

SKILLED NURSING FACILITIES: WELLNESS REQUESTS FROM THE BABY  
BOOMER GENERATION

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## DEDICATION

To my loving grandparents,  
The late Adolphus Grady Hemphill III and Mary Olive Hemphill,  
your passion for health, happiness, and love in life is inspirational beyond any  
sophisticated words I could perfectly write.

To my family,  
Rocky, Marilyn, Brett, and Phillip,  
for always supporting my wildest dreams.

To my husband,  
Andrew,  
thank you for your constant love and support and listening to me talk about school for  
entirely too long.

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Without doubt, this journey has been the most humbling experience of my entire life. I have been challenged how to think, questioned why I think what I think, and inevitably encouraged to think differently, write differently, and even communicate

differently. I have truly experienced the cliché statement of “learning the most by being exposed to all that I do not know.”

## ABSTRACT

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### SKILLED NURSING FACILITIES: WELLNESS REQUESTS FROM THE BABY BOOMER GENERATION

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The purpose of this study was to determine wellness specific requests of the Baby Boomer population in reference to choosing a skilled nursing facility for self and family members. Participants are any individual born from 1946 – 1964 with access to the survey via internet or hard copy. A survey was emailed using various hosting sites, such as corporate emails, social media sites, and forwards to additional contacts, containing questions regarding physical, social, and intellectual wellness preferences in the nursing setting. Returned survey responses through PsychData totaled 462, totaling 436 useable surveys. All data analyses were conducted using SPSS version 21.0, using a significance level of  $p \leq .05$ : for all analyses. Results of the study show that the specific demographics of income and education may not significantly determine the extent to which a Baby Boomer will prefer certain dimensions of wellness in a skilled nursing facility. However, gender has a significant impact on both physical and social wellness preferences based on Mann Whitney analysis. Physical wellness questions regarding meal options, walking trails, supervised exercise programs, adapted exercise programs,

and overall wellness were all significantly different at  $p < .001$ . Mean scores indicate women place slightly greater importance on each measure of physical wellness. Social wellness and gender shows association when measuring (1) distance of facility from family members and potential visiting friends, (2) family proximity to facility (3) animal interaction, and (4) volunteer opportunities. While the differences between genders are statistically significant for four of the five social wellness questions, there is only a noticeable difference for animal interactions. Additionally, intellectual wellness is important to Baby Boomers, exhibited by selections of ongoing educational programs and accessibility to technology and internet communication via Wi-Fi availability. In conclusion, the majority of Baby Boomers surveyed seek physical and social wellness opportunities in long term care, specifically skilled nursing despite income and education levels.

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## CHAPTER I

### INTRODUCTION

The population growth of the Baby Boomer Generation has infiltrated every marketable product in America. The growth of people aged 65 and over is a demographic phenomena affecting the United States as well as the rest of the world. Kinsella and Velkoff (2001) estimate internationally, the number of people aged 60 years and older is increasing, and it is expected to grow to almost 2 billion by 2050. Currently 1 in 10 persons is 60 years of age or older, while in 2050 this ratio is predicted to be 1 in 5 and finally and in 2150, 1 in 3 (Thomopoulou, Thomopoulou, & Koutsouki, 2010). Statistics from the United States Department of Health and Human Services Administration on Aging predict by 2030, when the last part of the Baby Boomers reaches age 65, there will be about 72 million at age 65 and up, more than twice the number in 2000, accounting for 19% of the population (“Aging statistics, 2012).

Consequently, long-term care institutions, including nursing homes, are expected to continue as important points of care (Fleshier, 2004). According to Sperazza (2011), the future Baby Boomer dwellers of nursing homes are quite different from the current residents regarding their knowledge and pursuits pertaining to wellness and a higher quality of life. Compared to previous generations, Boomers are better educated, having a higher occupational status, resulting in more discretionary income and improved health in their later years (Sperraza, 2011).

Current activity programs are mandated in all nursing homes that receive federal or state funding from Medicare and Medicaid; however, the question is if those activity programs are sufficient to meet the needs and interests of the future boomer generation. Research and evaluation of activity programs currently offered in nursing homes, in comparison to the personality and characteristic traits of Baby Boomers clearly illustrate the imbalance. No longer can it be assumed that bingo, church services, and van rides to view spring flowers represent the collective leisure interests of the Baby Boomers (Sperazza, 2011).

The Greatest Generation, coined by Tom Brokaw in his autobiography, is the current generation shaping the daily life in the nursing home community. Characteristics that define this generation are patriotism, a willingness to hard work, saving money and spending little, close-knit families, and loyalty (Brokaw, 1998). As of 2010, 95% of the generation is retired and their leisure activities are sedentary- including bingo, golf, shuffleboard, cooking, knitting and sewing (Sperraza, 2011). Cochran, Rothschild, and Rudick (2009) explain that where previous generations received their physical activity from work; boomers seek physical activity through leisure.

### **Problem Statement**

For decades the overall quality of nursing home care has been a concern to the general public, policymakers, and the healthcare industry (Arling, Job & Cooke, 2009). Federal and state regulations alike require that quality medical care is delivered to residents in the nursing home in order to receive government funding and maintain an

operational license (Arling et al., 2009). Government rules and regulations are hinged on quality nursing care for the residents. Nursing home care has improved over the years because federally required components and mandates; yet, research shows a lack of multi-dimensional holistic wellness programs incorporated into daily activity programs in nursing homes. Arling et al. (2009) communicate that federally mandated quality of life indicators include the availability of “meaningful activity”; however, the activities are undefined and subjective based on what an activity director defines as “meaningful.”

Observing the changing demographics and characteristics of the Baby Boomer generation as compared to prior generations, the nursing home industry must begin to add multi-dimensional wellness programs to which the boomer cohort is accustomed to and expects from long-term care providers. The Boomers are seeking such programs for themselves; moreover, they assume it just as important that their parents and loved ones entering nursing homes are offered holistic wellness programs in combination with quality nursing care to combat the disabilities and chronic diseases associated with aging.

Wellness programs are common in Independent and Assisted living facilities but rare in the nursing home. The nursing home is the last stage along the path of continuing care; however the greater physical decline of the residents does not warrant deletion of a wellness program. In addition, government funded health care programs, Medicare and Medicaid, are desperate for a higher quality of life while maintaining as many activities of daily living for as long as possible. As Boomers and their parents begin the transition from independent and assisted long term care into nursing care, both parties will expect

what is currently present in their daily leisure and wellness pursuits to be offered in nursing homes.

### **Research Questions**

1. Do sex, education, and income levels determine the degree to which Baby Boomers seek physical and social wellness?
2. Does the Baby Boomer Generation have an expectation of physical wellness, including activity options that encompass exercise components of endurance, resistance training, and flexibility?
3. Will the Baby Boomer Generation expect more offerings for social wellness in skilled nursing facilities?
4. Will the Baby Boomer Generation prefer social and intellectual wellness activities centered on technology and social media connections beyond the?

### **Definition of Terms**

Activities of Daily Living (ADL's)- According to the U.S. Department of Health and Human Services (1990), activities of daily living (ADL's) are the basic tasks of everyday life, such as eating, bathing, dressings, toileting, and transferring. When people are unable to perform these activities they need help from either human beings or mechanical devices in order to cope. In the elderly, ADL prevalence rates rise steeply with advancing age and are especially high for persons aged 85 and over (Rivlin, Wiener, Hanley & Spence, 1988).



Aging- According to Kaupuzs and Larins (2008) aging can be defined as a progressive or a gradual functional decline of physiological function with age. Aging is characterized by changes in appearance, such as a gradual reduction in height and weight loss due to loss of muscle and bone mass, a lower metabolic rate, lower reaction times, declines in certain memory functions, declines in immune functions and declines in exercise.

Assisted Living- According to Market Survey of (2011) assisted living facilities bridge the gap between home care and nursing homes, providing housing for those who need help in day-to-day living but do not need the round-the-clock care of nursing homes.

Baby Boomers- according to Gillon (2004) Baby Boomers are those individuals born between 1946 and 1964, estimated to be 76 million total in the United States.

Continuing Care Retirement Communities (CCRC's)- CCRC's are housing models developed to provide more affordable long-term care for the ever-growing aging population according to Branch (1987). CCRC's are communities designed for older individuals or couples who require or anticipate needing at least some assistance with tasks of daily living to maintain an independent lifestyle. These communities allow for the continuous progression of increased care to the point of providing full-time nursing care (Jenkins, Pienta & Horgas, 2002).

Chronic Disease- Chronic conditions are defined as diseases that last over many years, cannot be cured, and are often associated with disability (Korbitz, 2002).

Frailty- Fried, Tangen, Walston, Newman, Hirsch et al., (2001) define frailty as a clinical syndrome in which three or more of the following criteria are present: unintentional weight loss (10 lbs or more in past year), self-reported exhaustion, weakness, slow walking speed, and low levels of physical activity.

The Greatest Generation- Brokaw (1998) coined the term the Greatest Generation consisting of the cohort of people born 1914-1924, and also includes people born 1925-1927, forming a bridge to the Silent Generation.

Healthy Aging- Healthy aging does not necessarily mean an absence of decline but the best possible health for older individuals (Bryant, Beck & Fairclough, 2004).

Independent Living Facilities- Jenkins et al. (2002) explains independent living residents have full apartments and most elect not to use the common dining room, choose to participate in activities that take place off the premises, and are the healthiest of all continuing care community residents.

Long Term Care Facilities- Laurence & Kash (2010) defines long term care facilities as independent living, assisted living, and skilled nursing facilities along with many variations of those themes in between.

Medicaid- Medicaid is a joint Federal and state program that helps with medical costs for some people with limited income and resources. Medicaid programs vary from state to state, but most health care costs are covered if you qualify for both Medicare and Medicaid ("Glossary," 2012).

Medicare- Medicare is the Federal health insurance program for people who are age 65 or older, certain younger people with disabilities, and people with End-Stage Renal Disease (permanent kidney failure requiring dialysis or a transplant, sometimes called ESRD) ("Glossary," 2012).

Nursing Home Care- Blair, Glaister, Brown, and Phillips (2007) state nursing home care is designed primarily to minimize, rehabilitate, or compensate for loss of the independent ADL functioning of the older adult.

Palliate (Palliative Care) - Palliate care aims to reduce the violence of a disease, and also to ease (symptoms) without curing the underlying disease (Webster, 2012).

Physical Frailty- Physical frailty is characterized by declines in multiple domains including strength, balance, flexibility, reaction time, coordination, and muscular and cardiovascular endurance (Brown et al., 2000)

Primary Aging- Papalia & Olds (2002) define primary aging as the inevitable deterioration over time.

Secondary Aging- Aging due to the decline from physical and psychological abuse the body encounters throughout a lifetime (Papalia & Olds, 2002).

Wellness- A commonly accepted definition of wellness is that it is a constantly changing process that affects an individual's well-being in the physical, mental, spiritual, and social realms (Campbell & Kreidler, 1994).

### **Assumptions**

1. It is assumed that respondents of the survey answer the questions truthfully regarding wellness preferences for their parents in late life to the best of their ability.
2. It is assumed that respondents are truthful regarding their age and not complete the survey if they are not born within the years 1946 - 1964.
3. It was assumed that respondents will answer truthfully to the best of their knowledge annual income since the survey is completely anonymous.

### **Limitations**

1. Use of a volunteer sample may bias the results.
2. Respondents may not answer truthfully.
3. There may be difficulty assessing responses.

### **Significance of the Study**

Current research implementing and evaluating whole-person wellness in Continuing Care Retirement Centers (CCRC's) is plentiful, gaining much attention and popularity in long-term care (Edelman & Montague, 2008; Montague & Frank, 2007). Despite the whole person wellness trend and current reform, there is a significant lack of implementation and evaluation in the skilled nursing sector of long-term care. Mather LifeWays Institute on Aging has pioneered the movement by creating the Whole-Person Wellness Survey given to administrators in continuing care retirement communities.

The complexity and broad spectrum of disease states and functional levels in nursing homes is a deterrent for incorporating and measuring the results of whole person wellness programs? Despite the difficulty and planning required to design wellness initiatives, there is a significant demand and expectation the Baby Boomer generation will seek for their selves and loved ones when choosing an appropriate “home.”

This study has the potential to assist in current and future planning of whole person wellness programs in all levels of long term care. By carefully assessing what residents are looking for prior to their occupancy in nursing homes, programs and offerings have the potential to meet their needs from the onset, rather than trying to react to resident and family dissatisfaction.

## CHAPTER II

### REVIEW OF LITERATURE

Chapter II documents past and present research concerning the origination and continued development of wellness programs within the continuing care retirement community (CCRC) industry. The first portion of the chapter deals specifically with the physiology of aging and the natural decline resulting from increased age. Functional decline is a natural progression of life; however, different factors influence the speed and severity of decline, some of which are highlighted in the section on healthy aging. The ability of people to function both physically and mentally at the highest possible level because of the avoidance of disease and disabilities is known as successful aging.

The next section will orient the reader with the definition of comprehensive wellness and explain the 6 components of wellness: physical, social, intellectual, spiritual, emotional, and occupational/environmental according to Hettler's (1976) Model.

Current research of the wellness components in the aging population is reported. As the aging population in America increases, there is significant evidence suggesting that the Baby Boomer generation is spending large amounts of income to feel and look younger through varied components of the wellness model. Although there is a push for anti-aging, chronic conditions and ailments plague this population, increasing health costs. Physical activity is one way to combat health costs, preventing chronic disease

and functional decline. Evidence reporting the benefits of physical activity and exercise are cited. Current research exposing the percentage of the population that is considered physically active in accordance to government suggestions is also reported.

Intellectual and social wellness research is identified, exposing the significant affects a comprehensive wellness program can have on the entire body and mind. One major relationship that greatly affects emotional wellness is depression and lack of physical activity.

The next section explains the cost cutting potential wellness programs can have on increasing health care costs, primarily Medicare and Medicaid costs. The maintenance of prolonging independence in performing activities of daily living even in nursing home setting can impact cost. In order to implement wellness programs in nursing homes, there is a challenge to study and amend the current antiquated perception of wellness for these residents. Luckily, the Baby Boomers may possess a different outlook on wellness and, can hopefully change the current approach that leads to increased frailty exacerbated by inactivity and lack of movement in nursing homes.

Next in the literature review there is a focus to explain the current nursing home state and resident demographics in the United States. In addition, the current activity levels, particularly movement and physical activity in the nursing home are documented. Federal and state mandates regulate the industry and require certain “quality of life” elements to be present; however, there is quite a bit of subjectivity used to define “quality.” Discussion continues covering current wellness programs that occur in

retirement homes. Throughout the literature review, it is obvious that wellness programs are valued and sought after in the independent and assisted living segments of retirement care; yet the same enthusiasm is not witnessed in the nursing home setting. The thought remains that the nursing home is a place to decline, awaiting death.

