Zemke, and Clark (1998) found that occupation-based wellness groups were more effective than a socialization group; however, the findings of this study show just the opposite. This indicates the importance of conducting a needs assessment at the site of wellness programming to obtain the specific needs of the individuals to ensure their needs are met.

## **Theoretical Framework**

As they experience age related changes, older adults within the community often have a shift in environment, physical abilities, and level of occupational performance. This change encompasses all aspects of life, thus cannot be separated into defined categories (Rowe & Kahn, 1997). Occupational therapists operating under the PEO model use transactions between the person, environment, and occupation to analyze occupational performance and target interventions towards optimizing the fit, increasing occupational performance (Law et al., 1996). In comparison to other occupation-based models, the PEO model is transactive, allowing for changing environments and proposes that a person's behavior cannot be separated from meaningful occupations (Law et al., 1996). Thus, the person, environment, and occupation have interconnectedness (Law et al., 1996). To obtain information regarding person variables, the environment, and various factors that comprise occupations, researchers conducted a needs assessment

from a community dwelling older adult population through the use of a survey. This information was then dissected to reveal the transactions between the person, environment, and occupation that facilitate and inhibit occupational performance and health and wellness.

### **Statement of the Problem**

Occupational therapy literature has demonstrated the importance and efficacy of wellness programming in the older adult population (Clark et. al, 1998; Jackson, Carlson, Mandel, Zemke, & Clark, 1998; Matuska, Giles-Heinz, Flinn, Neighbor, & Bass-Haugen, 2003; Yamada, Kawamata, Kobayashi, Kielhofner, & Taylor, 2010.) However, limited research has been completed to demonstrate the outcomes of such programming on overall health and wellness, specifically targeting physical, mental, social, and dietary health. Currently, wellness programming is being offered to community-dwelling older adults. This study was completed to determine the specific health and wellness needs of this population to guide future programming.

### **Definition of Terms**

For this project the researchers referred to terms and definitions commonly found in the literature pertaining to the older adult population. See Table 1 for descriptions of important terms used throughout this study.

Table 1

*Definition of Terms*

<b>Term</b>	<b>Definition</b>	<b>Citation</b>
Community Dwelling Older Adults	Adults ages 60 and older whom currently are living at home, with family, in retirement communities, or in assisted living facilities	Stav, Hallenen, Lane & Arbesman (2012)
Aging in Place	A living accommodation where community dwelling older adults are able to stay residing in one setting for as long as possible without having to move to the next level of care due to environmental limitations	Mann & Hicks (2009)
Successful Aging	Combination of low probability of disease-related disability, high cognitive and physical functional capacity, and active engagement with life	Rowe & Kahn (1997)
Person-Environment-Occupation Fit	“the outcome of greater compatibility is therefore represented as more optimal occupational performance”	Law et al. (1996)
Person	“a dynamic, motivated and ever-developing being, constantly interacting with the environment”	Law et al. (1996)
Environment	“the broad definition gives equal importance to the considerations of the environment”	Law et al. (1996)
Occupation	“those clusters of activities and tasks in which the person engages in order to meet his/her intrinsic needs for self-maintenance, expression and fulfillment”	Law et al. (1996)

## **Summary**

In conclusion of Chapter I, the researchers introduced the problem, identified an appropriate theoretical framework, rationalized a need for this study, and defined important terms. In Chapter II, researchers discuss the review of literature used to design the study. Chapter III describes the methodology used to complete the study. Chapter IV outlines the data analysis through the use of PEO theoretical model. Lastly, Chapter V of the study ends with a summary of findings, recommendations, limitations, and the researchers' final conclusions.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

By the year 2050, the population of people aged 65 years and older in America is projected to be near 80 million, over double that population from 2012 (United States Census Bureau, 2014). Currently, individuals 65 and older are projected to “incur \$139,000 in future long term care service costs” (US Department of Health and Human Services, 2016). In order to avoid the health issues and costs that accompany an aging population, it is crucial that the health care industry focuses some energy into wellness programming for older adults to keep them in their homes and aging successfully for as long as possible. Wellness programs attempt to stop illness and injury before they happen and foster the overall health of populations in order to promote successful aging and health, which is essential for the United States’ aging population’s health. Wellness programs for older adults work to prevent injury or illness and promote overall health, keeping older adults’ quality of life high and healthcare costs low. Even though there are many benefits to wellness programs, they are most effective when they are targeted towards the specific needs of the population utilizing them.

#### **Successful Aging**

While adults over the age of 65 have a variety of health problems, depression among the general population of older adults does not top the list of most common conditions (CDC, 2015); however, depression rates among older adults in skilled nursing

facilities is 48.5% (Harris-Kojetin, Sengupta, Park-Lee, & Valverde, 2013). The polarity between community dwelling older adults and older adults in skilled nursing facilities confirms the importance of aging in place. For many older adults, staying independent and in their own home is a key to staying happy and healthy into older age.

Successful aging is a term that is often used to describe aging that encompasses the ideas “such as life satisfaction, longevity, freedom from disability, mastery and growth, active engagement with life, and independence” (Moody, 2005, p 59). Martin and colleagues (2015) conducted a literature review of successful aging and discovered that it has many subjective definitions and takes the form of multiple ideals. For the purpose of this study, the researchers will use the term successful aging as defined by Rowe and Kahn (1997) because of their emphasis on engagement with life, otherwise seen as engagement in meaningful occupations.

Rowe and Kahn (1997) described successful aging as a combination of “three main components: low probability of disease and disease-related disability, high cognitive and physical functional capacity, and active engagement with life” (p. 433).

Within each category, Rowe and Kahn (1997) broke down successful aging into absence, presence, or severity of risk factors for disease, physical and cognitive skills, what a person can actively do, interpersonal relationships, and productive activity. Successful aging is not based solely on the disease process of older adulthood, but is also largely centered on the ability to interact with the surrounding environment. Rowe and Kahn’s three categories build off one another to facilitate the aging process. Absence of disease and sound functional capacities, both physical and mental, facilitate active engagement in activities and with the environment (Rowe & Kahn, 1997). Only through dynamic



interactions with the environment and engagement with meaningful occupations can older adults have true successful aging.

### **Barriers to Successful Aging**

While successful aging promotes quality of life and the ability of older adults to age in place, many age-related and disease-related changes can negatively influence the successful aging process. Bonder and Bello-Haas (2009) define three major categories of disruption in the normal aging process. Falls, especially falls with injury, severe cognitive changes, such as dementia, and interruptions in mental health, such as severe depression, are three major categories of interruptions in normal and successful aging (Bonder and Bello-Haas, 2009). In addition, the CDC (2013) identified chronic medical conditions, such as heart disease or diabetes as the number one limiting factor to healthy and successful aging. The CDC reported that two-thirds of the older adult population in America have multiple chronic conditions, and the treatment for those with numerous chronic conditions accounts for over two-thirds of the country's health care (2013).

### **Wellness Programming**

For older adults who live in the community, one way to promote successful aging is through wellness programming. Currently, there are four studies published that examine the relationship between community-based wellness programming and effectiveness in promoting healthy aging and wellness (Clark et al., 2012; Jackson, Carlson, Mandel, Zemke, & Clark, 1998; Matuska, Giles-Heinz, Flinn, Neighbor, & Bass-Haugen, 2003; Yamada, Kawamata, Kobayashi, Kielhofner, & Taylor, 2010). Jackson, Carlson, Mandel, Zemke, and Clark (1998) piloted the first community-based wellness program for older adults through The Well Elderly Treatment Program as part

of The Well Elderly Study, one of occupational therapy's largest and highest-level evidence studies. The authors determined that those seniors who received community-based wellness programming directed by occupational therapists encountered fewer declines in areas of physical health, physical and social functioning, vitality, mental health, and overall life satisfaction. It was concluded through this study "that occupational therapists can importantly contribute to preventative health care through their focus on the benefits of occupation" (Jackson, Carlson, Mandel, Zemke, & Clark, 1998, p. 333).

