Barriers & Motivators to Physical Activity in Older Mexican American Men

by

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ABSTRACT

The purpose of this phenomenological study was to explore the cultural, social, environmental, and gender factors that may influence physical activity (PA) in older Mexican American (MA) men living in Tucson, Arizona. The Mexican origin population is the fastest growing Hispanic subgroup in our nation, increasing from 20.6 million in the year 2000 to 31.8 million in 2010. Arizona has the sixth largest Hispanic population in the United States and the Mexican origin population accounts for 91% of Arizona's Hispanics. Despite the fast growing Mexican population, there are a limited number of studies that examine MAs and PA. There are even fewer interventions created to foster PA among older (≥65 years old) MA men. Fourteen individual interviews were conducted with older MA men living in Tucson, Arizona. Data was collected, organized, and analyzed according to the methodologies of Clark Moustakas and the Social Ecology Model for Health Promotion framework. Six themes emerged which reflected the older MA male's perception of health, masculinity, and physical activity: a) Retirement promotes self-care behaviors, b) Women, health care providers, and the Internet are important in promoting health, c) Aging changes physical activity, d) I take care of myself, e) Physical activity is a personal choice and lifestyle, and f) I learn and make adjustments as needed. Themes were used to create textural and structural descriptions of their experiences. Descriptions were formed into the essence of the phenomenon. The results of this study increase our understanding of health, masculinity, and physical activity in older MA men. This research will inform the development of an evidence-based PA intervention to promote cardiovascular (CV) health in older MA men that may be implemented in a variety of community-based settings.

DEDICATION

For my grandfather, Robert Q. Corrales, father, Ruben A. Ortiz,

brother, Armando L. Ortiz, husband, Michael J. Dowling, and son, Zachary J. Jimenez.

It doesn't matter what is in front of her, as long as she knows who's behind her.

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CHAPTER 1

INTRODUCTION

The purpose of this study was to explore the cultural, social, environmental, and gender factors influencing PA in older MA males. Results from this preliminary research provided insight as to how older MA males feel about their general health, masculinity, and PA. This qualitative data is the first step in a program of study aimed at developing and pilot testing an evidence-based PA intervention to address CV disease and health disparities among older MA males.

Background and Significance

An ethnically diverse and aging population. Hispanics of all races represent 16% of the United States total population (Ennis, Rios-Vargas, & Albert, 2011; Motel & Patten, 2013). Mexicans represent 65% of the total United States Hispanic population (National Center for Health Statistics, 2010). The Arizona Hispanic population is ranked 6th largest in the nation at 1,950,000, with 91% being of Mexican origin (Brown & Lopez, 2013a; Brown & Lopez, 2013b). Projections illustrate that by 2050, Hispanics will represent 29% of the United States total population (Brown & Lopez, 2013).

Along with the increase in ethnic diversity, our nation's total population is rapidly aging. Older adults currently represent 13% of the United States total population (U.S. Department of Health & Human Services (HHS), 2012). Arizona is one of 11 states that constitute approximately 15% or more of the United States total older adult population at 37% (HHS, 2012).

The older population (adults 65 years and over) grew 15.1% during 2000 - 2010, surpassing the growth rate of the total population during this period at 9.7% (Werner, 2011). This decade also witnessed significant growth in the older male population 65 years and older (21%, compared to 11.3% in older women). The upward drift in the older population is driven by two factors: longer lives and the post-World War II baby boom (Centers for Disease Control and Prevention (CDC), 2013; Institute of Medicine (IOM), 2008; National Research Council, 2012).

The IOM reports in *Retooling for an Aging America: Building the Health Care Workforce* that our older population is vastly different from past generations (2008). Our current older adult population is larger in number, more educated, diverse, wealthy, and have fewer children, and although we predicted this population surge, our heath care workforce is not prepared for their arrival (IOM, 2008). The health care needs of these older adults will be more complex, and require additional education and training of our health care work force (IOM, 2008).

Health Disparities and Social Determinants of Health in Hispanics

Health disparities among minority populations in the United States have been well documented (AHRQ, 2013; National Partnership for Action (NPA); 2011), and although significant progress has been made over the past 50-years (CDC, 2013c), health disparities within certain populations persist (AHRQ, 2013; CDC, 2013c; IOM, 2003; NPA, 2011). Health disparities are the result of multifaceted and partially understood economic, biological, genetic, and psychological factors (Elder, Ayala, Parra-Medina, & Talavera, 2009). Hispanic communities are challenged by some of the worst health disparities in the United States (Elder et al., 2009). Current efforts on reducing health

disparities focus on improving healthcare access, coverage, and quality (Williams, Costa, Odunlami, & Mohammed, 2008); however, health is not a function of healthcare, rather a result of lifestyle that is connected to conditions where individuals live, play, and work (Williams, et al., 2008). Social factors such as availability of housing (Rich & Ro, 2002), transportation, racism (NPA, 2011), socioeconomic status (SES), ethnicity, culture, and gender shape the human experience of and vulnerability to most psychosocial and behavioral risk factors for health (House & Williams, 2000).