Current research and potential implications for whole person wellness uncovered in literature demands reform among the nursing home industry in America. With illustrated knowledge and outcomes of wellness, perhaps the focus can elevate beyond simply lengthening life or managing pain, and seek a continued quality of life in frail physical and mental states.

### **Human Aging**

Identifying the physiological changes occurring in the body as humans increase in years provides an integral understanding of why wellness in later life is such an important concept. Kaupuzs and Larins (2008) define aging as a progressive or gradual functional decline of physiological function with age. Aging is characterized by changes in appearance, such as a gradual reduction in height and weight loss due to loss of muscle and bone mass, a lower metabolic rate, lower reaction times, declines in certain memory functions, declines in immune functions and declines in exercise (Kaupuzs & Larins, 2008). Aging is a process, not a static entity observed at a single point in time (Bryant et al., 2004).

Aging is further distinguished by the fact that women have a longer life expectancy compared to their male counterparts (Satariano, 2006). The active life



expectancy is a key concept in the epidemiology of aging, and is used to summarize the remaining years that people can expect to spend free of disability. Active life expectancy includes the measure of life that defines the number of years that individuals can expect to live in independence, free of functional disability (Satariano, 2006). One of the real paradoxes of the aging process is the longer life expectancy, but worse overall health of women. Although women have greater life expectancies than men, women can expect to live a smaller percentage of their remaining years in independence than men (Satariano, 2006). According to Mathieu (2008) aging is manifested through both physical and psychological changes. The decline of the physical and psychological systems of the body is impacted by what Papalia and Olds (2002) identify as primary and secondary aging. Primary aging is the inevitable deterioration over time. Secondary aging is the decline from physical and psychological abuse the body encounters throughout a lifetime. Such physical abuses to the body can be prevented all together or controlled within reason by an individual (Papalia & Olds, 2002).

Healthy aging is another theory for identifying the highest physical and mental functioning at a given age. Bryant et al., (2004) report healthy aging does not necessarily mean an absence of decline but the best possible health for older individuals.

Additional research by Rowe and Kahn (1987) defined successful aging as the avoidance of disease and disability. Their expanded model includes maintenance of physical and cognitive function and engagement in social and productive activities (Rowe & Kahn, 1997, 1998). Crowther, Parker, Achenbaum, Larimor, and Koenig (2002)

believe the forgotten factor in this model is positive spirituality. Ory, Ables, and Lipman's (1992) past and current research on geriatric and gerontology aging aims to document the link between health and behavior by identifying points for intervention for both disability prevention and health promotion across one's lifespan.

### **Life Expectancy and Chronic Illness**

The increase in chronic illness is the result of longer life expectancies. Korbitz (2002) points to advances in technology and medical care, which combat fatal diseases such as heart disease, cancer, and stroke. These are now successfully treated, transforming fatal diseases into chronic conditions. Hence, chronic conditions have become the leading cause of disability. Chronic conditions are defined as diseases that last over many years, cannot be cured, and are often associated with disability (Korbitz, 2002). The most common chronic diseases are hypertension, arthritis, and cardiovascular and lung disease (Korbitz, 2002).

### **Definition of Wellness**

Wellness by Campbell and Kreidler (1994) is a constantly changing process that affects an individual's well-being in the physical, mental, spiritual, and social realms (Campbell & Kreidler, 1994). Another interpretation of wellness is offered by Satiriano (2006), a measure of functioning and the reality of "being in the world." Health represents the complete state of physical, psychological, and social well-being. Along these fine lines, functioning represents the intersection between the capacities of the individual and the population on the one hand and the resources and demands of the

social and physical environments on the other hand. Functioning provides, therefore, a more comprehensive and complete picture of health and well-being (Satariano, 2006).

Often wellness is said to be a multi-dimensional state of being, not specific to one type of behavior (Corbin, Lindsey & Welk, 2000). Wellness first emerged after the publication of High Level Wellness, by Halbert Dunn in 1961. Dunn's model contains three dimensions for well-being- the body, mind, and spirit (Dunn, 1961). Further research by Bill Hettler (1976) increased the multi-dimensional model to six. There are variations in models where some will list six dimensions and others include seven. The interaction between these dimensions are what Marinelli and Plummer (1999) refer to as a Rubik's Cube because one dimension is not affected without causing other dimensions to adjust, just as any move in Rubik's Cube illustrates.

Two dimensions- environmental and occupational tend to vary from model to model. Some models will use one or the other, but rarely are both listed. Most models include occupational and not environmental (Hettler, 1984). Models that include both occupational and environmental are referenced as the seven dimensions of wellness (Fisher Institute of, 2012).

For the present study, The National Wellness Institute, a principal organization for wellness education in the United States is the referenced model. Additional research by Montague, Piazza, Peters, Eippert and Poggiali (2002) expounds on the National Wellness Institute's Model. Whole-Person Wellness is defined as an active process through which people become aware of, and make choices towards, a more successful

existence. The six dimensions that embody personal wellness are: physical, social, intellectual, spiritual, emotional, and vocational (Montague et al., 2002). Although all dimensions do make up whole-person wellness, for this study, research will focus on the physical, social, and intellectual dimensions.

### **Components of Wellness for Study**

#### **Physical Wellness**

The physical dimension of wellness, explained by Montague and Rose (2012) promotes participation in personal safety and activities for cardiovascular endurance, muscular strengthening and flexibility. Even here the dimension is multi-faceted and relative to each person's abilities and disabilities, overall promoting healthy lifestyle habits while discouraging negative, excessive behaviors (Montague & Rose, 2012).

#### **Social Wellness**

The social dimension of Whole Person Wellness is humanistic, emphasizing the creation and maintenance of healthy relationships. It enhances interdependence with other people and nature while encouraging the pursuit of harmony and feelings of connectedness (Montague & Rose, 2012).

#### **Intellectual Wellness**

Montague and Rose (2012) believe the intellectual dimension promotes the use of one's mind to create a greater understanding and appreciation of oneself to others. Intellectual wellness involves the ability to think creatively and rationally, thereby

encouraging an individual to expand their knowledge and skills through a variety of resources and activities.

### **Current Research of Wellness Components in Aging Population**

#### **Physical Wellness**

The physical dimension of wellness is suitably defined in terms of exercise and fitness (Marinelli & Plummer, 1999). As research and information dissemination have increased, many people have paid close attention and adopted practices of physical activity into daily life. The “Boomer Generation” is at the forefront of all things related to wellness, especially fitness and physical activity. Sperazza (2011) reports special fitness programming for aging adults will remain strong because the growing number of boomers recognizes the multitude of benefits that come along with regular exercise participation. Ruuskanen and Parkatti, (1994) cite The American Geriatrics Society (AGS) describing physical activity as one of the most important and effective ways to prevent and treat certain health problems in older adults. Participation levels of physical activity positively influence the risk of chronic illness, loss of function, dependence, and death. The aging population in America is well-informed of the benefits from engagement in regular physical activity and seems to adhere to the suggestions to improve both quality and quantity of life.

Since the rise of chronic conditions in America, health care professionals continue to seek ways to implement programs combating the decline in independence that lead to some form of dependent care (Korbitz, 2002). Regardless of gender, both men and

women embrace the idea that the quality of life in later years is just as important as the quantity of life in earlier years. Rowe and Kahn's (1998) research identifies that successful aging includes the certainty of continual physical functional capacity and active life engagement. Following are examples and results of inclusion of physical activity for the aging individual.

**Definition of physical activity.** Physical activity is defined by The National Heart Lung and Blood Institute (2011) as any movement that works your muscles and requires more energy than resting; a movement that enhances health. Examples of physical activity include: walking, running, biking, gardening, household chores and seated aerobics.

The National Heart Lung and Blood Institute (2011) defines exercise as a type of physical activity that's planned and structured, such as lifting weights, group exercises classes, or team sports. More focus should be placed on physical activity, rather than formal exercise because of increased barriers and functional ailments preventing the elderly from participating in organized exercises. Mazzeo et al., (1998) suggest that elderly people who wish to begin a light to moderate physical activity program should be encouraged to do so without having to undergo special medical clearance. The reason for this is that a sedentary lifestyle generally appears to be a far more dangerous condition than physical activity in the very old.

Evidence reports that exercise and physical activity ameliorate diseases and delay diseases in the older population (Christmas & Andersen, 2000). Schneider and Bronder

(2002) suggests that even older persons well into their 80's and 90's can be trained in endurance and strength exercises that result in substantial health benefits, such as improved cardiovascular function, reduced risk factors for chronic diseases, an offset of muscle loss, and an overall greater quality of life and functional ability for the frail elderly persons (Mazzeo et al., 1998). An array of literature supports that involvement in physical activities is associated with benefits to mental and physical health (Caldwell, 2005; Trost, Owen, Bauman, Sallis, & Brown, 2002; Warburton, Nicol, & Bredin, 2006).

Mazzeo et al., (1998) notes that exercise goals for the frail elderly are different from younger adults. Younger adults seek exercise as a way to prevent disease and increase life expectancy. Conversely, in the frail elderly, exercise and physical activity has three goals: to minimize the effects of aging, to reverse the effects of disuse, and to maximize psychological health (Mazzeo et al., 1988).

Publicity accompanying the aging population led to Baby Boomers beginning to better understand the natural decline of the physical body as a result of aging. Continued engagement in physical activity is an important concept the elderly are starting to question and seek additional information of how and where to participate (Van Roie et al., 2010). Unfortunately simple curiosity and knowing the benefits of physical activity has not proven to be significant enough to change the levels of exercise in the current elderly population. Regular physical activity decreases the risk of developing chronic diseases and improves overall function, independence and quality of life (Leveille, Guralnik, Ferrucci & Langlois, 1999). Despite the well-known benefits of regular

physical activity, most elderly in North America and Europe do not reach the recommended level of 30 minutes of physical activity each day (Van Roie et al., 2010). About 28 to 34% of adults age 65-74 and 35 - 44% of adults ages 75 or older are inactive, neither exercising nor engaging in leisure-time physical activities (Bylina et al., 2006). National health-promotion objectives for the next decade recommend that adults engage in the moderate exercise range; however, currently only a few older adults even meet the minimum recommended activity levels (Bylina et al., 2006).

A 2002 American Association of Retired Persons (AARP) telephone survey of 1,000 American's aged 50-79 to assess overall perceptions of health and wellness and current activity levels demonstrated that 59% of respondents reported being physically active on a regular basis and 63% valued exercise as the most important thing they could do for their health (Bylina et al., 2006). While the self perception is high compared to national statistics, there is a clear disparity in the numbers of those who are participating. Some of the error of the reporting is contributed to the telephone survey sample being primarily White and well educated (Bylina et al., 2006).

Inactivity is defined as less than 20 minutes of physical activity at least 3 days a week. Research shows more than 85% of adult's age 65 years or older are considered inactive, and this number only increases in those above the age of 74 (Dorgo, King & Brickley, 2009).

Additional research over the past two decades shows that levels of physical activity among long-term care residents is consistently low (Bates-Jensen et al. 2004; Ice,



2002; MacRae, Schnelle, Simmons & Ouslander, 1996; Ruuskanen & Parkatti, 1994; Schenelle et al., 2004).

Leavy and Aberg (2010) agree the idea of simple physical activity should be more informative and include a three component program for seniors to provide the best all-around benefits. A program does not have to be tailored to every individual; however, educating the elderly about the benefits of the three areas of an exercise prescription of aerobic activity, muscle strengthening, and a flexibility and stretching routine can only increase the results of physical activity engagement (Leavy & Aberg, 2010).

### **Intellectual Wellness**

Brain health is an important component of intellectual wellness. Brain health is defined by Nassbaum (2007) as a “proactive, life-long pursuit” (p.11). Fitzpatrick (2010) explains learning as a social activity is seen as an “embedded process of development among older adults as they age in relation to the body, brain, and mind throughout the life course” (p. 32). Life span psychology confirms that people experience cognitive losses as they age, but they can still improve their cognitive abilities (Craik & Bialystok, 2006).

All too often the slogan, “use it or lose it” is accompanied with aging and cognitive decline. Fernandez and Michelon (2011) propose that the slogan should be changed to “use it and keep it,” stating that the focus should not primarily be about prevention of dementia and Alzheimers, rather active aging through lifelong learning. Memory loss is the greatest fear of the aging mind; however, there are other brain functions or cognitive capacities that are crucial to an independent life (Fernandez &

Michelon, 2011). Based upon their research, the goal should be brain fitness, including novelty, variety, and challenge, not just memory recall (Fernandez & Michelon, 2011).

### **Brain Health**

The concept of leisure activity participation and its relationship to mental and physical health among older adults is linked with the activity theory perspective, noting good adjustment and well-being in later life is positively associated with a high level of socialization and participation in activities (Fitzpatrick, 2010). Activities included group work, languages, computer lab, strength training, working for pay, listening to speakers, laughing, and participating in projects were significantly related to both mental and physical health as measured by self-reporting, the number of chronic diseases, and mental health measured by spirit and happiness (Fitzpatrick, 2010). Fitzpatrick suggests that these findings imply great advances for activity professionals, social workers, and gerontologists.

In addition to activity programs that stress social participation (Fernandez-Ballesteros, 2005), several studies indicate that physical and aerobic exercises are important in improving mental abilities (Sumic, Michael, Carlson, Howieson, & Kaye, 2007). Whatever approach selected for intellectual wellness, Hertzog, Kramer, Wilson and Lindenberger (2009) believe “maintaining effective cognitive functioning is desirable simply because it promises to enhance the quality of life in old age” (p.2). Fernandez and Michelon (2011) also proved in their study that physical fitness training has a positive impact on brain functions as it helps to both increase the generation of new neurons and

strengthen the connections between existing neurons. The relationship is further explained that both physical exercise and cognitive exercise, such as brain fitness, are paramount again, and each complements, rather than supersedes, the other (Fernandez & Michelon, 2011).

Additional research by Laurenhue (2012) on cognitive exercise suggests when we exercise our mind by learning or doing new things we are growing new dendrites. Dendrites are like branches on a tree that extend our reach and help us make new brain connections, which ultimately protect our minds from disease because of a “reserve” quantity (Laurenhue, 2012).

### **Social Wellness Research**

Professionals who serve older adults know from personal experience that their member and residents feel better when they are socially active (Larkin, 2008). Recent research suggests that loneliness contributes to a range of ills, from high blood pressure to pain, depression and dementia. Conversely, social interaction boosts healthy and overall quality of life (Larkin, 2008).

Despite the documented benefits of socialization, loneliness in later life is common according to Larkin (2008). A recent survey by Court, Farrell, and Forsyth (2007) revealed that more than 20% of Baby Boomers are lonely.

Holmes (2009) explores a new facet of social wellness, providing research from an intergenerational program using children from a preschool program that benefit the child and elderly resident through sensory stimulation and the meeting of special needs

with individual attention, such as acceptance, self-esteem, socialization and intellectual development (Holmes, 2009).