To further validate The Well Elderly Study, Clark and colleagues (2012) completed The Well Elderly Study 2 Randomized Control Trial. In this robust study, Clark and colleagues (2012) confirmed wellness programming's positive impact on various mental health factors that promote healthy aging. In addition, they added a research question to explore if wellness programs with older adults are cost effective. The authors concluded that the results of the research indicated significant cost effectiveness and applicability to a wide range of individuals, giving the program potential to foster health and promote psychosocial wellbeing in an older adult population (Clark et al., 2012).

There were two other studies conducted in the field of occupational therapy that examined effectiveness of wellness programs. Matuska, Giles-Heinz, Flinn, Neighbor, and Bass-Haugen (2003) found wellness programming significantly increased vitality, social functioning, and mental health in non-driving older adults. In a study of wellness programming in Japan, Yamada, Kawamata, Kobayashi, Kielhofner, and Taylor (2010) concluded that wellness programming, with an emphasis on social interaction, promoted

wellness by increasing quality of life and sense of wellbeing. Overall, community based wellness programming, directed by occupational therapists, does increase productive aging and wellness in the older adult population, and because of the limited number of studies, the total effects of wellness programming are still unknown.

### **Drawbacks to Wellness Programming**

Even though there are numerous studies that demonstrate the effectiveness of wellness programming, there is research that brings to light drawbacks to wellness programming. Mountain, Mozley, Craig, & Gall (2008) completed a study analyzing occupation-based health-promoting interventions, modeled after Lifestyle Redesign. In the original study published by Jackson, Carlson, Mandel, Zemke, and Clark (1998), the Lifestyle Redesign program and associated interventions were found to enhance participant's physical and mental capacities, as well as their occupational functioning and life satisfaction. However, Mountain, Mozley, Craig, & Gall, (2008) found that delivering the Lifestyle Redesign program can raise numerous issues. While a Lifestyle Redesign program benefits participants, leads to an increase in self-efficacy, and stimulates continuing community capital, there are many drawbacks to implementing the program (Mountain, Mozley, Craig, & Gall, 2008). The Lifestyle Redesign program is dependent on older adults dedicating their time to the program independently, which was a major barrier for Mountain, Mozley, Craig, & Gall, (2008). In addition, Mountain, Mozley, Craig, & Gall, (2008) found it increasingly difficult to reach older adults who were isolated from social groups and the ones to whom wellness programming is most appropriate. The Lifestyle Redesign program was also found to attract a homogenous population of Caucasian individuals, raising the question of cultural sensitivity

(Mountain, Mozley, Craig, & Gall, 2008). Even though there are numerous benefits to wellness programming for older adults, such programs have drawbacks that can limit their success.

### **Occupational Therapy's Role**

Because current literature supports the use of occupational therapy principals within wellness programming for older adults, wellness programs should be incorporated into the care of older adults. Even with the evidence, occupational therapists are not working in the community to promote successful aging with preventative programming. According to the American Occupational Therapy Association (AOTA) 2014 workforce study, only 2.0% of occupational therapists work in the community (AOTA, 2015). Occupational therapists are trained in the use of activity analysis and needs assessment required to implement community based wellness assessments (Yamada, Kawamata, Kobayashi, Kielhofner, & Taylor, 2010), putting this type of programming into the occupational therapy domain.

The occupational therapy practice framework can be used by OT practitioners to depict areas of imbalance related to older adults' health and wellness in order to create interventions that establish balance among occupations and improve quality of life (Papageorgiou, Marquis, Dare, & Batten, 2016). Occupational therapists have the unique ability to address the intrinsic factors of the individual as well as the extrinsic factors of the home environment and occupations to compensate for age-related declines, improving overall health and wellness through effective wellness programming (Hildenbrand & Lamb, 2013; Szanton et al., 2011).

## **Research Questions**

Because wellness programs have been shown to improve health outcomes and help older adults age successfully within their environment, a local occupational therapist and occupational therapy students in their second-year of study have been providing a wellness program to community-dwelling older adults living in an independent housing complex. The purpose of this study is to both gain an understanding of the population's health and wellness needs and analyze the effectiveness of the program within a 1-year time frame. With this purpose in mind, the researchers investigated 1) What factors are of greatest concern to the health and wellness of the population whom current wellness programming is being offered? and 2) Of the 8 respondents who participated in the wellness programming, what factors influence this population's perceived health?

## **Summary of Literature Review**

Throughout occupational therapy literature wellness programming has proven to be effective. There is much information on successful aging, barriers to aging in place, drawbacks to wellness programming, and occupational therapy's role in this unique community setting. While Clark et al., (2012) found that wellness programming is effective in general, completing a needs assessment is imperative to understanding and providing specific occupation-based intervention (Matuska, Giles-Heinz, Flinn, Neighbor, & Bass-Haugen, 2003). In Chapter III, researchers describe the methodology used to gather information on specific wellness needs of the community dwelling older adults.

## **CHAPTER III**

### **METHODOLOGY**

#### **Research Questions**

According to Jackson, Carlson, Mandel, Zemke, and Clark (1998), optimal results for wellness programming depend upon both therapist knowledge of occupation and familiarity with the “pressing life concerns” (p. 334) of the target population. The purpose of this study was to gain an understanding of the community-dwelling older adult population’s health and wellness needs in order to analyze the effectiveness of the current wellness programming. The research questions for this study were 1.) What factors are of greatest concern to the health and wellness of the population whom current wellness programming is being offered? and 2.) Of the 8 respondents who participated in the wellness programming, what factors influence this population’s perceived health? In order to further explore these research questions, the researchers utilized survey research of the population to better understand the population’s unique needs. The following section describes the basis of this study’s research methodology, the site and participants of the study, and the conceptual framework used to guide the survey and data analysis procedures.