Poverty. Hispanics comprise of only 14.4% of the US general population, yet represent 24% of those living in poverty (IOM, 2012). In fact, Hispanic families are 22 times more likely than white families to be living in a neighborhood with high concentrations of poverty (IOM, 2012). Poverty is linked to poor health and the relationship is related to limited resources, and working and living conditions (e.g., access to health care, transportation, outdoor recreational areas, and healthy food) (Evans, Barer, & Marmor, 1994; Feldman, et al., 2004; IOM, 2012; Marmot & Wilkinson, 2006; Robert Wood Johnson Foundation (RWJF) Commission to Build a Healthier America, 2013). Biology, genes, and physical structures also influence health (FIFARS, 2012; NPA, 2011). Lead exposure, asthma triggers, workplace safety factors, air quality, unsafe or polluted living conditions also determine health and wellness (FIFARS, 2012; NPA, 2011).

Specific to older adults, low income was found to be associated with a higher likelihood of functional limitations (Louie & Ward, 2011). One explanation may be related to work loss and reduced earning potential, secondary to disease and functional limitations, during mid or older adulthood (Louie & Ward, 2011).

Migration and acculturation. Migration should also be considered when assessing health disparities among Hispanics (IOM, 2012). More than 40% of the Hispanics living in the United States are foreign born (IOM, 2012). Immigrants are reported to "have better health outcomes than their counterparts born in the United States" (IOM, 2012, p.17). Sadly, the more time an immigrant spends in the United States, the unhealthier the individual becomes (IOM, 2012). Driving factors behind this phenomenon are unclear; however, understanding it and developing interventions to reverse it are necessary (IOM, 2012).

Aging and Social Determinants of Health

Successful aging is closely linked to social and environmental conditions. Chronic conditions in older MAs are often related to the reciprocal influence that marital partners have on one another (Stimpson & Peek, 2005). Shared living environments, habits, life events, and resources may translate into a disease process that they may not have had in an alternative social context (Stimpson & Peek, 2005). Successful aging also depends heavily on the realities and opportunities in which we live (Angel, 2009). Housing cost burden (expenditures on housing and utilities that exceed 30% of household income), physical inadequacy (maintenance), and crowding pose serious problems with the health and well being of older adults (FIFARS, 2012). Unfortunately, compared to their counterparts, older Hispanics feel that policy makers have no interest or concern over older adults and therefore believe they have no influence in making their neighborhoods a better place to live (Feldman, Oberlink, Simantov, & Gurson, 2004).

Chronic disease. Our changing and aging population has broad implications for many aspects of society (National Research Council, 2012; United Nations Population Fund (UNFPA), 2012). Growing numbers and needs will influence public health, social services, and health care systems. The IOM reports that the nation is not prepared to meet the social and health care needs of our changing population (2008).

One specific area of concern is chronic disease. Eighty percent of the older adults living in the United States have been diagnosed with a chronic condition (heart disease, stroke, cancer, diabetes, and arthritis – most common) (CDC, 2012; IOM, 2008; Saxton, 2011) and numbers are projected to steadily increase for the next 30 years (Anderson & Horvath, 2004). Increased longevity resulting from public health strategies and advancements in medicine and technology has given rise to what researchers call an epidemic of chronic disease (Anderson & Horvath, 2004; CDC, 2013a; HHS, 2011; IOM, 2008; IOM, 2012; UNFPA, 2012).

Cardiovascular heart disease. In 2010, cardiovascular disease (CVD) cost the United States $444 billion (CDC, 2010). One out of every six dollars spent on health care went to treating CVD (CDC, 2010), including coronary artery disease (CAD), stroke, high blood pressure and high cholesterol. Although death rates in the United States for heart disease and stroke have decreased in recent decades, rates for incidence and death continue to be high within populations of low socioeconomic status and within certain racial and ethnic groups (CDC, 2010).

In 2007, 81% percent of the heart disease deaths in the United States were among people 65 years of age and older (HHS, 2012). The American Heart Association (AHA)

predicts that the aging of our population will bring an increase in the prevalence of all CVD (AHA, 2011). The AHA foresees 40.5% of our population living with some sort of CVD by 2030 (2011).

Benefits of Physical Activity

The U.S. Department of Health and Human Services (HHS) states that a physically active lifestyle is a major contributor to successful aging (2013). PA is not only linked to the primary and secondary prevention of heart disease, obesity, disabling conditions (osteoporosis), and type II diabetes (HHS, 2013), but it is now being used as a treatment for older adults with chronic disease and disability (American College of Sports Medicine (ACSM), 2009). PA is also reported to slow the progression of CVD and decrease the costs associated with it (Ailinger, 1989; Noone & Stephens, 2008; Peak, Gast, & Ahlstrom, 2010; Sobralske, 2006c). Hui & Rubenstein (2006) report that deterioration in cardiovascular fitness and muscle strength can be reversed with resistance and aerobic training.