### **Social Interaction and Life Satisfaction**

Life satisfaction stated by Jenkins et al., (2002) is an outcome that has been related to physical and non physical activity participation. Havinghurst (1961) believes the activity theory is linked to life satisfaction, proving older adults need for social and psychological connections are continuous across the adult life span. Therefore the maintenance of levels (frequency) of activity engagement in both physical and non physical activity into late life is likely to be important for life satisfaction and well-being (Jenkins et al., 2002).

Participation in exercise programs is a great way to foster social interaction. The social contact associated with activity engagement may contribute to improving older person's well-being (Jenkins et al., 2002) and maintaining a sense of control and independence over their lives (Voelkl, Fries & Galecki, 1995). Even residents with disabilities and chronic conditions report a positive influence of well-being when attending social activities (Jenkins et al., 2002).

Social interaction is also a prime motivator for physical engagement. Research from Mannell and Kleiber (1997) shows that social, rather than physical concerns primarily motivate older adult's participation in leisure activities. Additionally, social factors appear important motivators for older adults when it comes specifically to exercise such as aerobics and strength training (Dean, Farrell & Kelley, 2007).

### **Physical – Social Wellness and Depression**

Depression is the most prevalent mental health problem among adults 50 years and older according to the Centers for Disease Control ([CDC], 2009) indicating 7.7 % reported current depression and 15.7% reported a lifetime diagnosis of depression. There is a need to focus on decreasing the incidence of depression before it leads to additional mental ailments and loss of independence. Schneider and Bronder (2002) believe depression leads to a reduction in mobility, a pervasive feeling of fatigue, and leads to a slowing of thought process, stating depressed persons are more likely to develop major illnesses and suffer from weight loss. The presence of depressive disorders, often adversely affects the course and complicates the treatment of other chronic diseases (CDC, 2009). Carels, Berger, and Darby (2006) report the positive benefits of activity participation involving postmenopausal, obese, and sedentary women. Physical activity was delivered to the women in both a planned exercise setting and other forms of physical activity. The planned exercise included a graded exercise test (GXT) factor that predetermined the when, where and how long the exercise would last. The planned exercise activities, compared to the more volitional control activities were strongly associated with mood. Women reported significant decreases in tension, depression, anger, and confusion and desirable changes in mood after the GXT (Carels et al., 2006). Additionally, a second pattern emerged, identifying an association between mood and planned exercise that became stronger over the course of the program (Carels et al., 2006). Simply offering activities to participate was not associated with mood.

Woods et al., (2012) report a longitudinal study where they examined two factors, physical-social functioning and emotional functioning as predictors of time to death, years of healthy living and years of independent living in women age 65 and over. The results show that social functioning related more strongly on the physical-social factor than emotional functioning (Woods et al., 2012). Additionally, physical-social functioning was a stronger predictor of (1) reduction in mortality risk, (2) reduction in risk of major health conditions, and (3) reduction in risk of dependent living (Woods et al., 2012). Overall, the physical-social functioning factor was the best predictor of each outcome (predictors of time to death, years of healthy living and years of independent living) assessed (Woods et al., 2012).

Although depression is a common mental state of the elderly population and the percent of those depressed does increase with age, it should not be considered a normal part of aging since 80% of cases are treatable conditions (CDC, 2009).

### **Wellness Program's Impact on Health Care Costs**

Kannan, Gaydos, Atherly and Druss (2010) describe wellness as being akin to health promotion and primary prevention through a healthy and natural lifestyle, including a variety of ways people strive to flourish in their daily lives. They suggest the reason for the focus on wellness programs and tools begins with policy makers at the federal and state levels in an attempt to address health care reform and reduce associated costs (Kannan et al., 2010). Attkisson (2010) predicts that by 2020 the number of people eligible for Medicare will double from 46 to 80 million once all the boomers reach age

65, growing the current annual cost from 500 to \$929 billion. In the next 40 years, average life expectancy for Americans could rise to 93 years for women and 86 years for men (Assisted Living Federation of America, 2010). The increase in life expectancy estimates healthcare costs for the aging at nearly \$8 trillion annually by 2050 (Assisted Living Federation of America, 2010).

Implementing holistic wellness programs for the elderly in nursing facilities is not only the right thing to do in order to maintain functional levels, (Montague, 2000) but as healthcare costs spiral upward, communities that cater to aging populations are seeking ways to counteract disabilities and possible chronic illnesses that jeopardize seniors' health and well-being by adopting such programs as a guiding principle.

Both concepts of successful aging (Rowe & Kahn, 1998) and morbidity compression (Fries & Crapo, 1981) emphasize the goal of maintaining physical and psychosocial well-being in older adults by maximizing the time period of independent functioning free of functional impairment that occurs in the aging process. Hertzog et al., (2009) report that, from a societal point of view, "prolonging independent functioning is both a desirable goal in itself and a way of deferring costs of long-term care" (p. 2).

### **Current Perception of Wellness from Elderly Population**

In a qualitative study by Campbell and Kreidler (1994) the interviewed elderly did not exhibit an extensive or elaborate perception of wellness. Respondents simply felt being well meant freedom from all illness, both acute and chronic. Of the 33 clients, 31 stated they were not well, suffering from diseases and pain that did not allow them to be

mobile or active (Campbell & Kreidler, 1994). The responses indicated that older clients did not see themselves as healthy or well unless they are able to perform activities and daily functions free of pain and discomfort. Because the majority of the clients were limited in these areas, they saw themselves as ill (Campbell & Kreidler, 1994). In circumstances that lend themselves to such negative psychological thoughts of wellness, educating the aging person is indispensable.

Perhaps the mindset needs to shift to a more proactive and less reactionary approach, looking at their current functional state and then gravitating more towards health maintenance and stability rather than absence of disease. The need for preventative health continues unabated in old age. However, Fillit and Picariello (1998) propose the focus of prevention shifts from preventing disease entirely to maintaining “wellness,” quality of life, and the ability to function independently despite the presence of chronic illness.

## **Generational Demographics**

### **Parents of Baby Boomers**

This generation began with birth during the depression and continued through World War II (Giordano, 1988). The generation is characterized by early marriage, with women marrying at an average age of 20.5, and men of 21.1 (Glick, 1979). The later cohort of the generation that produced today’s middle-age Baby Boomers has been called the new generation of the Young-Old and will place unique demands on society (Giordano, 1988). Production of children was approximately three per couple, divorce



rates increased, creating an increase in the number of single parents (Giordano, 1988). Literature warns that individuals in this generation experienced a wide variety of living arrangements prior to marriage and after divorce, leaving the group with a legendary experimentation of lifestyles (Giordano, 1988). Finally, Brody (1981) explains states that women of this generation entered the labor workforce in large numbers.

Generational predictions noted by Giordano (1988) include highly motivated individuals participating in self-help groups, interested in self-improving the quality of life through counseling, health activities, and education. The cohort will be more aware of community services and resources (Giordano, 1988). All of these items point back to the experimentation in lifestyles because of marriages, divorces, re-marriages, resulting in four and five-generation families (Giordano, 1988).

### **Nursing Home Facility Demographics**

At any given time, 1.5 million individuals reside in nursing homes in the United States (Zimmerman & Cohen, 2010). According to the U.S. Census Bureau, in 2010, 66 % of nursing home residents are women, only 16 % of the residents were under the age of 65 and the median age was 82.7 years (Market survey of, 2011). Street, Quadagno, Parham, and McDonald (2003) describe the long-term care system (which includes nursing homes) in the United States as consisting of a complex mix of public and private financing and delivery mechanisms that, until recently, have favored nursing homes as the site of long-term care services, with Medicaid as the primary payer. Nursing home care defined by Blair et al., (2007) is designed primarily to minimize,

rehabilitate, or compensate for loss of the independent activities of daily living (identified as ADL's) functioning of the older adult. According to Levit et al., (2003) in the USA, nursing home expenditures doubled during 1990 – 2001, reaching \$99 billion, 57 % of which paid by Medicare and Medicaid. Jacobzone's (2000) cost predictions for the years 2000 – 2020 project long-term care cost will increase 20-21% from the 99 billion. The numbers can be lowered if health care interventions decrease disability, allowing nursing residents to live independently and capable to complete activities of daily living for as long as possible (Blair et al., 2003). In Texas in 2010, the U.S. Census reported 94,278 people in nursing facilities/skilled nursing facilities (Census, 2010).

### **Physical Activity Levels and the Elderly**

Despite the notion and recurrent communication that physical activity can prevent disability thereby enabling older adults to continue living longer independently, there is still a lack of activity according to research by Hildebrand and Neufeld (2009).

Sheppard, Senior, Park, Mockenhaupt and Chodzko-Zajko (2003) cite the U.S Surgeon General's Report estimating between one third and one half of Americans over the age of 50 get no leisure time physical activity at all. Even with all the benefits of physical activity, 35-44% of adults ages 75 and older are inactive, not exercising, and engaging in no leisure-time physical activities (Bylina et al, 2006). Perhaps there is a pattern change among exercise levels and activity engagement later in age based upon AAPR studies directed at Baby Boomers and older. In 2002, 1,000 Americans aged 50-79 were asked about their wellness preferences and 59% report being physically active on a regular

basis and 63% valued exercise as the most important thing they could do for their health (Bylina et al., 2006).

**Federal mandates regarding activity programs.** Nursing facilities are required to provide services and activities in order to attain or maintain the highest practicable physical, mental, and psychosocial well-being of each resident (United States Code, 2012) but not all residents participate. In the amount of time actually spent in activities, more than 376,000 residents indicated that 8% participated in activities most of the time, 42% some of the time, 44% a little of the time, and 7% none of the time over a week (Zimmerman & Cohen, 2010). Such a statistic presents a clear need that modification and change is necessary to engage residents. Perhaps the shift of generations will bring about change to provide “meaningful” and outcome based activity programs that center on a holistic wellness approach. The extreme need for wellness programs is illustrated by research that exposes the functional ability of nursing home residents may decline by as much as 30% over a 6 month period of no activity (Resnick & Simpson, 2003). Health maintenance and activity continue unabated in old age. The focus of prevention shifts from preventing disease entirely to maintaining wellness, quality of life, and the ability to function independently despite the presence of chronic illness (Fillit & Picariello, 1997).

### **Existence of Wellness Programs in CCRC's**

Wellness programs in continuing care retirement communities (CCRC's) are not absent by any means. CCRC's are preparing to meet the needs of the Baby Boomer who are beginning to move into senior living communities and according to Edelman and

Montague (2008) whole-person wellness is becoming more than a slogan; it is becoming an expectation and way of life. The culture change has started at the independent and assisted living levels of long-term care (Edelman & Montague, 2008).

The problem begins because CCRC's comprise all levels of care and offer a housing model that provides the opportunity for residents to "age in place" in a setting with care resources that allow for a continuum of support (Silvia-Smith et al., 2011). The continuum includes independent apartments, or homes, assisted living, memory care, and either skilled nursing care or the option to bring home health care into the facility (Silvia-Smith et al, 2011). Since the average age is lower and functional ability higher of the residents in all of these facilities compared to nursing homes, the creation and implementation of wellness programs is quite common.

Numerous studies measure the positive implications that accompany the inclusion of a multi-dimensional wellness program in independent and assisted living facilities. Some of the first studies were conducted in the early 1980's. The Ohio Presbyterian Homes assessed the effect of a personal health management system, integrating aspects of the body, mind, and spirit (Slivinske & Kosberg, 1984). The Goodwin House studied 370 residents after starting a health education program called "The Wellness Program" (Barbaro & Noyes, 1984). In the Midwest United States, 167 communities cited functional maintenance and even improvement in the frequency to which one participates in activities may yield positive effects on quality of life for elderly adults (Jenkins et al., 2002). The Palisades Model in Colorado Springs, Colorado created a multidimensional

wellness model that receives a major focus because of the emphasis on maintaining functional well-being (Silvia-Smith et al., 2011). In Delaware, sick seniors with disrupted activity levels chosen from multiple continuing care retirement homes showed significant improvement when replacing less strenuous activities for past activities they were no longer capable of doing (Goldberg & Beitz, 2006). The Virginia Mennonite Retirement Community is a forward thinking-facility that introduced the whole-person wellness concept back in the late 1990's (Edelman & Montague, 2008). Pearson (2008) reported on this same community that the benefits of wellness and fitness are now incorporated into their corporate mission statement, "to provide resources to help elders age well in a place they call home" (p. 26).

Primary prevention measures (vaccinations, healthy behaviors such as low-fat diets and regular exercise, injury prevention...) were measured by interviews among 206 adults living independently in their own apartments in Maryland, exposing the need that the first step is to engage the older adults to participate in the aforementioned behaviors (Resnick, 2003). These results suggest a need to consider an individualized approach to health promotion and disease prevention when working with older adults (Resnick, 2003).

In addition to multi-dimensional wellness programs in CCRC's there is also a significant amount of research that has been conducted that focuses on one factor, or one type of exercise. This type of study is researched and reported quite often in nursing homes. Again, the issue is that it is one-dimensional, and involves only a small sample

size of residents that are typically highly functioning and ambulatory, not the typical profile of a nursing home resident. Below are some of the commonly reviewed studies.

### **Current Research of Wellness Components in Nursing Homes**

#### **Wii Gaming Console**

Gaming or “exergaming” as termed in the health and wellness arena is also popular among older adults. A study in Germany by Sohnsmeier et al., (2007) utilized a Nintendo Wii gaming console where participants 60 years and older performed Wii Bowling 20 min at a time for twice a week for a total of 6 weeks. Quadriceps strength pre and posttest revealed that after 6 weeks, there were significant changes in the maximum isometric strength of the middle quadriceps for the intervention group. The intervention group muscle strength increased by an average of 38.71% for the left leg and 36.91% in the right leg (Sohnsmeier, Gilbrich & Weisser, 2007).

#### **Tai Chi**

Chyu et al. (2010) reported the effects of tai chi exercise on posturography, gait, and physical function on postmenopausal women with osteopenia. Reducing the risk of falls in older adults is critical and has proven successful when performing activities that maintain or improve balance (Chyu et al., 2010). The study was the first to show that a 24-week tai-chi exercise intervention improved stride width and quality of life, in terms of general health, vitality and bodily pain in the selected sample (Chyu et al., 2010). A statistic to show this improvement was a measure from baseline to conclusion of the 24-week program, which resulted in the participating group showing an increase of 50% in

Sensory Organization Test, compared with only 19% from the control group.

Additionally, the tai chi group had a greater stride width compared to the control group (Chyu et al., 2010).

### **Balance Program**

Neid and Franklin (2002) present evidence suggesting balance programs, such as standing on one leg can improve stability and reduce the risk of falls. For de-conditioned and sedentary elderly adults, patients should be encouraged to improve their functional ability with strength and balance training before beginning aerobic exercise (Neid & Franklin, 2002). Even if one is not required to receive physician approval to exercise, it has shown to be beneficial. The strength of the physician's advice is significantly correlated with the likelihood of adopting increased physical activity in older patients (Neid & Franklin, 2002).