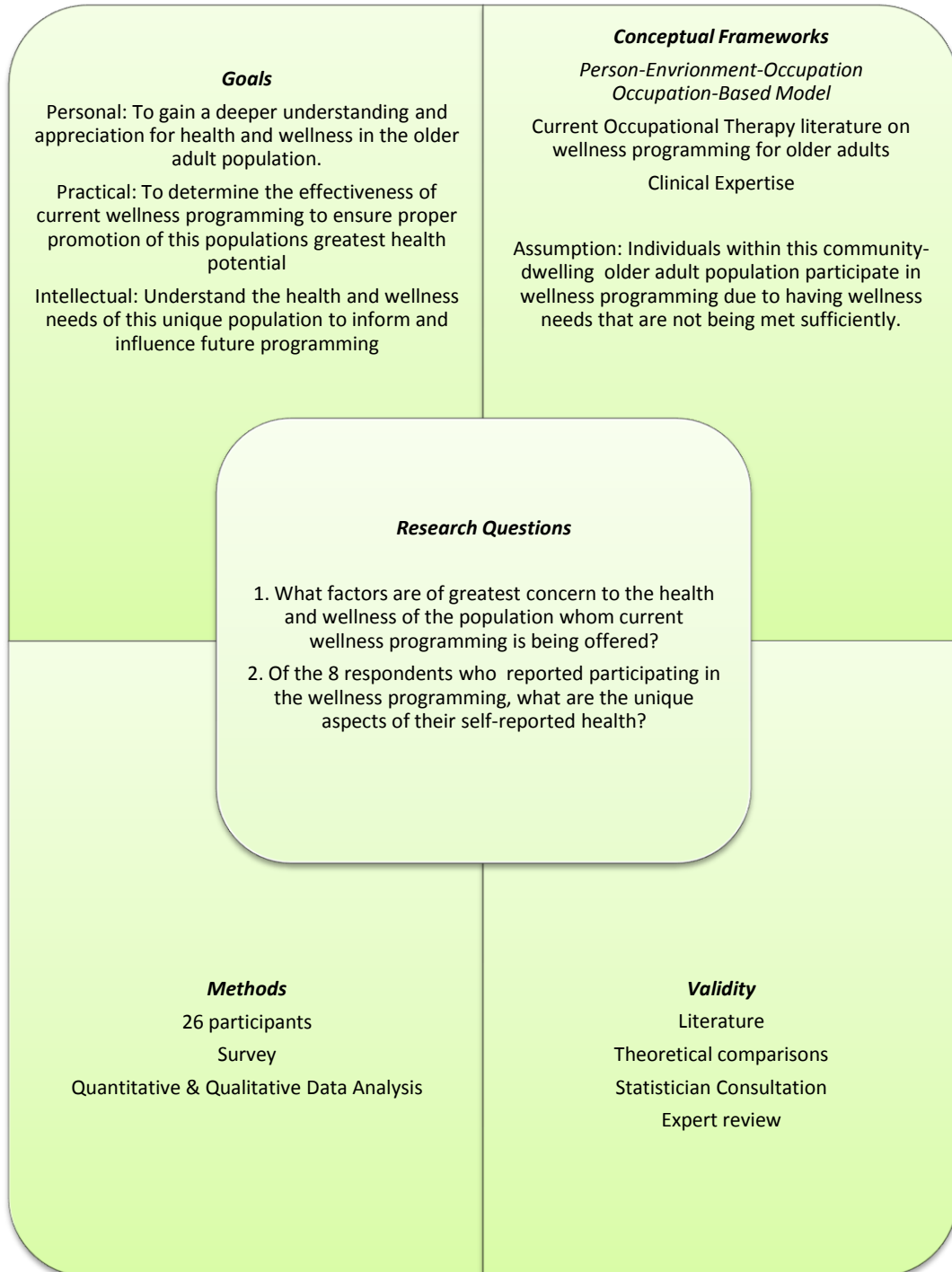
## **Research Methodology**

### **Research Design**

To gather the information for this study, the researchers used a nonexperimental cross-sectional survey study design. The purpose of the survey was to identify the wellness needs of the residents in the community-housing complex in order to inform wellness program design and to gather data on the effectiveness of current wellness programming at the facility. Current literature, clinical reasoning, and the P-E-O model (Law et al., 1996) informed the development of the survey questions and served as the basis of the researchers' conceptual framework. In order to obtain the researchers' goals of gaining a deeper understanding for the health and wellness needs of the residents and add direction to future programming, the researchers chose an occupation-based model (P-E-O) to holistically conceptualize the population and target harmful transactions impacting health and wellness (Law et al., 1996). In addition, current literature on health and wellness needs of the older adult population and clinical expertise from occupational therapists who work with this population was further used to guide survey questions. See Figure 1 for conceptual framework.

Figure 1

*Conceptual Framework*





## **Research Procedures**

The research study was approved by the University of North Dakota's Institutional Review Board. Each respondent was given a copy of the informed consent sheet along with the survey and completion of the survey provided implied consent to participate in the study. One of the researchers currently provides the wellness programming to the facility and served as the contact person for survey distribution and collection. The surveys were delivered to each apartment individually and returned to an envelope hanging in an easily accessible area. Along with the informed consent and survey, each resident was given an envelope to seal their response in to ensure confidentiality. The researchers gave each resident in the facility a paper copy of the survey. The surveys were collected two weeks after distribution.

## **Site**

The survey was completed at a community-housing complex for older adults. The apartment complex offers 30-units with no additional services provided. At the time of the two surveys, 32 residents were living in the apartment complex and wellness programming was being offered to any resident who would like to participate. The site staffed a service coordinator for the building to assist residents at the time of the first survey in 2015; however, no service coordinator was available at the time of the second survey in 2016. The apartment complex offers residents the opportunity to purchase housing at low-cost, and offers amenities such as in-house laundry, large kitchen area, parking, and shared social spaces.

## **Population and Sample**

The researchers used a purposive sampling technique. The inclusion criteria for participating in the survey was living within the community-housing complex where the survey was distributed. The population was chosen from a community-housing complex in the Midwest, which is the site of occupation-based wellness programming through an Occupational Therapy Program. Residents in the community-housing complex live in individual apartments and are self-sufficient, remaining in the community with their peers. The housing complex consists of thirty-two residents, most of whom live alone in a single apartment. For the purposes of this research study, the sample of respondents remained the same from the 2015 survey to the 2016 survey due to distributing the surveys to the same population. To analyze the data from the survey, the researchers combined the two surveys together. The sample of participants who returned the survey to the researchers in both 2015 and 2016 was a 39% return rate, consisting of twenty females, five males, and one non-specified gender, ranging in age from 63 to 87 years old. For further information on the sample participants, see Chapter IV.

## **Instrument**

The survey consisted of 20 questions dealing with a variety of topics. The questions were created based upon common areas of concern that can jeopardize the ability to age in place, as evidenced in literature about older adults. The survey gathered information dealing with demographics, common health conditions, ambulation, dietary habits, community mobility, reading levels, happiness, falls, living situations, socialization, stressors, and pleasures. All of the questions were close-ended questions, with the option to expand on an answer if necessary.

With consideration for the population sample, the researchers distributed the survey to the respondents in paper copy with large print, to accommodate for possible age-related vision changes. The 2016 survey had an additional five questions regarding the occupation-based wellness programming. Questions focused on gaining insight into favored program topics, if they have ever participated in the current wellness programming, overall sense of well-being, improved areas of wellness, and improved aspects of wellness. See Appendix A for a copy of the survey.

**Literature used to inform questions**

The survey was developed by the researchers, using current literature and clinical expertise as a guide for formulating the questions. All of the questions within the survey reflected areas of health and wellness that are shown in the literature to decline with age. See Table 2 for a sample of literature reflected within the survey instrument. The survey can be found in the Appendix A.

Table 2

*Current Literature Reflected within Survey Questions*

<b>Survey Question</b>	<b>Current Literature</b>
The following chart shows recommended servings for a balanced diet. How balanced is your diet on a regular day?	USDA (2015a; 2015b)
How often do you experience boredom on a typical day?	Larson and von Eye (2010)
If you go out into the community, what kind of transportation do you use?	Matuska, Giles-Heinz, Flinn, Neighbor, and Bass-Haugen (2003)

## **P-E-O model and the survey**

In addition to current literature, the researchers also utilized the P-E-O model (Law et al., 1996) to guide survey questions. The P-E-O model (Law et al., 1996) was used to analyze the dynamic relationships between person variables, such as medical conditions and abilities, environmental factors, such as availability of transportation and social interactions, and occupations, such as pleasurable activities, to better understand the unique health and wellness factors of this population. In order to gather data related to person, environment, and occupation, the researchers designed the survey around the P-E-O model's three main constructs (Law et al., 1996). After gathering data about person, environment, and occupation, the data was analyzed to assess barriers to occupational performance and the goodness of fit (Law et al., 1996). See Table 3 for a sample of the constructs reflected in survey topics.

Table 3

### *P-E-O Model Constructs Reflected in the Survey*

<b>Person</b>	<b>Environment</b>	<b>Occupation</b>
Age	Modes of transportation	Food and Water intake
Gender	Homelessness	Leaving apartment/building
Conditions	Time with visitors	Greatest Stressors
Ambulation	Social Isolation/Boredom	Greatest Pleasures
Reading skills		
Vision		
Overall Health		
Happiness		

## Data Analysis

The data were analyzed using a mixture of quantitative and qualitative approaches due to variability with the data collected. Data were encoded into a spreadsheet and imputed into SPSS for Windows, version 24.0. The information gathered through the surveys was nominal, ordinal, and interval in nature. Because of the nature of the data, the researchers utilized descriptive statistics, Spearman's rho, Pearson correlations, Mann-Whitney U-tests, and non-parametric independent t-tests to analyze the data. For the data collected on current wellness programming, the researchers deemed qualitative methods of analysis most appropriate due to small sample size (N=8), some missing data, and variability in response.

- Descriptive Statistics - Descriptive statistics were used to produce frequencies and percentages for all categorical variables. In addition, means, medians, standard deviations, minimums, and maximums were produced for all continuous variables. For the data that had a normalized distribution, the researchers summarized using means and standard deviations. However, much of the data was skewed due to small sample size, so the median, minimum, and maximum values were reported to gain a more appropriate and accurate representation of the population sampled (Cronk, 2011).
- Spearman's rho - In order to analyze correlations of data that was not normally distributed, the researchers utilized Spearman's rho statistical tests. The researchers wanted to assess whether specific health variables correlated with each other, meaning that one variable can predict another

(Cronk, 2011). The Spearman's rho test was deemed most appropriate due to the large amount of ordinal and skewed data from the nature of the questions and smaller sample size.

- Pearson Correlation - Because some of the data received through the survey was normally distributed, the researchers also utilized the Pearson Correlation statistical test. The researchers were interested in the predictability between different continuous variables on the survey, and Pearson's Correlation offered the most accurate analysis of the normally distributed data (Cronk, 2011).
- Mann-Whitney U-test - In order to analyze the difference between two independent groups of data from the survey results, the researchers utilized Mann-Whitney U-tests. This test is useful for ordinal and skewed data, giving the most accurate representation of the participants in the survey (Cronk, 2011.)
- Non-Parametric Independent t-tests - Because the sample size of this study was small, the researchers used non-parametric t-tests to compare medians between groups of data (Cronk, 2011). This non-parametric test analyses two groups of continuous and binary data to assess if groups of data are from the same sample (Cronk, 2011). When groups of data are from different samples, there is statistical significance between two groups of answers on the survey (Cronk, 2011).
- Qualitative Analysis - The last half of the survey asked respondents questions about participation in current wellness programming. Because

only eight individuals responded to the questions about current programming, no quantitative statistical tests were sensitive enough to detect relationships between data (Cronk, 2011). Based on the sample size (N=8) and incomplete data with the final questions on the survey, the researchers decided to utilize qualitative statistical analysis to discover the meaning behind current wellness programming data.

### **Summary of Methodology**

The research methodology for this nonexperimental cross-sectional survey study included utilizing a conceptual framework based on the P-E-O model (Law et al., 1996), current occupational therapy literature, and clinical expertise to inform survey development, survey distribution techniques required per IRB approval, and quantitative and qualitative methods of data analysis. The research study was completed at a community-dwelling older adult housing complex in the Midwest, where an occupational therapist is currently providing wellness programming. The response rate of the survey was 39%. Both quantitative and qualitative methods of data analysis were utilized to interpret the data due to variations within responses. In Chapter IV, the researchers present the findings of the data analysis and discuss the transactions between person, environmental, and occupational factors that emerged from the results of the survey.

## **Chapter IV**

### **PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA**

In this chapter, the researchers describe the results of the data obtained by the survey. The survey was distributed to all thirty-three residents in the housing complex in both 2015 and 2016. Twenty-six participants returned the survey over the two-year period, and the data was analyzed utilizing both quantitative and qualitative methods. Utilizing the P-E-O model (Law et al., 1996) as a guide, the researchers targeted the goodness of fit of the model's theoretical constructs in order to analyze the participants' perceived occupational performance, evidenced by self-perceived health ratings. While there are numerous factors that influence health and wellness in this population, the researchers' overall assertion is that boredom and social isolation influence not only participants' social health, but their overall health as well. The relationship between social isolation, boredom, and overall health produce a strong need for occupational engagement wellness programming within this housing complex.

### **Results**

#### **Variables**

Between the two surveys distributed in 2015 and 2016, 26 respondents participated in the survey (N=13 in 2015; N=13 in 2016). Five males and 20 females responded to the surveys (one respondent declined to report gender), and the respondent's average age was 74.3 and ranged from 63 years old to 87 years old. Eight respondents reported driving within the community, while eighteen reported using other modes of



transportation. When asked to rate their amount of boredom throughout the day, four respondents indicated never feeling bored and 22 indicated occasional boredom. When asked about balance, twelve respondents reported having balance problems and 14 indicated not having balance problems. Table 4 shows the results of key survey responses, which were used for the statistical analysis of the transactions between person, environment, and occupation variables.

Table 4

*Key Responses to Survey Questions, Combined 2015 & 2016 Data*

<b>Variable</b>	<b>N</b>	<b>%</b>
<i>Person</i>		
Diabetes		
Yes	7	26.9
No	19	73.1
Impaired Joints		
Yes	11	42.3
No	15	57.7
Health		
Not Very Good	18	69.2
Very Good	8	30.8
Ambulate Independently		
Yes	19	73.1
No	7	26.9
<i>Environmental</i>		
Use Public Transportation		
Yes	7	26.9
No	19	73.1
Homeless in Past Year		
Yes	2	7.6
No	24	92.4
<i>Occupation</i>		
Eat a Balanced Diet		
Yes	13	50.0
No	13	50.0
Leave Apartment		
Several Times/Day	21	80.8
Once a Day	5	19.2
Leave Building Daily		
Yes	12	46.2
No	14	53.8
<i>Occupational Performance</i>		
Experience Boredom		
Never	4	15.4
Occasionally	22	84.6
Fall within the Past Year		
Yes	12	46.2
No	14	53.8

In order to analyze respondents' health and wellness, the researchers grouped key information from the survey into five categories of physical health, mental health, social health, dietary health, and overall health. The variables within the survey were placed into categories based on high correlations, which were determined with the assistance of a statistician. *Physical health* encompasses balance (balance or vision problems), movement restrictions (pain, weakness, >1 fall), problems with mobility (joint problems and ambulatory aide), and problems hearing, impaired breathing, a heart condition, or diabetes. *Dietary health* takes into consideration water intake, number of servings of fruits and vegetables consumed, and report of a balanced diet. *Social health* includes how often respondents leave their individual apartment and the apartment building, and time spent with visitors throughout the day. *Mental health* incorporates happiness rating, boredom, and total number of activities rated as enjoyable compared to the total number of stressors reported. The four areas of health - physical, diet, social, and mental health - were added to the respondents' self-reported health to create one final overall health score. Descriptions of key variables can be found in Table 5.