### **Current Limitations in Comprehensive Wellness Programs in Nursing Homes**

Studies in America seem to be less comprehensive of entire wellness programs from a longitudinal standpoint, focusing more on single activity trial programs and the benefit realized at the conclusion of the activity implementation. Improvement of physical function in the frail elderly has been supported by controlled clinical trials in America and Europe (Chyu et al., 2010, Neid & Franklin, 2002, Sohnsmeier et al., 2007). Success is not deficient, as almost all studies show benefit to and significant progress in the elderly patient and samples. However, they lack the holistic wellness approach researching the connection from one dimension to the other.

Below are examples of clinical interventions that exemplify these successes.

Gine-Garriga et al., (2010) tried a 12-week functional circuit training program in a group of frail community-dwelling adults. Despite positive results, Gine-Garriga et al., (2010) explains that such programs seem to be “impractical to implement in applied settings with limited time, few resources, and many competing demands” (p. 402). The goals to implement programs in order to reduce the physical-frailty components as the main outcome measure are not being observed (Gine-Garriga et al., 2010). Older people in institutionalized settings have severe physical impairment, affecting their ability to perform ADL’s, in turn requiring extensive assistance (Rosendahl, Lindelof, Littbrand et al., 2006). Gine-Garriga et al. (2010) suggest that “the need to focus on ADL as a fundamental outcome measure is also important as an index of independent living” (p. 402). Despite the general decline in condition of nursing home residents, the importance of maintaining as many activities of daily living as possible is paramount for not only the resident, but the staff that is responsible for their daily care.

Physical frailty, according to Brown et al. (2000) is characterized by declines in multiple domains including strength, balance, flexibility, reaction time, coordination, and muscular and cardiovascular endurance. Their study of low-intensity exercise on physically frail sedentary men and women over the age of 78 revealed significant improvement in functional capability because of positive changes in strength, flexibility, and balance (Brown et al., 2000). The only drawback is that this study was for those aged 78 and older living independently, not in a nursing home setting.



Long-term care centers, especially nursing facilities, lack research measuring a comprehensive wellness program and the potential effect on elderly patients already exhibiting the signs of inactivity, depression, social withdrawal and frail conditions. Published studies cited in this paper have a tendency to include samples from senior day centers, community centers, and independently living individuals in retirement homes, or elderly people that still reside in their own homes. Current research conducted in nursing homes, tends to be one-dimensional, lacking transferrable ability to the industry because of the small, controlled setting.

### **Structural Design and Staffing of Nursing Homes**

The structural design and staffing-to-resident ratio of nursing homes has also proved to be an issue for the implementation of wellness programs (Benjamin et al., 2009; Brune, 2011). The decrease in resident functioning requires more people to help transport residents to the central location where activities take place (Benjamin et al., 2009). Another factor that impacts wellness, specifically physical activity levels in nursing homes, according to Benjamin et al. (2009) is “the environmental factors such as availability and aesthetics of outdoor walking paths and physical features of the indoor environment such as handrails in hallways” (p. 182).

It is not atypical for one health care aide to oversee 14 residents on a hall while maintaining full responsibility for bringing residents to the dining room for physical activity (Benjamin et al., 2009). It is here that one should refer back to the 30% decline noted by Resnick and Simpson (2004) that may occur in nursing home residents due to

inactivity. Perhaps the lack of assistance and ratio of nurse aides to residents also contributes to decline because of lack of activity. According to Baltes, Neuman and Zank, (1994); and Morris et al. (1999) such decline is commonly accepted as an inevitable consequence of advanced age, frailty and multiple health problems, hence the long-term care environment may perpetuate resident decline and reinforce dependency through institutional policies and staff attitudes

Brune (2011) explains when nursing facilities were first built in America “they were developed for a very autocratic and hierarchical style of management based in the 1960’s” (p. 4). They were structurally modeled after hospitals, where the major focus was on healing and palliation of physical ailments and mental impairment, where residents were and still are isolated from family, friends, and community, without any consistent interaction from the outside (Brune, 2011).

Benjamin et al. (2009) identified that the building design of nursing homes may actually be a barrier to activity, especially walking. External environmental factors such as the availability and aesthetics of outdoor walking paths, and physical indoor features such as handrails in hallways and stairs also influence levels of activity for the institutionalized seniors (Benjamin et al., 2009). The ability to walk down long corridors without resting or sitting is a typical problem in homes, leaving residents using their wheelchairs too often instead of continuing to walk.

Brune (2011) exclaim that Baby Boomers will not tolerate the same environments for themselves or their parents. The cultural revolution has started with a focus on

resident-centered care, allowing the care giving level of front line staff to be considered in decision making (Brune, 2011). While the revolution has surfaced, it is not as popular as the Baby Boomer generation might expect, particularly in the nursing home entity of long-term care.

The need for comprehensive wellness programs in nursing facilities is irrefutable. The optimistic assumption is the Baby Boomers will be the generation to fully usher this amenity into nursing homes, regardless of the connotation and frailty levels accompanying this sector of long-term care.

Laurence and Kash (2010) inform readers, since the demographics of the aging population are changing so rapidly, now is the time to establish marketing plans and strategies to attract the retiring customer. Marketing in long-term care and nursing homes is difficult because one has to convince potential clients that they eventually will be dependent upon the care and amenities offered at the facilities (Laurence & Kash, 2010). Furthermore, the marketing plan is not an overnight event, but a long-term process since the consumers do not make impulse decisions (Laurence & Kash, 2010). A facilities relationship with the community and a resident's family is one of the strongest marketing tools, making sure the community is both aware of the services at the facility and regards them a favorable impression (Laurence & Kash, 2010). Exposing the community to the results and statistics of a viable, outcome-based wellness program in local nursing homes is crucial in the eyes of future Baby Boomer as consumers.

## CHAPTER III

### METHODOLOGY

This chapter describes the research design, sample setting and characteristics, survey instrument, data collections, data analysis procedures, and participants' rights. The first section- research design, explains the research approach and justification for the design selected. The second section, sample setting and sample characteristics, defends and describes the sample population selected and the procedure to disseminate the survey. The third section, the survey instrument, includes the survey distributed and the sample. The fourth section, data collections, describes the method in which the survey was distributed through email, how the survey was returned for data collection and entry into SPSS. The fifth section, data analysis describes the inferential analysis method chosen for the study and the hypothesis proposed. Analytical tools are described in this section as well. This last section explains the participants' rights.

The quantitative study examined the relationship of wellness requests in skilled nursing settings in terms of permanent long-term care the Baby Boomer generation seek for, first their aging parents, and secondly for themselves. The survey is designed to show significance towards upgraded wellness options and more inclusion of holistic wellness programs desired by Baby Boomers than what is currently observed and measured in the present day nursing home setting. The implications of this study would recommend that operators and management of skilled nursing centers in the long-term

care industry begin designing, implementing, and formulating staffing requests to meet the needs of the next generation of inhabitants. The implications also suggest that such programs must be present in order to compete, sustain, and expand their value in the marketplace of healthcare.

### **Research Design**

The study examined the components of a whole person wellness program and the requests of the Baby Boomers. The survey also measures the level of importance for the physical, social and intellectual dimensions in wellness programs desired when considering a nursing facility for themselves and loved ones.

Data analysis is used to assess the relationship between Baby Boomer demographics and their specific preferences of wellness; physical, mental, and intellectual. The survey takes into account three dimensions of wellness and the relationship of those three dimensions: Physical, Social, and Intellectual. Mann Whitney and Kruskal-Wallis is calculated to show the strength between dependent variables (sex, annual income, and education levels) for wellness preferences sorted by each individual dimensions. The survey (Appendix C) was created in PsychData and first forwarded via email to a group of 750 plus employees of Senior Care Centers. Links to the survey were also posted on two additional web pages – Sara McVean Kyle Facebook page and Sara (McVean) Kyle LinkedIn page. Hard copies of the survey were placed at the Denton, Texas and McKinney, Texas Senior Recreation Centers. Center participants could either fill the survey out as a hard copy or use a computer personal or facility computer to

access the survey via the PsychData link. All responses to the survey remained anonymous and did not include names of any of the respondents. The link included a password that had to be entered to take and submit the survey. Password requirement prevented multiple submissions of a survey from the same IP address. Prevention of duplication from the senior centers was managed by the center directors. When the survey was turned in to the locked drop box in the director's office, the name was crossed off of the roster containing all members of the city senior recreation department.

An application was made to the Texas Woman's University Institutional Review Board (IRB) requesting permission to collect data from the sample population before data collection was started (Appendix E). Once permission was granted, a PsychData emailed link was delivered through email to all Senior Care Centers employees with an email address; approximately 750 employees. The instructions in the emailed survey link explained those who were born between 1946 – 1964 to please participate and complete the survey, ensuring anonymous responses back to the principal investigator. There was also instruction to forward the survey link to all other applicable personal email contacts that were born in the same timeframe. Permission to place the survey at the City of McKinney Senior Recreation Center was granted by Laura Cegelski (Appendix G). Permission to place survey at City of Denton Senior Recreation Center was granted by Jeff Gilbert (Appendix H). Permission to send this email was granted by President and CEO of Senior Care Centers, Mark McKenzie (Appendix I).

The survey in PsychData and the printed hard copy contained the following items for each perspective participant.

1. Detailed instructions to forward email survey on to applicable participants in their personal email database born from 1946 – 1964. (Appendix A).
2. Description of study, including an Informed Consent form. (Appendix B)
3. Wellness Survey (Appendix C)
4. A list of definitions pertaining to the long-term care setting, describing each setting in the range of Continuing Care Retirement Communities (CCRC's). (Appendix D)

Additional information such as the survey instrument, description and demographics of the participants, the data collection and analysis procedures, and participants' rights will be explained in greater detail in the latter sections.

### **Sample Setting and Characteristics**

The requested target population for this study was any male or female of any ethnic race born between the years of 1946 to 1964. This population was selected simply because of their association of being labeled as a “Baby Boomer” based upon their birth years. There was not any specific criterion that a participant was required to meet in order to participate by completing and returning the email survey. Those not meeting the age requirements were excluded from the data analysis. It is assumed that respondents are honest about their age.

Sample size requirement has been determined based upon Godden (2004) sample size formulas for an infinite population that is greater than 50,000 people.

Sample size determination was determined using a 95% confidence level and a 5% confidence interval. The total number of surveys is N = 384.

$$ss = Z^2 * (p) * \frac{1-p}{C^2}$$

Z = Z value (1.96 for 95% confidence interval)

p = percentage, expressed as decimal = 0.5

c = confidence interval, expressed as decimal = .05

$$ss = 1.96^2 * \frac{0.5(1 - 0.5)}{.05^2}$$

$$ss = 3.8416 * \frac{0.25}{.05^2}$$

$$ss = \frac{0.9604}{0.0025} = 384.16 \text{ survey participants}$$

### **Instrumentation, Reliability, and Validity**

An instrument that included a demographics portion was used to collect quantitative data from voluntary participants. A survey titled “Baby Boomer’s Wellness Requests for Nursing Facilities” was emailed to Senior Care Centers Employees and posted on additional websites related to the long term care industry. Only those born from 1946 - 1964 were instructed to participate.



## **Content Validity**

Content validity defined by Carmines and Zeller (1991) is based on the extent to which a measurement reflects the specific intended domain of content. The survey seeks content validity by including questions covering all six dimensions of wellness in an equal manner. Additionally, the defined terms list will ensure that terms are clearly understood and not subjective in meaning.

A pilot study was first conducted with 10 participants aged born from 1946 - 1964, from various educational and career backgrounds. In order to obtain validity in online surveys Wiersma (2010) relies on the idea that a survey represents what it intends and claims to represent. Both internally and externally, so that the concepts set out to be measured are in fact measured and measured completely (Wiersma, 2010). External validity is highly important and will also be tested in a pilot study to prove that that the study can generalized to the nursing industry based on statistical inference. Allowing any aged person born 1946 - 1964, sexual gender, ethnic race, social class, profession, and overall access to the survey via an internet connection and email address will help to prove that a random sample size is responding, consistent with the Baby Boomer population (Vincent, 1999). Internal validity will maintain the rigor of the measurement and that the concepts set out to be measures are in fact measured (Wiersma, 2010).

## **Demographics Portion**

A brief portion of the survey asked questions regarding sex, age, race, income levels, town location in Texas and marital status.

### **Data Collection**

PsychData Survey software was used to create the survey containing applicable documents: Informed Consent form, definitions of long-term care terms, wellness survey, and forwarding instructions for potential participants was initially delivered to approximately 750 Senior Care Centers email addresses. The survey was also printed in hard copy form and distributed to the City of Denton and McKinney, Texas Senior Recreation Centers. Surveys were placed in a locked drop box inside the manager's office. Surveys were picked up by the principle investigator, Sara McVean Kyle and entered into SPSS. Raw data was kept in locked electronic files exported from Survey Monkey into SPSS. After entering the hardcopy surveys into SPSS, surveys were shredded and recycled. The data did not contain any identifying email addresses that would jeopardize the privacy of the participants. Raw data, absent from any identifying information will be made available to interested participants and colleagues upon request to the researcher.

### **Restatement of Research Questions**

1. Do sex, education, and income levels determine the degree to which Baby Boomers seek physical and social wellness?
2. Does the Baby Boomer Generation have an expectation of physical wellness, including activity options that encompass exercise components of endurance, resistance training, and flexibility?

3. Will the Baby Boomer Generation expect more offerings for social wellness in skilled nursing facilities?
4. Will the Baby Boomer Generation prefer social and intellectual wellness activities centered on technology and social media connections beyond the nursing home facility?

### **Data Analysis**

Association analysis was selected as the method of choice to test the research question based on answers from the wellness survey. Participants were determined based upon age demographic match and voluntary willingness to complete in its entirety the survey through the PsychData link. The variables assessed in this study were physical, social, and intellectual wellness and Baby Boomer's specific requests. Mann Whitney and Kruskal-Wallis were used to determine the significance between dependent variables (sex, annual income, education levels, and overall wellness preferences sorted by each physical and social dimension(s)). Chi Square was used to show the relationship for intellectual wellness, specifically technology and the use of Wi-Fi for communication and cognitive pursuits.

### **Protection of Participants' Rights**

Each participant received an informed consent letter and their acceptance to take the survey indicated their voluntary agreement to participate in the study. (Appendix D). All information was transferred from PsychData into SPSS, void of any names or identifying information. All raw data was kept under the control and protection of the

researcher in a locked computer and later stored on an external flash drive that remains securely under lock and key. Participants were also given the option to forgo participation by simply declining the invitation link to the survey or refraining from answering via paper copy.