Table 5

*Descriptive Statistics of Key Variables*

	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>S.D.</b>	<b>Min</b>	<b>Max</b>
Age	26	74.27	73.5	8.27	63	87
Overall Health	26	9.61	9.63	1.64	6.5	12
Physical Health	26	12.38	12	4.11	7	19
Social Health	26	7.38	7	2.04	4	12
Mental Health	26	9.88	9.5	3.10	3	17
Diet Health	26	8.77	10	2.55	3	13
Fruit/Vegetable Intake Daily	26	2.20		1.041	1	4
Water Intake Daily (8oz Servings)	26	3.54		1.303	0	5

**Correlations**

When calculating relationships between the five domains of health, the researchers used a Pearson correlation coefficient and a Spearman *rho* coefficient to calculate the relationship between physical, mental, social, and dietary health to respondents' overall health scores. A strong positive Pearson correlation coefficient was found between overall health scores and physical health scores ( $r = .709, p=.01$ ), social health scores ( $r =.538, p=.01$ ), and mental health scores ( $r =.607, p=.01$ ). Respondents who scored higher on physical, mental, and social health tend to have higher overall health scores. A weak Spearman *rho* coefficient, which was not significant, was found between overall health score and dietary health score ( $r = .198, p >.01$ ). Dietary health scores did not show a correlation with respondents' overall health.

In order to calculate the relationship between social health scores and boredom experienced throughout the day, a Pearson correlation coefficient was calculated. A strong negative correlation was found between social health and boredom ( $r = -.397, p=.01$ ), indicating respondents who scored higher on their social health scores tend to experience less boredom throughout the day. In addition, the researchers calculated the relationship between leaving the apartment building daily and poor balance. A Spearman  $\rho$  coefficient and Person correlation coefficient were calculated between leaving the apartment building daily and poor balance. A strong negative correlation was found for both Spearman  $\rho$  coefficient ( $\rho = .393, p < .05$ ) and Person correlation coefficient ( $r = -.393, p=.05$ ), indicating that respondents who reported experiencing poor balance tend to stay within the apartment building.

### **Non-Parametric Tests**

The researchers used non-parametric independent t-tests in the form of Mann-Whitney U tests and Kruskal-Wallis tests to compare the differences between independent groups of data. The researchers used a Mann-Whitney U test to examine the overall health scores of respondents depending on how often they leave their apartment. Those respondents who leave their apartment several times a day have significantly higher overall health scores (m score = 15.38;  $U = 13.00, p < .05$ ) than those who leave their apartment once a day (m score = 5.60). The researchers also used a Mann-Whitney U test to examine physical health scores depending on current driving status and overall health scores and gender. No significant differences in physical health scores and driving status ( $U = 84.00, p > .05$ ) or overall health scores and gender ( $U = 25.50, p > .05$ ) were found. Those respondents who do not drive averaged a physical health score of 12.83 and those

who do drive averaged a score of 15.00. Respondents who identified as male had an average overall health score of 17.90 and those who identified as female averaged an overall health score of 11.78.

A Kruskal-Wallis test was used to compare the outcome of social health scores with the number of times participants leave the apartment building. A significant result was found ( $H [3]= 1.011, p < .05$ ), indicating respondents who left the building several times a day had an average score of 8.80, those who left once a day had a score of 9.29, those who left once a week had a score of 15.56, and those who left once a month had a score of 20.40.

### **Qualitative Data**

Of the 13 respondents who completed the survey in 2016, eight reported participating in the wellness sessions offered to the community. When asked how the current wellness programming contributed to his/her sense of well-being, 63% (N=5) reported the programming contributing “very much,” 25% (N=2) reported “somewhat,” and 12% (N=1) declined to answer. Of the various areas of wellness targeted by the wellness programming, half of the respondents indicated physical wellness as being the most improved, followed by cognitive and spiritual wellness. Five respondents indicated that their occupational and spiritual wellness were improved through the programming and three indicated enjoyment of their surroundings as improving.

### **Interpretation of Data**

Because the P-E-O model was chosen to guide the survey and analysis of this study, data analyses began with targeting specific transactions between components of the person, environment, and occupation to assess goodness of fit and address barriers of

occupational performance (Law et al., 1996). Each component was broken down separately to depict the details of what the researchers were anticipating to obtain, as well as what the current literature suggests for health and wellness needs of older adults.

- **Person** - To analyze the person (Law et al., 1996) in this study, researchers chose to obtain information on demographics and multiple age-related conditions in developing this study. The main demographics analyzed were age, gender, health conditions, mobility, reading skills, and vision. Further exploring the biopsychosocial aspects, researchers assessed several aspects of health broken down into social health, dietary health, physical health, mental health, and overall health. Lastly, the survey contained questions regarding happiness, falls, and stressors/pleasures of each person. This information was used as a comparison between the 2015 and 2016 surveys to not only assess the person but to get a clear vision of implications each individual may be encountering over time.
- **Environment** - Within the PEO model, the environment is divided into 5 categories: physical, cultural, socioeconomic, institutional, and social (Law et al., 1996). The participants within this study have numerous environmental factors that play a role in their ability to interact with their environment and participate in meaningful occupations, which are all important to consider when designing wellness programming. Physical environment factors, such as the layout of individual apartments, the apartment building design, and accessibility of the community shape the types of activities the older adult population engage in on a daily basis

(Law et al., 1996). Because of the unique culture of the population, some individuals may not value wellness programming. The socioeconomic status of each individual was also considered as this housing complex is designed as a lower income housing development. The institutional component is recognized as the availability of programs offered to the tenants. Finally, the social context is assessed to provide availability for gatherings within the complex but also factors in isolation as each tenant has their own apartment. If individuals have their own vehicle or family in the area, they may be more prone to be actively mobile in the community. Aspects reflected in the survey include transportation within the community, homelessness, community housing complex and how often they see others, such as willingness to attend wellness sessions and value of independence. These were a consideration for designing wellness programming sessions. The wellness sessions also need to be mindful of the participants' socioeconomic status, such as possible retirement and lower income, to make programming realistic. For institutional and social environments, the residents in the community housing complex have a limited number of programs offered to help them, and social isolation from other members of the complex and the community could be a concern. Numerous questions about environmental factors were included in the survey questions. The questions in the survey were mostly targeted at the physical and social environments of the participants, which are mostly modifiable with wellness programs. Questions in the survey