### **Summary**

This chapter explained the research design, setting and sample size, the survey as instrumentation, data collection, data analysis procedures, and the participant's rights, and data protection. Inferential statistical analysis, namely multiple regression analysis was selected as the quantitative method of choice to show the relationship of Baby Boomer's and the wellness requests based upon physical, social, and intellectual dimensions. The following chapter will present the results of the study. Chapter 5 will provide interpretation of the results and further discuss the implications for the skilled nursing industry regarding the change of culture that will occur as the Baby Boomer generation begins to enter skilled nursing homes.

## CHAPTER IV

### PRESENTATION OF FINDINGS

In chapter 4 the findings of the data analysis are presented. Data was collected through electronic and hard copy survey format in response to the research questions presented in Chapter 3. The goal of the data was to create a base knowledge to categorize what specific demographics, if any, determine the wellness requests of future Baby Boomer residents in skilled nursing facilities. From an operations perspective, can skilled nursing facility providers identify what amenities and wellness preferences certain portions of the generation seek in future care for family and self based on demographics.

Additionally, are preferences in physical and social wellness important factors for owners and operators to address as they begin planning and marketing to future residents? At the same time, what intellectual and social pursuits are dependent on technology and connection capabilities via internet and social media? These objectives were partially accomplished. Findings presented chapter IV demonstrate the future desires and wellness preferences at skilled nursing facilities for the Baby Boomer Generation.

#### **Response Rate**

The target population for the survey was any male or female born between 1946 – 1964. An email inviting Baby Boomers to participate in the survey was disseminated through various channels of communication, i.e. Employment email, LinkedIn Groups,

and Facebook. All recipients were asked to participate (if within the applicable age range) and forward survey on to family and friends who also met study requirements. A total of 462 surveys were received. Inadequately answered surveys were deleted; two surveys did not contain answers, and 28 surveys were deleted because the participants did not fit the age demographic (born from 1946 – 1964). A total of 432 surveys were used for data analysis, meeting the 5% confidence interval requiring at least 384 survey participants.

### **Participant Demographics**

Demographic information for the sample is provided in Table 1.

Table 1

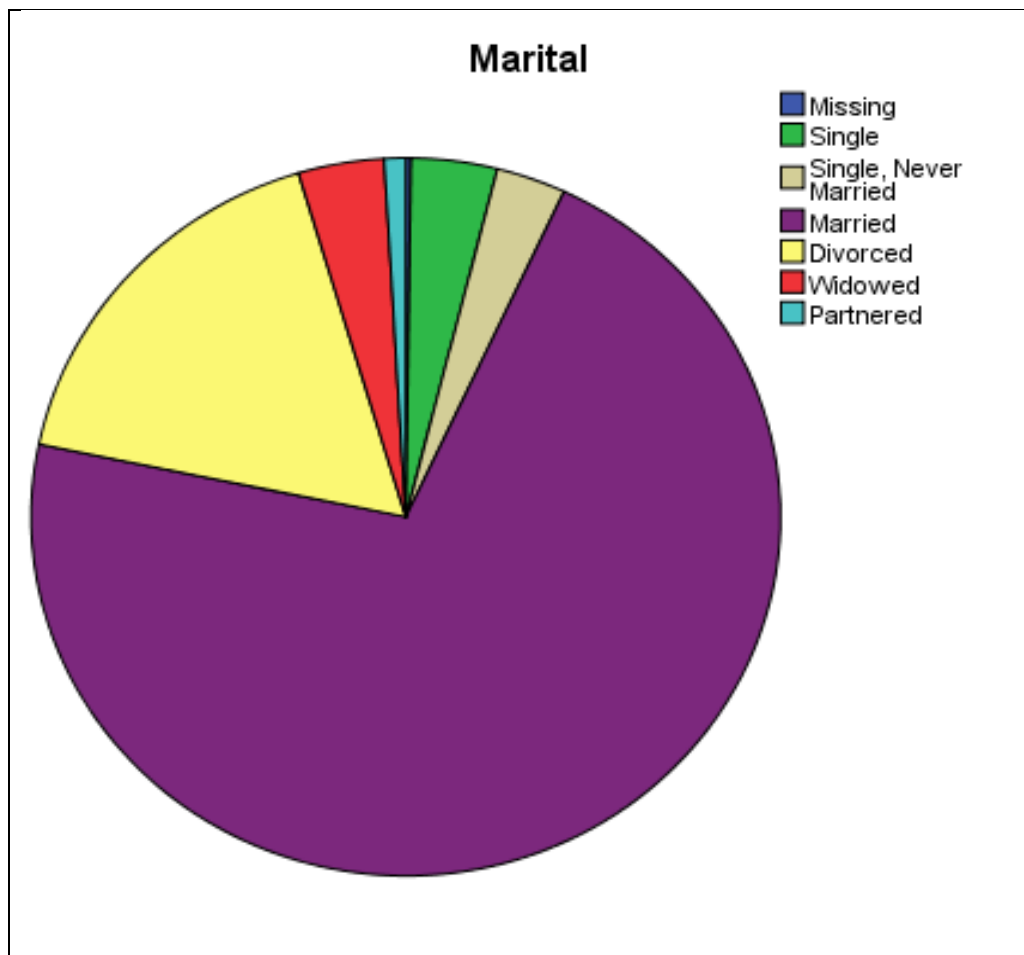
	49-54	55-60	61-67	N	Percent
Male	37	35	33	105	24.4
Female	88	124	113	325	75.4
Missing	0	1	1	2	.2
Total	125	160	147	432	100

*Sex and Age Descriptive Characteristics of Participants. (n=432)*

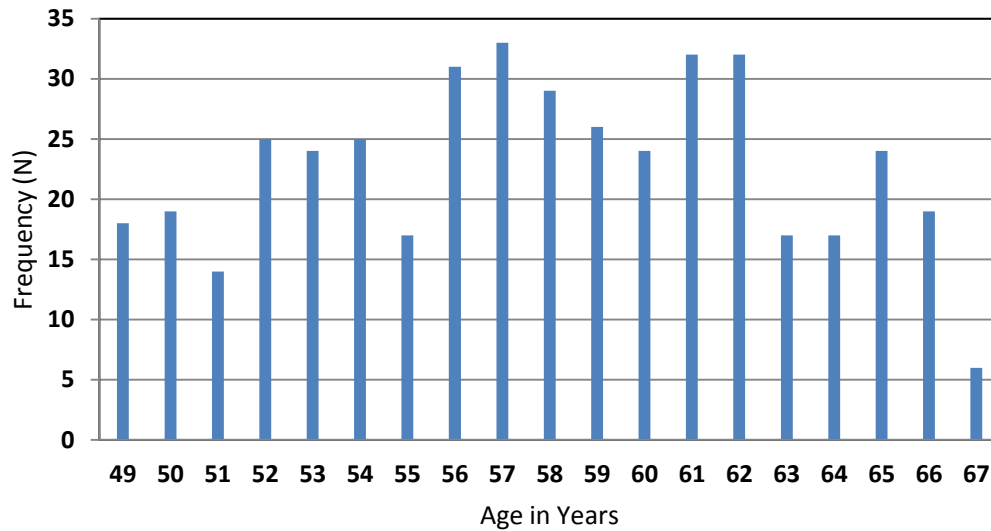
### **Location of Participants**

Residing location of the large majority of respondents was Texas; 362 or 83.7% of participants currently live in Texas. The remaining 70 or 16.3 % of participants reside in the following states AZ - 1, CA - 9, CO - 6, FL – 6, GA – 2, HI – 1, IA -2, ID – 1, IL – 1, IN – 1, KS – 3, LA – 3, MD – 1, MI – 2, MN – 1, MO – 2, NC- 1, NJ – 2, NM - 1, NV – 1, NY – 9, OH – 4, OK – 3, SC – 2, TN – 3, UT – 2, VA – 2, WA – 2, WI – 1,

WY – 1, Canada -1, and Missing-2



*Figure 1: Marital Status. (n = 432)*



*Figure 2: Participants Listed by Age. (n = 432)*

### **Demographics of Survey Respondents**

Education and income demographics were used to determine significance levels of both physical and social wellness preferences. The study seeks to determine if a particular economic position or education level can predict the extent to which a Baby Boomer desires physical and social wellness amenities in skilled nursing settings.

Total annual income was reported by N = 425 and is presented in Table 2. Income is divided into 4 categories and each grouping is sorted by total frequency, male responses, female responses, and total percent of respondents. Seven survey participants declined to answer annual income per household.



Table 2

Income	Frequency	Male	Female	Percent
Missing	7	0	7	1.6
\$0- \$79,999	161	26	135	37.2
\$80,000 - \$129,999	129	30	99	29.9
\$130, 000 - \$199,999	80	31	49	18.5
\$200,000+	55	18	37	12.7
Total	432	105	327	100.0

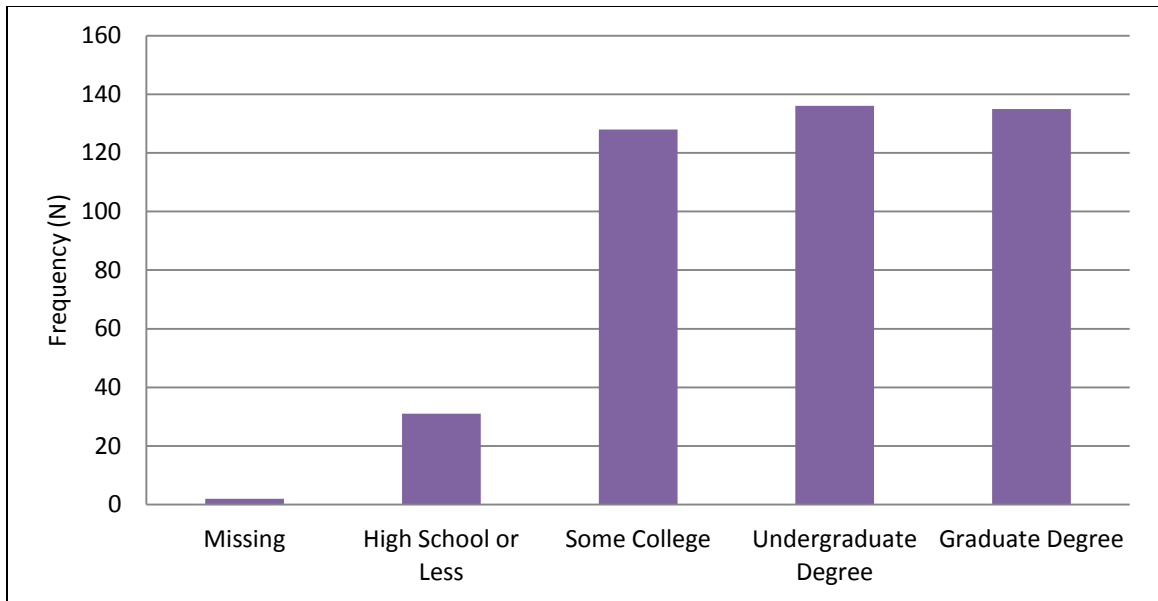
*Total Annual Household Income. (n= 432)*

Highest level of education completed for all respondents is presented in Table 3. Education was grouped into four levels and again frequencies are identified by total N, male responses, female responses, and overall percent.

Table 3

	N	Male	Female	Percent
Missing	2	0	2	.5
High School or less	31	4	27	7.1
Some college, but no degree	128	18	100	29.6
Undergraduate Degree	136	42	94	31.5
Graduate Degree (MS, MBA, M, Ed.)	135	41	99	31.3
Total	432	105	327	100.0

*Highest Level of Education Achieved. (n=432)*



*Figure 3: Highest Education Level Achieved*

### **Physical Wellness Measurement**

A physical wellness is identified and calculated from five Likert scale questions in the survey. The five questions comprising physical wellness were:

1. Meal options, more than one meal for entire population: such as low calorie, high calorie, diabetic, vegetarian, etc....
2. Walking trail or walking path available to able-bodied residents?
3. Supervised exercise programs for those who would like to participate
4. Adaptive exercise programs for those wheelchair bound or bed ridden
5. Wellness/Activity Program providing mind, body, spirit, and social components

## Current Levels of Physical Activity Engagement

Table 4

	Unfit 0X Weekly	Moderately 1-2x Weekly	Fit 3-4x Weekly	Extremely 4+ Weekly	Missing	Total
49-54	13	53	42	16	0	124
55-60	24	77	48	9	2	160
61-67	25	55	44	26	2	152
Total	62	185	134	51	4	436
<b>Percent</b>	<b>14%</b>	<b>42%</b>	<b>31%</b>	<b>12%</b>	<b>1%</b>	<b>100%</b>

*Weekly Physical Activity Engagement by Age Group. (n = 436)*

## Social Wellness Measurement

Social wellness is also defined by extracting five Likert scale questions that pertain to varied types of social interaction in a nursing facility. The five questions were:

1. Distance of facility from family members and potential visiting friends
2. Facility location in same town that you are currently living
3. Facility location in same town as your child(ren) and grandchildren
4. Interaction with animals (i.e. dogs and cats)
5. Opportunity to participate in volunteer projects for outside community that could be done within the building.

## Reliability of Survey

Survey reliability was calculated using Chronbach's Alpha. Combining the five questions/items for physical and social wellness produced a score of .888 for physical

wellness and .756 for social wellness. Statistically, the survey questions for both physical and social wellness prove reliable.

### **Data Analysis**

1. Do sex, education, and income levels determine the degree to which Baby Boomers seek physical and social wellness?
2. Does the Baby Boomer Generation have an expectation of physical wellness, including activity options that encompass exercise components of endurance, resistance training, and flexibility?
3. Will the Baby Boomer Generation expect more offerings for social wellness in skilled nursing facilities?
4. Will the Baby Boomer Generation prefer social and intellectual wellness activities centered on technology and social media connections beyond the nursing home facility?

Data analysis was calculated for each question in the physical and social wellness question cluster using sex, education, and income as independent variables. The analysis used was based on the measurement scale of the data and the number of levels of the independent variable.

### **Gender and Wellness**

Mann-Whitney was used to calculate the differences male and females ranked and placed value on both physical and social wellness components. Gender was entered as the independent variable. Each question in the series of five questions for both social and

physical wellness was entered as dependent variables. Tables 5 and 6 illustrate the differences based on gender regarding physical and social wellness questions.

Table 5

Physical Wellness Variable	Males	Females	p
Meals Selection	3.8	4.2	.001
Walking Trail	4.0	4.4	<.001
Supervised Ex Program	4.0	4.4	<.001
Adapted Ex Program	3.7	4.2	<.001
Wellness Program	4.0	4.5	<.001
<i>Physical Wellness and Gender</i>			

Table 6

Social Wellness Variable	Males	Females	p
Distance from Family	3.5	4.1	.001
Same Town Location	3.7	3.8	.701
Family Proximity	3.5	4.1	<.001
Animal Interaction	3.4	4.5	.004
Volunteer Opportunities	3.7	4.0	.004
<i>Social Wellness and Gender</i>			

**Educational levels and wellness.** Kruskal-Wallis was used to calculate the association between the highest level of education and physical and social wellness dimensions. Education was used as the independent variable and contains four groups sorted by highest education level attained. Again, each question in the series of five per physical and social wellness was identified in the test as the dependent variable. Tables 7

and 8 explain the association between education levels and physical and social wellness preferences, respectively.

Table 7

	High School	Some College	Undergraduate Degree	Graduate Degree
Meals	3.6	4.1	4.0	4.0
Walking Trail	4.2	4.0	4.3	4.2
Supervised Ex Program	4.2	4.2	4.2	4.2
Adapt Ex	4.0	4.1	3.9	3.9
Wellness	4.4	4.2	4.3	4.1

*Physical Wellness and Education Levels.*

*Note.* Mean scores listed

Table 8

	High School	Some College	Undergraduate Degree	Graduate Degree
Distance from Family	4.5	4.4	4.1	4.1
Same Town	3.6	3.9	3.6	3.5
Family Proximity	4.2	4.0	3.7	3.7
Animal interaction	3.7	3.7	3.5	3.4
Volunteer Opportunities	4.1	3.9	3.8	3.6

*Social Wellness and Education Levels*

*Note.* Mean scores listed

**Income levels and wellness.** Kruskal-Wallis was used to determine associations between physical and social wellness preferences determined by annual household income levels. Income level is divided into 9 categories in the survey, as noted in the demographic section above. For this analysis, income was condensed into four levels: 1) \$ 0 - \$79,999, 2) \$80,000-\$129,999, 3) \$130,000 - \$199,999 and 4) \$200,000 and higher. Income was entered as the independent variable and each question for physical and social wellness, the dependent variable. Tables 9 and 10 identify the association between annual household income levels and physical and social wellness preferences.

Table 9

Physical Wellness Variable	\$0 - \$79,999	\$80,000 - \$129,999	\$130,000 - \$199,999	\$200,000+
Meals	3.7	4.0	4.0	4.1
Walking Trail	3.9	4.2	4.2	4.3
Supervised Ex Program	3.9	4.2	4.1	4.3
Adapt Ex	3.9	4.1	3.9	4.0
Wellness	4.2	4.1	4.2	4.3

---

*Physical Wellness and Income Levels*

*Note.* Mean scores listed

Table 10

	\$0 - \$79,999	\$80,000 - \$129,999	\$130,000 - \$199,999	\$200,000+
Distance from Family	4.2	4.2	4.3	4.2
Same Town	3.5	3.5	3.6	3.8
Facility Proximity	3.8	3.8	3.9	3.8
Animal interaction	3.5	3.5	3.5	3.8
Volunteer Opportunities	3.8	3.6	3.8	3.9

*Social Wellness and Income Levels*

*Note.* Mean scores listed

### **Baby Boomer Intellectual and Technology Wellness Preferences**

Intellectual wellness preferences; heavily weighted on internet and Wi-Fi capabilities in nursing facilities was analyzed using Chi Square. Chi Square was selected since there are only two questions compared to the five included in physical and social wellness. Two questions in the survey were used to determine the association:

1. Wi-Fi Internet connections and computers available for use
2. Educational programs such as fall prevention, diabetes management, osteoporosis, arthritis, depression

Tables 11 and 12 demonstrate the importance of Wi-Fi internet connections and opportunities to participate in educational programs at the facility. Based upon equal distribution, it is clear that the majority of respondents label connectivity and educational programs as highly important to somewhat important.



Table 11

	Observed Frequency	Expected Frequency
Not very important	6	85.8
Neutral	44	85.8
Somewhat important	97	85.8
Highly Important	270	85.8

*Wi-Fi Internet Connection Preference*

$$X^2 = 554.974, p < .001$$

Table 12

	Observed Frequency	Expected Frequency
Not important at all	12	71.7
Not very important	22	71.7
Neutral	88	71.7
Somewhat important	138	71.7
Highly Important	158	71.7

*Education Programs Preference*

$$X^2 = 302.893, p < .001$$

### **Physical Wellness Score**

Combining the 5 research questions to determine an overall wellness score emphasizes the demand of physical wellness services even though there is a lack of association between specific demographics and individual physical wellness preferences.

Combining the following questions yield a total score of 25 possible points:

1. Meal options, more than one meal for entire population: such as low calorie, high calorie, diabetic, vegetarian, etc....
2. Walking trail or walking path available to able-bodies residents
3. Supervised exercise programs for those who would like to participate
4. Adaptive exercise programs for those wheelchair bound or bed ridden
5. Wellness/Activity Program providing mind, body, spirit, and social components

Below, Table 13 identifies the number of respondents who rank the five physical wellness questions at a minimum of 20 out of 25 possible points.

Table 13

n	Physical Wellness Score
74	25
46	24
46	23
31	22
56	21
37	20
Total N = 290	67%
<i>Total Physical Wellness Scores</i>	

### **Social Wellness Score**

Combining the five research questions to determine an overall score emphasizes the request of social wellness preferences in skilled nursing facilities despite being able to

associate with specific demographics. The following questions yield a total score of 25 possible points.

- 1.Distance of facility from family members and potential visiting friends
2. Facility location in same town that you are currently living
3. Facility location in same town as your child(ren) and grandchildren
4. Interaction with animals (i.e. dogs and cats)
5. Opportunity to participate in volunteer projects for outside community that could be done within the building

Identical to table 13, Table 14 also labels the number of respondents who rank the five physical and wellness questions at a minimum of 20 out of 25 possible points.

Table 14

n	Social Wellness Score
27	25
21	24
30	23
36	22
57	21
45	20
Total N = 216	50%
<i>Total Social Wellness Scores</i>	

CHAPTER V  
SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS FOR  
FURTHER STUDIES

**Study Overview**

The purpose of this study was to determine Baby Boomer's wellness preferences when choosing a skilled nursing facility for family and self. Additionally, do demographics such as sex, education, and income levels drive wellness tendencies, and are those preferences valued more or less important, based on specific demographics. This chapter presents a summary of survey findings along with discussion and conclusions collected from survey responses. Included in the discussion are results for each research question and the implications for skilled nursing facility operators, employees, and the industry as a whole. The conclusions derived from the research present suggestions to be addressed and/or upgraded in current nursing centers so that needs are met prior to the influx of Boomers who will eventually inhabit these facilities. Previous research predictions and personality studies concerning wellness choices for Baby Boomers are compared to survey results, further emphasizing the need and pursuit of multi-dimensional wellness programs in skilled nursing facilities and other long term care sectors. Recommendations for further research identified by concerns, gaps, and limitations within the study are presented. Although there is an abundance of research on the Baby Boomer generation and wellness, there are still specific factors that need to be

studied to fully comprehend preferences of multi-dimensional wellness programs in later life.

## **Summary of Findings**

### **Research Question One**

Do sex, education, and income levels determine the degree to which Baby Boomers seek physical and social wellness?

**Gender demographics.** All physical wellness questions; meal options, walking trails, supervised exercise programs, adapted exercise programs, and an overall wellness program show some variation between males and females. Meal options that include options of low calorie, high calorie, diabetic and vegetarian choices shows the greatest magnitude of difference, although all were significantly different at  $p < .001$ . Mean scores found that women place a slightly greater importance on meal options and choices compared to men at 4.2 and 3.8, respectively, out of a 1 to 5 scale.

Social wellness and gender shows greater association between male and female preferences when measuring (1) distance of facility from family members and potential visiting friends, (2) family proximity (3) interaction with animals, and (4) volunteer opportunities at the facility. While the differences between genders are statistically significant for all social wellness questions, there is only a noticeable difference for the question on animal interactions.

**Educational levels demographic.** In the original survey question, highest level of education attained was divided into seven categories (no schooling completed, high

school graduate / GED, some college credit, associate degree, bachelor's degree, master's degree, and post graduate degree). For analysis purposes, education levels were grouped into four sections (No college, some college, undergraduate degree, and graduate degree or higher). After running Kruskal-Wallis for each physical and social wellness question grouping, using education level as the independent variable, there was not a significant association. In this study it is not accurate to assume that education is a predictor, nor measures the degree to which the Baby Boomer generation values physical and social wellness, as defined by the series of questions in the survey.

**Income levels and wellness.** Income level was tested against the five questions in each physical and social dimension, and labeled as the independent variable. Kruskal-Wallis was chosen to measure the strength of association. Annual household income was grouped into four levels, compressed from nine in the original survey, ranging from \$0 - \$200,000+. Similar to educational levels, income levels did not prove to be a significant factor for physical and social wellness selections for the Baby Boomers. Continuing to accept existing notions that affluent, highly educated people are the primary users interested in wellness offerings later in life should be cautiously approached in planning and operating strategies.

Evidence from data charts, and combined scores for physical and social wellness does not support or disprove the assumption that higher paid and more educated individuals are definite enthusiasts of wellness programs. Survey responses show no extreme differences. Interestingly, those with the only a high school education place the

highest emphasis on multi-dimensional wellness programs and adapted exercise programs when compared to the three other categories mean scores. (4.4 for wellness programs and 4.2 for adapted).

Another example to argue against the current affluence and education label of wellness consumers is evidenced when comparing income levels to preferences. The assumption is that the higher the income level, the higher the value placed on wellness. Unexpectedly, scores closer to the maximum of 5 are not associated with higher levels of income. It appears that the concern for wellness in later life, for both physical and social dimensions is favored regardless of income. The differences are small, and when rounded to the nearest whole number, all categories are approximately a four. However, there is slight association that indicates higher income levels possess a score greater than 4.0 concerning meal selection, walking trails, and supervised exercise program availability in skilled nursing facilities.

Social scores and income levels are fairly even across all categories, ranking from 3.5 to 4.0, and slightly lower for the social preferences questions as compared to physical wellness questions. Distance of the skilled nursing facility from family and potential visitors is the highest ranked social activity, both with scores over 4.0.

Despite the lack of major association measured by demographics, it is evident based on mean scores that both sexes, regardless of education or income levels seek future skilled care options that include an assortment of physical and social wellness

features. On a 1 to 5 scale, the lowest mean scores, male or female, education or income, were a 3.7 for physical and 3.4 for social wellness components.

### **Research Question Two**

Does the Baby Boomer Generation have an expectation of physical wellness, including activity options that encompass exercise components of endurance, resistance training, and flexibility?

Determining the extent and magnitude of physical wellness preferences is best demonstrated by analyzing the total score for the physical questions. Placing all five physical questions in a group and creating a maximum score of 25, gives a fair indication for physical wellness. Of the 432 responses, 290 or 67% of respondents ranked physical wellness at a total score of 20 or greater.

Moreover, using the mean scores data from the Mann-Whitney analysis to determine an association of gender and physical wellness, respondents rank all physical wellness questions at 3.7 – 4.5 on a potential 1 to 5 importance scale. Components of endurance, resistance training, and flexibility are implied components of physical activity when Boomers choose the inclusion of supervised and adapted exercise programs, as well as a multi-dimensional wellness program. The addition of supervised and adapted exercise programs exceeds current skilled nursing activity instruction, primarily identified by seated, passive range of motion movements.



### **Research Question Three**

Will the Baby Boomer Generation expect more offerings for social wellness in skilled nursing facilities?

Comparing scores of social wellness to physical wellness in the Baby Boomer population shows an interesting variation from the common hypothesis that social is more important and highly sought after. Total social wellness defined by a maximum of 25 points from the five social wellness questions indicated that only 216 or 50% of the 432 respondents gave social wellness a cumulative score of 20 or higher. The social wellness variance observed from the current skilled nursing inhabitants referred to as the “silent generation” compared to Baby Boomers, is paramount for both current and future wellness and/or activities planning. The focus on social activities and entertainment appears to be more centered on the physical dimension of wellness. Baby Boomers are interested in more than just interacting and being social with other residents. Perhaps the Baby Boomer generation realizes that physical wellness in a group setting allows one to engage in multiple dimensions, including social and physical wellness, rather than simply referring to the activity as “exercise.” Moreover, the simple term “exercise” may hold a more positive connotation for both men and women of later generations, no longer just associated with physical discomfort as a means of staying healthy and young.

### **Research Question Four**

Will the Baby Boomer Generation prefer social and intellectual wellness activities centered on technology and social media connections beyond the nursing home facility?

Findings in the study concerning social connectedness, or simply the opportunity to stay linked with society, via internet capability, are both enlightening and beneficial for strategic building arrangement. Sixty-three percent of respondents report that a Wi-Fi internet connection in a nursing facility is a 5 or “very important.” Not a single respondent ranked Wi-Fi as a 1 or “not important at all.” Additionally, only six of the 429 answers ranked Wi-Fi at a 2. Data analysis using Chi Square decidedly indicates the importance of social interaction through online connections.

Intellectual wellness was also measured looking at results from the question on educational program availability pertaining to health concerns for an aging population. Again, the observed score signifies a greater propensity with those who selected somewhat to highly important compared to not important. Of the 430 respondents, 296 or 69% replied with score of a 4 or 5 for educational program options. Internet accessibility via a Wi-Fi connection is the major identifiable factor with intellectual wellness for Baby Boomers.

Additional data identified through email usage survey results, concludes 420 or 97% of the respondents have a current email address and of those 420 users, 377 or 87% check their email accounts daily. The Baby Boomer generation is quite different compared to current residents who do not place emphasis on technology and often struggle with computer applications.

## **Discussion**

Research currently reports the predictable Baby Boomer wellness consumer is more affluent and has a higher education level compared to the Baby Boomer nonconsumers. A study by Chapman (2010) supports this notion reporting survey findings that concluded the primary users of eHealth portals are baby boomers with high education levels. Chapman's study is not discounted; however, survey responses from the current study challenge the assumption, and substantiate Boomers from all educational backgrounds are interested in wellness opportunities that affect how they choose services, particularly in long term care. From a marketing and operator perspective in skilled nursing homes, it cannot be assumed the level of importance for wellness offerings is only determined by prior educational pursuits or accomplishments.

### **Connection of Physical and Social Wellness**

Equality among the three measured dimensions of wellness is well documented in the literature. According to Campbell and Kreidler's (1994) wellness definition, Boomers are in line with believing wellness is a process that affects individual well-being in the physical, mental, spiritual, and social realms. Although there is a holistic approach from the Boomers, there are distinct differences noticed between current inhabitants and the future Baby Boomers with relation to the physical and social dimensions. To begin with, Boomers appear to have a propensity to place importance on programs such as supervised and adapted exercise opportunities when choosing physical wellness preferences in nursing care settings. Montague and Rose (2012) acknowledge this

concept in their studies by stressing a multi-faceted approach to wellness that includes working with both the person's abilities and disabilities. Boomers understand they are not immune to the physiology of aging and detrimental effects on the body and as a result need solutions that adapt to those future disabilities.