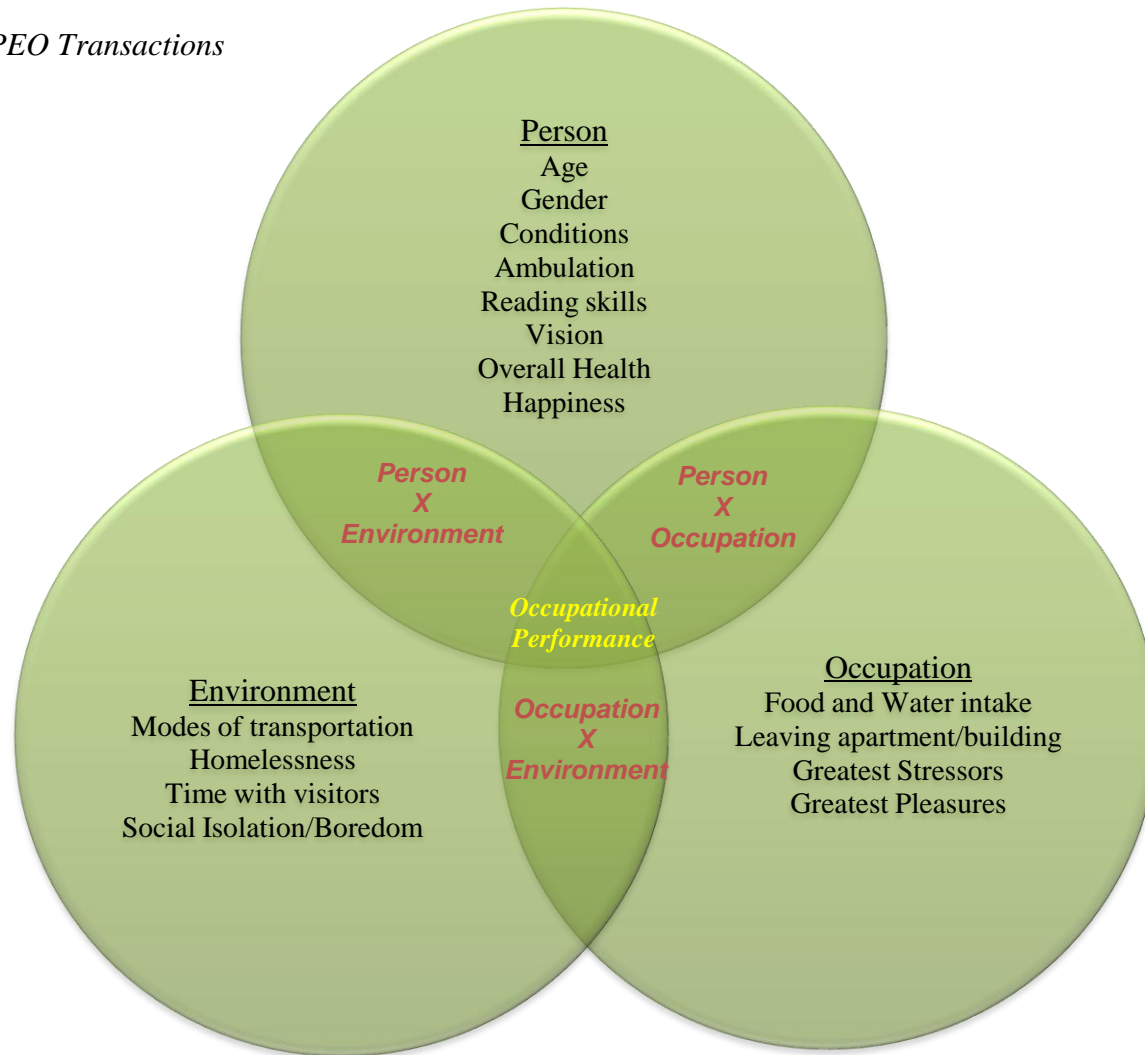
reflected the physical and social environments by gathering data about transportation with the community, past homelessness, social isolation, community mobility, and time spent with others.

- Occupation - Occupation within the P-E-O model consists of activities, tasks, and occupations that make up what individuals engage in throughout the day (Law et al., 1996). Occupation is important to living a meaningful life and meeting basic needs for maintaining one's self, fulfilling basic life roles, and personal expression (Law et al., 1996). Within the survey, the researchers assessed occupation by exploring the participants' eating habits, social participation, boredom, participation in wellness sessions, and activities that bring the greatest pleasure.

Occupational therapists operating under the P-E-O model use the transactions between the person, environment, and occupation to analyze occupational functioning and target interventions towards optimizing the *fit* and increasing occupational performance (Law et al., 1996). Within the community dwelling older adult population in the apartment complex, the data gathered from the survey about person variables, the environment, and various factors in occupation revealed transactions that facilitate and inhibit occupational performance and health and wellness. See Figure 2 for visual schematic of PEO transactions.

Figure 2

*Visual Schematic of PEO Transactions*



Adapted from Law et al. (1996)

## Transactions

The first transaction evaluated was between the person and occupations. When looking at the transaction of social health, which falls under *person* and boredom, or a lack of *occupation*, the data indicated the occupations individuals engaged in throughout the day had a significant impact on social health ratings. Because those with higher social health scores reported experiencing less boredom throughout the day, and social health was found to predict overall health. Thus, occupational therapy programming should target decreasing boredom to increase social and overall health within the community dwelling older adult population. According to Vodanovich, Verner, and Gilbride (1991), high levels of boredom correlate positively to depression. With depression being major concern for the older adult population (Riley, 2009), wellness programming should include occupation-based activities during educational sessions in order to decrease boredom and promote social health that results in an increase in satisfaction and quality of life.

When looking at the transaction between the environment and person variables, there were multiple areas where the *fit* between the *person* and the *environment* was minimized. Those individuals who leave their apartment multiple times a day scored higher on both social health and overall health scores, which suggests that community mobility and social contact are important to maintaining the participant's health and wellness. However, when variables within the *person* (health conditions) or the *environment* (accessibility and transportation) do not match, individuals are no longer able to navigate their environment and risk social isolation and physical limitations (Law et al., 1996). Within this study, those experiencing poor balance tended to stay within the

apartment building, which limits the occupations available to them and decreases social and overall health.

Even though the data from this survey did not find significant differences in health between drivers and non-drivers, driving is a major component to social participation and community mobility. Matuska, Giles-Heinz, Flinn, Neighbor, and Bass-Haugen (2003) asserted that wellness programs are most effective when targeting older non-drivers. Those who drive have more opportunity for physical activity, cognitive stimulation, and socialization as noted in getting in and out of cars, engaging in community activities, and interacting with people they encounter (Ekelman, Stav, Baker, O'Dell-Rossi, & Mitchell, 2009). In contrast, non-drivers tend to stay in their homes with limited opportunity for physical activity, cognitive stimulation, and socialization, which jeopardizes their overall wellness (Ekelman, Stav, Baker, O'Dell-Rossi, & Mitchell, 2009). Wellness programming at this site needs to be developed to address community mobility, helping residents become mobile within their community and benefit from the wellness resources the community has to offer.

According to the World Health Organization (WHO), physical, mental, and social well-being are the important factors in overall health (2003). Within this study, the researchers analyzed the respondents' physical, mental, and social health in regards to an overall health rating. However, the researchers also included dietary health to assess daily nutrition and knowledge of a balanced diet because nutrition education is currently integrated throughout the wellness program. Within the data provided by the respondents, physical, mental, and social health were all correlated to overall health, while dietary health did not have a significant impact on overall health.

The data from the survey and the transactions between the person, environment, and occupation indicate wellness programming should target occupational engagement to decrease boredom, while increasing community mobility, social participation, and physical and mental health. Based on the majority of respondents who reported the current wellness programming increased their sense of well-being “very much,” targeting these four areas will allow the wellness programming to be as effective as possible with this population (Jackson, Carlson, Mandel, Zemke, & Clark, 1998) and increase overall health and wellbeing.

### **Summary of Data Analysis**

While numerous factors influence health and wellness (WHO, 2003), results of this survey indicate that physical, mental, and social health factors influence overall health, while dietary health is not correlated to overall health in this specific population. The overarching conclusion made by the researchers is the correlation between boredom, social health, and overall health is the most significant within this community dwelling older adult population. Participants who indicated they regularly experience boredom and social isolation had poorer social health, which correlated significantly with poor overall health. In order to target the population’s overall health most effectively, wellness programming should include activities that promote occupational engagement and socialization to decrease boredom and social isolation.

## **CHAPTER V**

### **SUMMARY, CONCLUSIONS & RECOMMENDATIONS**

The purpose of this study was to explore the specific wellness needs of community dwelling older adults, who were already being offered wellness programming. In this chapter, the researchers present a summary of findings, recommendations, and limitations related to the data gathered throughout this study.

#### **Summary of Findings**

- Boredom and depression have a positive correlation (Riley, 2009), which makes engaging in activities and socializing important wellness areas. Meaningful interactions with the environment, occupations, and others are key to fostering quality of life, health, and occupational engagement
- Due to conflicting evidence of socialization's role in health and wellness (Clark et al., 2012), it becomes imperative that a needs assessment is conducted at other sites where wellness programming will be offered to ensure the specific needs of the target population are met.
- Occupational Therapy's role in wellness programming is confirmed with the need for targeting occupational engagement to decrease boredom and social isolation.

## **Recommendations**

Currently, there is ongoing OT wellness programming occurring at the researched site. It is recommended that the current wellness program offered be continued, especially because of the way it promotes occupational engagement and socialization, which are two identified needs of the target population. However, it becomes important to acknowledge the key findings from this study, which include decreasing boredom, increasing social participation, and occupational engagement. It is recommended that clinicians conducting wellness programming implement a short survey. This would allow individuals to give feedback, assisting the program to best meet their specific needs. It would also be a benefit to incorporate an interprofessional treatment team into wellness programming due to the wide variety of needs. Utilizing an interprofessional team would increase the holistic service delivery as well as target all areas of need for each individual.

## **Limitations**

Because this study was completed on a small population of community-dwelling older adults in the upper Midwest, the generalizability of the findings is limited. The needs of this population are supported by current literature, but the wellness needs identified by this survey are unique to the residents at this community-housing complex. The survey return rate was 39%, so it is possible that the surveys returned do not represent the true needs of the population. However, the high return rate reduces this risk. Another limitation of this study is presented in the survey instrument. While the survey questions are based upon current literature on older adults and evidence of their needs, the survey itself has not been tested for reliability or validity. The survey was

pilot tested, but further testing of the survey instrument is warranted. Another limitation to the research study is the perceived depth of engagement highly depends on the individual's emotional response or intellectual interest in the topic as well as the activity, context of engagement, and person's abilities (Larson & von Eye, 2010), which may skew the data. However, this risk is minimal.

### **Conclusion**

Wellness programming for older adults is key to keeping healthcare costs low with a rapidly aging United States population (Scaffa & Bonder, 2009), but wellness programming needs to be specific to its targeted population (Jackson, Carlson, Mandel, Zemke, & Clark, 1998). Through this study, the researchers have identified key areas of wellness to focus programming on for this population. The health management and maintenance interventions in community dwelling older adults are seen as “developing, managing, and maintaining routines for health and wellness promotion, such as physical fitness, nutrition, decreasing health risk behaviors, and medication routines” (Arbesman & Mosley, 2012). These interventions were reflecting within the survey and are being incorporated into the current wellness programming at the site and will be considered in the future as the program continues.



## APPENDICES

## Appendix A

### Survey

#### **Wellness Census for Grand Forks Homes 2016**

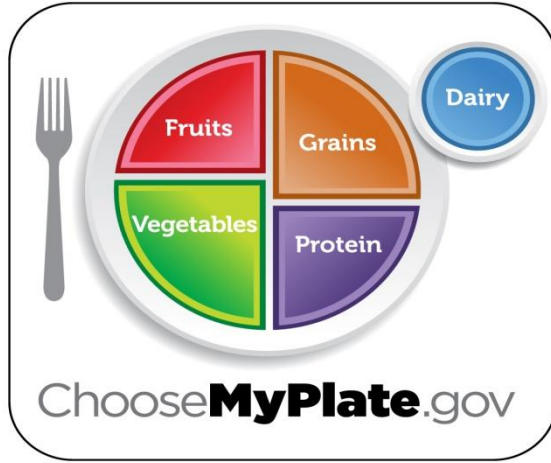
The purpose of this survey is to learn about the wellness needs of residents living in Cherrywood Village and current wellness programming effectiveness in order to guide the wellness program activities that are offered at Cherrywood Village. Your input is valuable as we develop more wellness activities. Your name will not be used with the results of the census. Your participation is voluntary; you are not required to complete this survey if you do not want to. This survey is a part of a study for the University of North Dakota; the GFHA has plays no part in the survey.

1. Age: \_\_\_\_\_
2. Gender: \_\_\_\_\_ female \_\_\_\_\_ male
  
3. Health Conditions (check all that apply)  

_____ diabetes	_____ weakness
_____ impaired joints	_____ balance problems
_____ difficulty breathing	_____ heart issues
_____ impaired vision	_____ impaired hearing
_____ cancer	_____ general mobility problems
_____ alcoholism	_____ medication/drug addiction
_____ chronic pain	_____ other (please describe):
  
4. How do you move around (check all that apply)?  

_____ walk	_____ use a cane
_____ use a walker	_____ use a wheelchair
  
5. What is the average number of servings of fruits and vegetables you eat a day? (a serving is about ½ a cup)  
\_\_\_\_\_ 0 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 or more
  
6. How many glasses of water do you drink a day (about 8oz size)?  
\_\_\_\_\_ 0 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 or more

7. The following chart shows recommended servings for a balanced diet.  
 ½ plate = Fruits and Vegetables.



¼ plate = Protein, such as lean beef, lean pork, chicken, turkey, or tofu

¼ plate = Whole Grains

Dairy = Low-Fat Milk, or an additional serving of fat-free Yogurt

How balanced is your diet on a regular day?

not balanced       balanced       well balanced

8. How often do you leave your apartment?

several times a day       once a day  
 once a week       once a month  
 never

9. How often do you leave your building?

once a day       several times a day  
 once a week       several times a week  
 once a month       never

10. If you go out into the community, what kind of transportation do you use? (Check all that apply)

drive myself       public transportation  
 ride with others       walk  
 bike       other (please describe):

11. How would you describe your reading skills?

poor       good       very good

12. How would you describe your vision?  
 poor             good             very good
13. Rate your overall health  
 poor     fair     good     very good     excellent
14. Rate your overall happiness  
 not happy             happy             very happy
15. Have you been homeless at any time in the last 5 years?  
 yes             no
16. How many falls have you experienced in the last year?  
 0  1  2  3  4  5 or more
17. How often do you experience boredom on a typical day?  
 never     occasionally     half the day     the whole day
18. How much time do you spend with family, friends, or visitors?  
 0 hours             1-3 times/week             4-7 times/week  
 1-2 hours/day     3-4 hours/day             5 or more hours/day
19. Which of the following conditions are your greatest stressors? (check all that apply)
- |   |   |
|---|---|
| <input type="checkbox"/> physical impairments   | <input type="checkbox"/> challenging family behaviors   |
| <input type="checkbox"/> sadness                | <input type="checkbox"/> thinking difficulties          |
| <input type="checkbox"/> boredom                | <input type="checkbox"/> challenging friend behaviors   |
| <input type="checkbox"/> financial limitations  | <input type="checkbox"/> lack of security               |
| <input type="checkbox"/> fear of falling        | <input type="checkbox"/> fear of nursing home placement |
| <input type="checkbox"/> lack of transportation | <input type="checkbox"/> isolation                      |
| <input type="checkbox"/> fear of abandonment    | <input type="checkbox"/> fear of death                  |

20. Which of the following conditions are your greatest pleasures?

- |   |  |
|---|--|
| <input type="checkbox"/> hobby activities | <input type="checkbox"/> TV            |
| <input type="checkbox"/> socializing      | <input type="checkbox"/> seeing family |
| <input type="checkbox"/> seeing friends   | <input type="checkbox"/> volunteering  |
| <input type="checkbox"/> working          | <input type="checkbox"/> church        |
| <input type="checkbox"/> praying          | <input type="checkbox"/> exercising    |
| <input type="checkbox"/> relaxing         | <input type="checkbox"/> sleeping      |
| <input type="checkbox"/> intimacy         | <input type="checkbox"/> learning      |
| <input type="checkbox"/> other: (list)    |  |

21. What wellness program topics would you be interested in participating in through the Cherry Village? (check all that apply)

- |   |  |
|---|--|
| <input type="checkbox"/> nutritional wellness                                       | <input type="checkbox"/> physical activity       |
| <input type="checkbox"/> emotional wellness   | <input type="checkbox"/> intellectual wellness   |
| <input type="checkbox"/> financial wellness   | <input type="checkbox"/> personal safety         |
| <input type="checkbox"/> community mobility   | <input type="checkbox"/> enjoyment of activities |
| <input type="checkbox"/> enjoyment of the world                                     | <input type="checkbox"/> spiritual wellness      |
| <input type="checkbox"/> substance abuse  | <input type="checkbox"/> falls prevention        |
| <input type="checkbox"/> common medical conditions                                  | <input type="checkbox"/> socializing             |
| <input type="checkbox"/> Checks of blood pressure, temperature, pulse, blood sugars |  |
| <input type="checkbox"/> medication management                                      | <input type="checkbox"/> Foot Care               |
| <input type="checkbox"/> technology training (Ipad, cell phone, computer)           |  |
| <input type="checkbox"/> Dental wellness  |  |

22. Have you participated in the wellness sessions provided weekly by UND Occupational Therapy instructor (Cindy Janssen) and students?