Data from the present study also support Sperazza's (2011) belief that Baby Boomers are on the "forefront" of all things wellness, especially fitness and physical activity. Physical wellness is rated slightly higher than social wellness on the 1 to 5 scale according to survey responses. Despite not meeting recommended exercise guidelines of 30 min of physical activity per day (Bylina et al., 2006; Van Roie et al., 2010), the Baby Boomers are at least aware of the benefits of physical activity and the opportunity to increase functional independence (Mazzeo et al., 1998). Survey responses from the present study mirror actual activity levels in society. Boomers were asked to indicate how many times a week they engaged in moderate exercise. Forty two percent of respondents engage in physical activity only once a week and 14% engage in no physical activity. The reality of physical inactivity and compromised health conditions of those aged 50 plus, along with the reported 85% of adults 65 and over who are inactive (Dorgo et al., 2009) will only perpetuate chronic diseases, robbing functional independence and ultimately lead to Baby Boomers becoming residents of skilled nursing centers. Regardless of their awareness towards physical activity, there is still a need to educate residents about the benefits of physical wellness.

A more optimistic position for the Boomer generation is their social approach to physical wellness. Older adults, including Boomers aged 50 plus report that social interaction is a prime motivator for physical engagement, (Mannell & Kleiber, 1997) particularly aerobics and strength training (Dean et al., 2007). With fairly similar scores in social and physical wellness, Baby Boomers are headed in the right direction, seeking to integrate social activity as a form to meet physical activity recommendations.

Current resident engagement in social activities is the most popular and established wellness dimension in long term care, but as studies point out, levels of physical activity among residents is consistently low (Bates-Jensen et al., 2004; Ice, 2002; MacRae, et al., 1996; Ruuskanen & Parkatti, 1994; Schnell et al, 2004). Hopefully awareness, knowledge of the benefits, and a socialized approach to physical activity will lead to increased movement and exercise sessions once the Boomer generation takes up residence.

### **Intellectual Wellness**

Intellectual wellness is the third dimension of wellness the Boomers show an interest in and ongoing pursuit. Referring to the proclivity Baby Boomers express towards technology, specifically social media, maintains Nassbaum (2007) and Fitzpatrick's (2010) beliefs that brain health is a proactive, life-long pursuit, and a social activity seen as an imbedded process of development among older adults. The slogan "use it and keep it" by Fernandez and Michelon (2011) is already exemplified in the Boomer generation as they continue to pursue new technology, occupying idle time

engaging and/or requesting topics to further their knowledge. The opportunity for educational seminars and speakers in nursing homes is another example exemplifying cognitive pursuits of the group.

### **Baby Boomers and Depression**

Greater emphasis should be placed on a continuing effort to combine physical and social wellness to address and combat depression and loneliness. Since loneliness in later life is common (Larkin, 2008) and more than 20% of Baby Boomers cite depression, (Court, et al., 2007) concerted programming efforts should target participation in exercise programs as a means to foster social interaction (Jenkins et al., 2002). Respondents preference for social wellness is marked by the survey research in the present study, as are requests to have contemporary programs in place upon occupancy in a skilled setting. Planning accordingly will negate the potential incidence for depression that manifests from life changes, such as placement in a home.

### **Healthcare Costs Support Need for Wellness Programming**

The reality of physical inactivity and compromised health conditions of those aged 50 plus, and the reported 85% of adults 65 and over who are inactive (Dorgo et al., 2009) will only perpetuate chronic diseases that rob independence and ultimately lead to Baby Boomers becoming residents of skilled nursing centers. Regardless of the awareness towards physical activity, there will always be a need to educate and instruct residents towards physical wellness. The influx of people eligible for Medicare will double by 2020 from 46 to 80 million, raising annual costs to \$929 billion (Attkisson,

2010). Integrating wellness programs that are both preferred and requested, prior to the Boomers arrival is another way to increase functional levels of residents which directly decrease operating and caretaking costs. This type of wellness approach is simply an extension of Rowe and Kahn's (1998) model of successful aging and Fries and Crapo (1981) morbidity compression.

### **Generational Shift**

Giordano's (1988) predictions describing the Boomer generation as a highly motivated group participating in self-help, self-improvement, and awareness of community services appear to be correct based on survey responses in the present study. Responses to physical, social, and intellectual wellness preferences maintain the general Boomer's mindset is to be informed, connected, and offered such amenities regardless of age or functional levels. If the information presented in the present study is acted upon, and leadership in the facility supports how Boomers anticipate and desire to function in later life, the day-to-day demeanor in nursing homes will positively transform. Present statistics reveal that only 8% of residents participate "most of the time" in activities, 42% some of the time, 44% a little, and 7% never engage (Zimmerman & Cohen, 2010). With the change of generations, the whole-person wellness concept that is becoming more than a slogan; instead a way of life that Edelman and Montague (2008b) have discovered at the independent and assisted living levels of continuing care is a promising and overdue trend approaching skilled nursing care.

### **Staffing Implications in Skilled Nursing**

Staffing models in skilled nursing will undoubtedly feel an impact from the incoming Baby Boomers. Present operational budgets typically assign one health care aide to oversee 14 residents on a hall, while still maintaining full responsibility to bring residents to and from scheduled activities (Benjamin et al., 2009). In order to meet the physical and social wellness requests, additional staffing supporting support wellness in the building is paramount. Subsequent staffing concerns should extend to those entrusted to lead wellness activities. Current positions titled “activity directors” that highly vary in skill, experience, and educational levels. Requirements, certifications, and training are not consistent for what is necessary to become an activity director.

### **Limitations**

Despite efforts to reach a sample population outside of Texas, via the use of internet delivery and social media announcements, the majority, 83.7%, of all respondents currently reside in Texas. Generalizing the survey data to large metropolitan areas outside of Texas may be less substantial and lack generalizability.

Male to female percentage is also a slight limitation, with males representing only 25% of responses. Although this first appears to be a seemingly significant limitation, the response rate is not far off from current inhabitation rates of male and females living in skilled nursing facilities throughout the entire United States. In December 2011, Centers for Medicare and Medicaid (2012) reported that more than 1.4 million residents were living in US nursing homes and women constitute more than two-thirds (67.2 %).



Because of life expectancy and the higher female population in any long term care setting, it is more than accurate to trust females will continue to be the more numerous sex in skilled nursing populations.

### **Survey Design Limitations: Likert and Grouping Questions**

The formatting change from a Likert scale to a grouping order response on the last 12 questions was confusing for respondents, and as a result the data was not useful, nor interpreted in the analysis. Although they did answer with a value of 1 through 5 for the question, each value of a 1, 2, 3, 4 or 5, was not used only once. Many surveys contained answers where respondent may use all 1's or all 5's for the answer instead of only using one number answer, (1 – 5) only once, for each set of 5 items in the group as instructed. Furthermore, the change in format from the previous 1 - 5 (important to highly important) Likert scale questions, caused confusion. As a result, the variables / questions used to define physical and social wellness came only from the Likert scale questions, not the grouping questions.

**Annual income.** Annual income was only used as ordinal/categorical data, and not as ratio data due to the method in which income was asked in the survey. The initial divisions used in annual income were separated into nine possible categories to distinguish smaller increments. When placing the groups into variables for analysis, using the Kruskal-Wallis method for association, only four divisions were used, creating much larger segments of annual income than originally planned.

**Social wellness score limitations.** Of the five questions that signify a social wellness score, two focus on animal interaction and volunteering opportunities. If a respondent was not an animal person, nor did they like to volunteer, this could be a potential drawback for accurately identifying a respondent as one that would score 20 or higher on the total social wellness score.

Social wellness scores may also be noticeably lower since the social media and internet influence is absent and measured separately as intellectual wellness. Obvious data results show the importance of social connectedness through internet and Wi-Fi capabilities. Perhaps, if the social media questions were included in the social wellness series of questions, the scores of 20 and above would increase.

**Intellectual wellness limitations.** Intellectual wellness questions were listed primarily in the last portion of the survey containing the one to five grouping scenario questions. As previously noted, those grouping questions were not included in the data analysis. Only having two questions to gauge intellectual wellness prevented an overall “intellectual score” that would have matched physical and social wellness totals.

### **Conclusions**

Persistent research on Baby Boomers wellness demands and preferences will continue to guide continuing care industry providers, including long term care and skilled nursing, what is needed to create and maintain an edge over competitors in a highly competitive market. As research is presented, it is important to focus on where the data was collected? What age group was it collected from, was it the entire Baby Boomer

population? Were the respondents still employed, or are they retired? Each of these factors is important to consider when deciphering between such a large population that continues to mature. By establishing that physical, mental, and intellectual wellness dimensions are clearly identified by the cohort as important in skilled nursing care for self and loved ones, more detail and design can be placed on what programs should resemble and include. Questions should seek to answer if physical wellness leans more towards outside space like a walking trail, or is an equipped indoor exercise room what the Boomers think of when they refer to physical wellness? Then again, half the population may think that aquatics are the best form of physical wellness as they are faced with compromised capability to fully function on ground with ailing body parts.

Before the skilled nursing providers progress with information and ideas from research, comparative research in similar regions should be completed to best determine preferences and requests for multi-dimensional wellness programs. Both past and current experience as well as geographic facility location will determine what is viewed as well living. States with mild climates may place much more emphasis on outdoor settings for all components of wellness compared to states that encounter extreme temperatures. As much as researchers design methods to explore and identify the Baby Boomers as a whole entity, there is still a need to individually evaluate future residents, one-on-one, and determine their current individual wellness philosophy, but also distinguish how they view transitions as independent functioning diminishes.

### **Recommendations for Future Research**

Ongoing studies referring to the Baby Boomer generation continue to reveal that blanket generalizations about the age cohort are not always relevant. This massive age bracket keeps challenging any business offering service or products to stay abreast on their demanding preferences and buying power. There is a welcome complexity that may start individualizing sects and age brackets in this cohort. For marketers and other professionals attempting to both capitalize on, and benefit the generation, there is more direction and insight for specific practices that may foster best possible relationships while ethically fulfilling Baby Boomer needs.

While this study is more applicable to Texas, similar studies across the United States concerning wellness preferences related with demographics will potentially provide more information, and determine if the lack of significant demographic association is repeatable on a national level. Perhaps there are other distinguishing demographics that separate this cohort in wellness preferences that have not yet been identified and can add a more individual approach to incoming residents.

### **Industry Approach**

Long term care, specifically the skilled nursing segment, cannot afford to wait any longer to begin upgrading current homes and designing new buildings that include areas to adequately house wellness programs. Exercise specific rooms outside of clinical therapy settings are key components that can distinguish a home from neighboring business, offering an edge in a highly competitive market. The present setting that

includes sharing space in a dining room rather than a specific area for physical and social wellness activities is not a marketable or appealing scenario for this generation or their families, whom undeniably seek a contemporary approach to wellness. Future research should focus on building updates and design that incorporates wellness space that meets the needs prior to inhabitants moving into a facility. Additional research should also focus on the potential return on capital investments and the level of marketability they provide to future residents and families.

The consumer predictability of the generation is also not as formulaic as projected. True, the nature of the Baby Boomer is more challenging, selective and informed than previous generations; however, the demographics, coupled with these requests are not biased toward income, education, or sex. It appears that past experiences, individual philosophies, and current interests drive more indicators of multi-dimensional wellness inclinations for the generation than previously presumed.

As wellness programs infiltrate skilled nursing facilities, the availability of useful research will increase. Up to this point, the majority of research confirming the success of multi-dimensional wellness interventions is evident only at independent and assisted living communities (Brown et al., 2000; Gine-Garriga et al., 2010; Rosendahl et al., 2006;). Even though the ability to maintain independence and functional levels is supported by engagement in physical activity, concrete studies not specific to clinical rehabilitation are scarce in skilled nursing homes.

## **Technological Advancement**

In order to continue to meet the intellectual desires and connectedness these future residents are accustomed to, high-speed, facility-wide, Wi-Fi internet connections are requirements; as well as other equipment needed to access the internet. If the information trend is moving toward news and communication on electronic devices, facilities may reach more residents and family members by deploying internal communication via email and intranet services, rather than hard copied handouts/newsletters, as currently disseminated. Further information from technology studies may be useful to identify internet browser or computing devices (i.e., Macs vs. PC's, laptops vs. iPads or tablets, etc.) preferred by the cohort. Beyond hardware, do preferences change within the age range, and are the younger Baby Boomers the tablet and iPad users, compared to older counterparts? For the 69% of respondents in the present study interested in educational programs, are they more inclined to participate and benefit from individual lessons on electronic and mobile devices, or even interactive learning methods, or do they still seek the format of a group setting listening to a professional discussion?

## **Motivating Baby Boomers to Pursue Lifetime Wellness**

Knowing the benefits of a multi-dimensional wellness program at any age is something Boomers already understand. The main focus needs to be discovering what it is that motivates this group to participate and not just talk about, or recognize the importance. Once the youthful conquest is beyond grasp, what incentive and purpose is identifiable, motivating the Baby Boomer to engage in lifetime wellness?

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APPENDIX A  
RECRUITMENT EMAIL AND FLYER

I am conducting an interpersonal survey and would like your participation.  
Baby Boomers only (born 1946 – 1964). If you are not a Baby Boomer, please forward  
to any person you know that fits the age range.  
<https://www.psychdata.com/s.asp?SID=152880>

My survey is titled: "Skilled Nursing Facilities: Wellness Requests from Baby Boomer  
Generation"

**Please forward this email and link to as many people as possible to participate in the  
survey.**

Thanks,  
**Sara McVean Kyle**

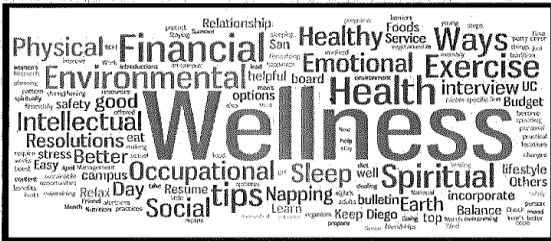
**\*\*Participation in survey is voluntary\*\***



**When?** During the months of March and April 2013

**What? A PhD dissertation survey asking about your preferences for wellness programs in long term care homes. The results will be used for research.**

**Who? Anyone born from 1946 - 1964.**



**77.3 million Boomers**

\*There is a potential risk of loss of confidentiality in all email, downloading, and internet transactions.

APPENDIX B  
INFORMED CONSENT



Study Title: Skilled Nursing Facilities: Wellness Requests from the Baby Boomer Generation  
Principle Investigator: Sara McVean Kyle, Senior Care Centers LLC

Dear Respondent,

You are invited to participate in a research project identifying the preferred elements of whole-person wellness programs the Baby Boomer generation seeks when planning for retirement in a long-term nursing care center. Included with this letter is a short questionnaire that asks a variety of questions about your current state of health and wellness, and what you will expect in retirement. The goal is to find how important these preferences are for choosing a nursing center. I am asking you to please look over the questionnaire and, if you choose to do so, complete using the survey link, or hard copy attached.