- yes       no

**If no**, you do not need to answer the rest of the questions on this survey.

23. If yes, how much have the sessions contributed to your sense of well-being?

\_\_\_ Not at all      \_\_\_ Somewhat      \_\_\_ Very much

24. Of the various areas of wellness, please rank the areas following areas in order of most improved to least improved (1=most improved, 4=least improved):

\_\_\_ mind              \_\_\_ physical              \_\_\_ emotional

\_\_\_ spiritual

25. Of the following aspects of wellness, please rank in order of most improved to least improved (1=most improved, 3=least improved):

\_\_\_ socializing              \_\_\_ enjoyment of the world around you

\_\_\_ occupational (doing meaningful activities)

Appendix B

IRB Approval

**Institutional Review Board**  
Twamley Hall, Room 106  
264 Centennial Dr Stop 7134  
Grand Forks, ND 58202-7134  
Phone: 701.777.4279  
Fax: 701.777.6708

May 4, 2016

<b>Principal Investigators:</b>	Sara Johnson; April Schmiesing
<b>Project Title:</b>	A Study of Wellness Programming among Community Dwelling Older Adults
<b>IRB Project Number:</b>	IRB-201605-381
<b>Project Review Level:</b>	Exempt 2
<b>Date of IRB Approval:</b>	05/04/2016
<b>Expiration Date of This Approval:</b>	05/03/2019

The application form and all included documentation for the above-referenced project have been reviewed and approved via the procedures of the University of North Dakota Institutional Review Board.

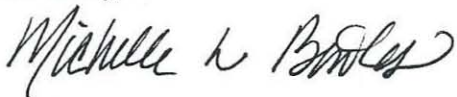
*Attached is your original informed consent statement that has been stamped with the UND IRB approval and expiration dates. Please maintain this original on file. You must use this original, stamped consent form to make copies for participant enrollment. No other consent form should be used. Each participant must be given a copy of the informed consent statement.*

If you need to make changes to your research, you must submit a Protocol Change Request Form to the IRB for approval. No changes to approved research may take place without prior IRB approval.

This project has been approved for 3 years, as permitted by UND IRB policies for exempt research. You have approval for this project through the above-listed expiration date. When this research is completed, please submit a Termination Form to the IRB.

The forms to assist you in filing your project termination, adverse event/unanticipated problem, protocol change, etc. may be accessed on the IRB website: <http://und.edu/research/resources/human-subjects/>

Sincerely,



Michelle L. Bowles, M.P.A., CIP  
IRB Coordinator

MLB/sb

Enclosure

Cc: Dr. Scinda Janssen (w/o attachment)



**UNIVERSITY OF NORTH DAKOTA  
Institutional Review Board  
Informed Consent Statement**

**Title of Project:** A Study of Wellness Programming among Community Dwelling Older Adults

**Principal Investigator:** Sara Johnson, (701)777-2209, sara.l.johnson@und.edu  
April Schmiesing, (701)777-2209, april.schmiesing@und.edu

**Advisor:** Cindy Janssen, (701)777-2209, sclinda.janssen@med.und.edu

**Purpose of the Study:**

You are invited to be in a research study about the health and wellness needs of older adults because you are living at Cherrywood Village, a community-housing complex.

The purpose of this research study is to determine the effectiveness of the current wellness programming within Cherrywood Village.

**Procedures to be followed:**

You will be asked to answer 23 questions on a survey. When you have completed the survey, please seal it in the envelope provided to you. Once the survey is completed and sealed, you may return it to the manila envelope in kitchen on the bulletin board.

**Risks:**

There are no risks in participating in this research beyond those experienced in everyday life.

**Benefits:**

- Future programming in your facility will be centered around the responses of the survey
- You may gain an understanding of what your needs are based on your responses to the survey questions
- Gain knowledge of proper dietary guidelines

**Duration:**

It will take about 15 minutes to fill out this survey.

**Statement of Confidentiality:**

The survey does not ask for any information that would identify who the responses belong to. Therefore, your responses are recorded anonymously. If this research is published, no

Approval Date: _____	MAY 4 2016
Expiration Date: _____	MAY 3 2019
University of North Dakota IRB	

information that would identify you will be included since your name is in no way linked to your responses.

**Right to Ask Questions:**

The researchers conducting this study are Sara Johnson, April Schmiesing, and Cindy Janssen. You may ask any questions you have now. If you later have questions, concerns, or complaints about the research please contact Sara Johnson, April Schmiesing, or Cindy Janssen at 701-777-2209 during the day.

If you have questions regarding your rights as a research subject, you may contact The University of North Dakota Institutional Review Board at (701) 777-4279. You may also call this number with problems, complaints, or concerns about the research. Please call this number if you cannot reach research staff, or you wish to talk with someone who is an informed individual who is independent of the research team.

General information about being a research subject can be found on the Institutional Review Board website “Information for Research Participants”

<http://und.edu/research/resources/human-subjects/research-participants.cfm>

**Compensation:**

You will not receive compensation for your participation.

**Voluntary Participation:**

You do not have to participate in this research. You can stop your participation at any time. You may refuse to participate or choose to discontinue participation at any time without losing any benefits to which you are otherwise entitled.

You do not have to answer any questions you do not want to answer.

You must be 18 years of age older to consent to participate in this research study.

Completion and return of the survey implies that you have read the information in this form and consent to participate in the research.

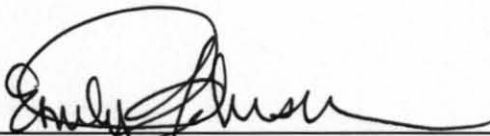
Please keep this form for your records or future reference.

Approval Date:	<u>    MAY    4    2016    </u>
Expiration Date:	<u>    MAY    3    2019    </u>
University of North Dakota IRB	



To Whom It May Concern:

Cherrywood Village acknowledges involvement in "A Wellness Census Survey for Residents in a Grand Forks Community-Housing Complex" and agrees to allow researchers to distribute surveys to each resident. Sara Johnson and April Schmiesing will be the principal researchers under the advisement of Dr. Cindy Janssen. Cherrywood Village acknowledges that no survey respondent will be identified, participation is voluntary, and that no compensation will be given to those who participate in the study. Cherrywood Village agrees to assist the researchers with survey distribution and collection procedures if needed, but will take no part in the research process. The top of the survey will read: "The purpose of this survey is to learn about the wellness needs of residents living in Cherrywood Village and current wellness programming effectiveness in order to guide the wellness program activities that are offered at Cherrywood Village. Your input is valuable as we develop more wellness activities. Your name will not be used with the results of the census. Your participation is voluntary; you are not required to complete this survey if you do not want to. This survey is a part of a study for the University of North Dakota; the GFHA has plays no part in the survey."

Signature: 

Printed Name: Emily Johnson

Title: Resident Service Coordinator

Date: April 27, 2016



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