The results of this project will be used for future wellness programs in skilled nursing facilities. Your participation will help to understand what compels an individual and family to select a skilled nursing center and the importance of a whole person wellness program. I intend to compile and statistically analyze the results and seek publication in a scientific journal.

All surveys will remain anonymous and conducted through PsychData, or paper and pen. The survey software will have a link that directly connects the respondent to the survey, requiring a general password allowing only one submission from the same IP address. The researcher will not have access to the IP addresses. There is a potential risk of loss of confidentiality in all email, downloading, and internet transactions.

I hope you will take the time to complete and return this survey. Your participation is completely voluntary and there is not a penalty if you choose not to participate. Regardless of participation, you may request a summary of my findings. To receive a summary please send an email before May 1, 2013 to [skyle@seniorcarecentersllc.com](mailto:skyle@seniorcarecentersllc.com).

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at 214-907-3795. You may also contact my research advisor, Dr. Kimberly Miloch at 940-898-2592 or Dr. David Nichols at 940-898-2522. This project has been approved by the Institutional Review Board (IRB) at Texas Woman's University.

If you have questions about your rights as a research study participant, you may contact the chair of the IRB through the Compliance Office at (940) 898-3375.

You must have been born between 1946 and 1964 to participate.

If you agree to participate, you may keep this form and complete the survey.

If you wish, you may stop at any time.

Sincerely,

Sara McVean Kyle, PhD candidate

\

## APPENDIX C

### SURVEY TOOL

## Wellness Preference Survey

### 1. Please circle your gender

- a. Male
- b. Female

### 2. What is your current age? \_\_\_\_\_

### 3a. Are you currently retired?    3b. Is Your Spouse Retired?

- |        |                   |
|--------|-------------------|
| a. yes | a. yes            |
| b. no  | b. no             |
|        | c. not applicable |

### 4. Please indicate your marital status:

- |                          |             |
|--------------------------|-------------|
| a. Single                |             |
| b. Single, Never Married | d. Divorced |
| c. Married               | e. Widowed  |

### 5. Please indicate your current annual household income:

- |                        |                          |
|------------------------|--------------------------|
| a. Less than \$24,000  | f. \$100,000 – 129,999   |
| b. \$24,001 – \$29,999 | g. \$130,000 - \$159,999 |
| c. \$30,000-\$54,999   | h. \$160,000 - \$199,999 |
| d. \$55,000 -\$79,999  | i. \$200,000 or higher   |
| e. \$80,000-\$99,999   |                          |

### 6. What is the highest degree or level of school you have completed? If currently enrolled, mark the highest grade or highest degree received?

- |  |  |
|--|--|
| a. No schooling completed                    | e. Bachelor's degree (for example: BA, BS) |
| b. High school graduate / GED                | f. Master's degree                         |
| c. Some college credit, but less than 1 year | g. Post Graduate degree                    |
| d. Associate degree (i.e.: AA, AS)           |  |

### 7. Have you had any interaction with a Skilled Nursing Facility in the last 5 years? Highlight all that apply

- |                              |                     |
|------------------------------|---------------------|
| a. Yes – visiting a relative | c. Yes - employment |
| b. Yes – volunteering        | d. No               |

**8. Do you have a long-term care insurance policy?**

- a. Yes
- b. No

**9. Assuming you will need permanent long term care in a nursing setting, how do you intend to pay for the care? (see glossary if necessary)**

- a. Medicare (pays for short term stay only approx. 28 days)
- b. Medicaid (need based, approx <2,000.00 monthly income and no assets)
- c. Supplemental Insurance (i.e. long term care insurance, supplemental plans)
- d. Private pay (fully responsible for all medical treatment)

**10. What are you top 3 leisure activities? *Leisure = spare time activities***

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

**11. What is your religious affiliation?**

- |                          |                 |
|--------------------------|-----------------|
| a. Protestant Christian  | e. Muslim       |
| b. Roman Catholic        | f. Hindu        |
| c. Evangelical Christian | g. Buddhist     |
| d. Jewish                | h. Other: _____ |

**12. Indicate your current level of physical fitness?**

- a. Not active - unfit
- b. Exercise maybe once a week - slight to moderately fit
- c. Exercise 2-3 times a week - fit
- d. Exercise 4+ times a week – extremely fit

**13. How do you prefer to obtain daily news and headline stories?**

- |   |                                  |
|---|----------------------------------|
| a. Newspaper                            | d. Internet access on cell phone |
| b. Ipad / Tablet                        | e. Televised News                |
| c. Internet access on laptop / computer |                                  |

**14. How many hours of television do you watch when you have a relaxing day at home?**

- a. 0-1 hour    b. 2-3 hours    c. 3-5 hours    d. 5+ hours

**15. Do you have a current email address? YES or NO**

If YES, what is the frequency to which you log in?

- a. daily                      c. every two weeks  
b. weekly                  d. monthly or less

**16. Circle all applicable social media accounts to which you maintain a presence:**

- a. Facebook                  f. Match.com/Eharmony or dating site  
b. Twitter                    g. Google+  
c. Linkedin                  h. Eons  
d. Personal Blog          i. none  
e. Meetup

**17. Please list your city and state of residence \_\_\_\_\_ , \_\_\_\_\_**

When choosing a facility for yourself of significant other, please answer the following questions about programs and amenities on a 1-5 scale.

**1 = least important, 5 = most important**

1. Meal options, more than one meal for entire population: such as low calorie, high calorie, diabetic, vegetarian, etc....

1                  2                  3                  4                  5

2. Distance of facility from family members and potential visiting friends

1                  2                  3                  4                  5

3. Facility location in same town that you are currently living

1                  2                  3                  4                  5

4. Facility location in same town as your child(ren) and grandchildren

1                  2                  3                  4                  5

5. Credentialing of those providing care, i.e. licenses, ratio of care-taker to patient

1                  2                  3                  4                  5

6. Educational programs such as fall prevention, diabetes management, osteoporosis, arthritis, depression

*1            2            3            4            5*

7. Walking trail or walking path available to able-bodied residents?

*1            2            3            4            5*

8. Supervised exercise programs for those who would like to participate

*1            2            3            4            5*

9. Adaptive exercise programs for those wheelchair bound or bed ridden

*1            2            3            4            5*

10. Availability of Physical Therapy

*1            2            3            4            5*

11. Availability of Occupational Therapy (assist with daily activities for living)

*1            2            3            4            5*

12. Wellness/Activity Program providing body, mind, spirit and social components

*1            2            3            4            5*

13. Overall cleanliness of facility

*1            2            3            4            5*

14. Interaction with animals (i.e. dogs and cats)

*1            2            3            4            5*

15. Opportunity to participate in volunteer projects for outside community that could be done within the building

*1            2            3            4            5*

16. Opportunity to garden, plant, and grow food

*1            2            3            4            5*

17. Separate activity area that contains fitness or exercise equipment

*1            2            3            4            5*

18. Wi-Fi Internet connections and computers available for use

*1            2            3            4            5*

### Ranking Questions 1-12

Please rank each activity from 1-5 in each section. **1 is least desirable and 5 is most desirable.**

- |                              |                        |                               |
|------------------------------|------------------------|-------------------------------|
| ___ Bingo                    | ___ Book               | ___ Chair Yoga                |
| ___ Dominoes                 | ___ Magazines          | ___ Tai Chi                   |
| ___ Chess                    | ___ E-Reader Books     | ___ Resistance Band Exercise  |
| ___ Card games               | ___ Newspaper          | ___ Chair Aerobics on DVD     |
| ___ Bridge                   | ___ News on Internet   | ___ Exercise with parachute   |
| ___ Sony Play Station        | ___ Morning Coffee     | ___ Art instruction           |
| ___ Wii Video Games          | ___ Iced Sodas         | ___ Beading                   |
| ___ Online games             | ___ Hot tea            | ___ Jewelry Making            |
| ___ Billards                 | ___ Evening wine       | ___ Quilting / Sewing         |
| ___ Ping Pong                | ___ Beer / Spirits     | ___ Oil / Watercolor Painting |
| ___ Manicures                | ___ Play an instrument | ___ Planting flowers          |
| ___ Pedicures                | ___ Gospel Singing     | ___ Herb gardens              |
| ___ Hairstyling              | ___ Listen to AM/FM    | ___ Growing vegetables        |
| ___ Chair Massage            | ___ Listen to CD       | ___ Growing fruits            |
| ___ Aromatherapy             | ___ Talk Radio         | ___ Canning / Preserving      |
| ___ HGTV / Food Network/ DIY |                        |                               |
| ___ ABC, NBC, CBS            |                        |                               |
| ___ ESPN / Fox Sports        |                        |                               |
| ___ CNN / MSNBC              |                        |                               |
| ___ Discovery/ Animal Planet |                        |                               |

APPENDIX D  
DEFINITION OF TERMS



### **Definition of terms:**

**Assisted living facilities** bridge the gap between home care and nursing homes, providing housing for those who need help in day-to-day living but do not need the round-the-clock care of nursing homes.

**Baby Boomers** according to Gillon (2004) are those individuals born between 1946 and 1964, estimated to be 76 million total in the United States.

**Continuing care retirement communities (CCRC's)** are housing models developed to provide more affordable long-term care for the ever-growing aging population according to Branch (1987). CCRC's are communities designed for older individuals or couples who require or anticipate needing at least some assistance with tasks of daily living to maintain an independent lifestyle. These communities allow for the continuous progression of increased care to the point of providing full-time nursing care (Jenkins et al., 2002).

**Independent living facilities** residents have full apartments and most do not use a common dining room, participate in activities that take place off the premises, and are the healthiest of all continuing care community residents.

**Long Term Care (LTC)** Personal care and other related services provided on an extended basis to people who need help with activities of daily living or who need supervision due to a severe cognitive impairment. It can be provided at home, in a nursing home, assisted living facility, or an adult day care center. (<http://www.guidetolongtermcare.com/ltcglossary.html>)

**Medicaid** is a joint Federal and state program that helps with medical costs for some people with limited income and resources. Medicaid programs vary from state to state, but most health care costs are covered if you qualify for both Medicare and Medicaid.

**Medicare** is the Federal health insurance program for people who are age 65 or older, certain younger people with disabilities, Provides coverage for hospitalization, doctors and other types of medical expenses. Medicare is a medical insurance program, and except for a limited short-term (28 days) nursing home benefit, is not coverage for nursing home or other long-term care.

**Medicare Supplement ("Medigap") Insurance** a private insurance policy that supplements Medicare benefits by covering co-payments and deductibles for medical and hospital expenses. These policies do not provide coverage for personal or custodial care. (<http://www.guidetolongtermcare.com/ltcglossary.html>)

**Skilled Nursing Facility (SNF)** a state-licensed institutional setting that provides skilled care by skilled medical personnel. This care is available 24-hours-a-day and is ordered by a physician under a treatment plan. Nursing home care is designed primarily to minimize, rehabilitate, or compensate for loss of the independent ADL functioning of the older adult  
<http://www.guidetolongtermcare.com/ltcglossary.html>

APPENDIX E

IRB APPROVAL LETTER



**Institutional Review Board**

Office of Research and Sponsored Programs  
P.O. Box 425619, Denton, TX 76204-5619  
940-898-3378 FAX 940-898-4416  
e-mail: IRB@twu.edu

February 8, 2013

Ms. Sara McVean Kyle  
3831 Royal Lane  
Dallas, TX 75229

Dear Ms. Kyle:

*Re: Skilled Nursing Facilities: Wellness Requests of the Baby Boomers Generation (Protocol #: 17260)*

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and was determined to be exempt from further review.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. Because a signed consent form is not required for exempt studies, the filing of signatures of participants with the TWU IRB is not necessary.

Any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any unanticipated incidents. If you have any questions, please contact the TWU IRB.

Sincerely,

Dr. Rhonda Buckley, Chair  
Institutional Review Board - Denton

cc. Dr. Charlotte Sanborn, Department of Kinesiology  
Dr. Kimberly Miloch, Department of Kinesiology  
Graduate School

APPENDIX F  
IRB STUDY CLOSURE LETTER

## **NOTICE: IRB PROTOCOL FILE HAS BEEN CLOSED**

Investigator: Sara McVean Kyle

Title: Skilled Nursing Facilities: Wellness Requests of the Baby Boomers Generation

Protocol #: 17260

The TWU Institutional Review Board (IRB) has received the materials necessary to complete the file for the above referenced study. As applicable, agency approval letter(s), the final report, and signatures of the participants have been placed on file. As of 10/7/2013, this protocol file has been closed.

APPENDIX G  
CITY OF MCKINNEY APPROVAL LETTER



January 17, 2013

Texas Woman's University IRB,

I hereby grant Sara McVean Kyle permission to place hard copies of her dissertation survey "Skilled Nursing Facilities: Wellness Preferences from the Baby Boomer Generation" at the City of McKinney Senior Recreation Center. The target audience will be Baby Boomers, born 1946 – 1964, who visit the center.

Sincerely,

A handwritten signature in cursive script that reads "Laura Cegelski".

Laura Cegelski  
Senior Recreation Center Supervisor  
City of McKinney Parks, Recreation and Open Space

**CITY OF MCKINNEY**

P.O. Box 517 • McKinney, Texas 75070 • Metro 972-562-6080



APPENDIX H  
CITY OF DENTON APPROVAL LETTER



---

Texas Woman's University IRB,

I hereby grant Sara McVean Kyle permission to place hard copies of her dissertation survey "Skilled Nursing Facilities: Wellness Preferences from the Baby Boomer Generation" at the City of Denton Senior Recreation Center. The target audience will be Baby Boomers, born 1946 – 1964, who visit the center.

Sincerely,

A handwritten signature in black ink, which appears to read "Jeff Gilbert", is written over a horizontal line.

Jeff Gilbert  
Denton Senior Center

## APPENDIX I

### SENIOR CARE CENTERS APPROVAL LETTER

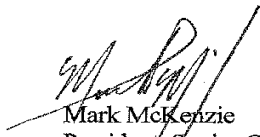


December 10, 2012

Texas Woman's University IRB,

I hereby grant permission Sara Kyle to disseminate the "Wellness Preferences of Baby Boomers" via Senior Care Centers employee email distribution list. In addition to the survey delivered via email and housed in PsycData, a request to forward the email, survey instructions and survey to any known contacts born from 1946 – 1964 is acceptable.

Sincerely,



Mark McKenzie  
President, Senior Care Centers

2828 North Harwood St. Suite 1100 • Dallas, TX 75201  
214-252-7600 • Fax 214-252-7599  
[www.seniorcarecentersltd.com](http://www.seniorcarecentersltd.com)