Physical Activity Trends in the United States

Hispanics. Over the last forty years, the United States has seen a significant increase in obesity in all citizens with PA rates only modestly increasing (HHS, 2012). Sadly, only 18.4% of adult Hispanics meet the current PA recommendations of 150 minutes of moderate-intensity aerobic activity every week and muscle-strengthening activities on two or more days a week that work all major muscle groups (Harris, C.D., Watson, K.B., Carlson, S.A., Fulton, J.E., & Dorn, J.M., 2013).

Older male population. Statistics specific to PA trends in older MA male could not be found; however, limited information was located on PA and older men in general.

Despite the benefits of PA, only 12% of all men 65 years of age and over meet the PA recommendations (Bopp, Fallon, & Marquez, 2011). In addition, 33% of men over the age of 75 engage in no PA (Ebersole et al., 2008).

Bennett, Wolin, Puleo, Masse, and Atienza report that only 36% of adults can accurately identify the PA guidelines (2009). This lack of knowledge was more pronounced in the adult male population (Bennett et al., 2009). Researchers speculate the lack of knowledge is related to the lower risk perceptions for serious health conditions and worry that is noted in men's health research (Bennett et al., 2009).

Men's Health Disparities

There is a crisis affecting the well-being and health of all American men (Rich & Ro, 2002). Men's attitudes and behaviors contribute to their risk for injury, disease, and death (Courtenay, 2011). It is estimated that one half of all men's deaths in the United States each year could be prevented through lifestyle changes (Courtenay, 2011).

Leading cause of death and disability. The leading cause of death in men is heart disease, accounting for one in every four male deaths (CDC, 2013a); however, men also have higher death rates for malignant neoplasms, unintentional injuries, diabetes mellitus, and suicide (National Center for Health Statistics, 2012). The life expectancy of men is reported to be five years younger than women (National Center for Health Statistics, 2012). Globally, for every 100 women aged 60 and older there are only 84 men, and for every 100 women aged 80 and older, 61 men (UNFPA, 2012).

Hispanic men have shorter life expectancies than White men (69.6 years versus 74.5 years) (Aguirre-Molina, Borrell, & Vega, 2010; Rich & Ro, 2002). Hispanic men are also at higher risk for chronic disease due to health care access and utilization that are

influenced by socioeconomic challenges (James, Salganicoff, Ranji, Goodwin, & Duckett, 2012; Rich & Ro, 2002; Sobralske, 2006). In two studies, confidence in knowing when to receive medical care, the ability to adhere to medical treatments at home, and obstacles to health were related to lower income (Elder, Meret-Hanke, Dean, Wiltshire, Gilbert, Wang, Shacham, Barnidge, Baker, Wray, & Moore, 2013; Peak et al., 2010).

Compared to non-Hispanic white men, Hispanic men are three times less likely to have health insurance and two times less likely to have a health care provider (James, et al., 2012). Forty percent of Hispanic men did not visit a healthcare provider in the past 12-months, compared to 24% of non-Hispanic white men (HHS, 2014). In a study conducted by Peak, Gast, & Ahlstrom (2010), participants stated they had access to health insurance, but opted out due to cost. Sobralske (2006) found similar results related to health insurance costs when participants described hardship in meeting the upfront co-pay that is required for service. However, a participant in the Peak et al. (2010) study stated, "some men use the lack of the ability to pay as an excuse to not seek care" (p.163).

Risk-taking behaviors have also been linked to men's poor health and mortality (Courtenay, 2011). Men use more alcohol, tobacco (Stimpson & Peek, 2005), and drugs than women (Courtenay, 2011). Men also engage in more reckless driving and drive drunk more often than women (Courtenay, 2011). Dubowitz et al. found that MA men had a higher probability of binge drinking if their family had low income (2011). Structural factors (e.g., poverty and low education achievement) produce vulnerability to

substance abuse because they increase exposure to specific types of risk factors and decrease the accessibility of protective factors (Aguirre-Molina, et al., 2010).

Promiscuity and high-risk physical activities (e.g., dangerous sports, physical fights, and gun use) also undermine the health of men and those around them (Courtenay, 2011). Social networks and support are also associated with longevity; unfortunately, men have much smaller social networks and fewer friends, compared to women (Courtenay, 2011). Evidence shows that individuals with higher levels of social support maintain more positive health practices and are likely to modify negative behavior (Courtenay, 2011).

It is reported that the total indirect costs (i.e., lower worker productivity, secondary to illness and premature death) which men's health disparities impose on our society for a four-year period is $436 billion (Thorpe, Richard, Bowie, LaVeist, & Gaskin, 2013). These findings clearly signify the problem in men's health and demand attention. Reducing economic burden is of importance; however, it is equally important to remain focused on addressing disparities for the lives and well-being of all men.

As mentioned above, Hispanic men are at higher risk for chronic disease due to lower health care access and utilization (James, Salganicoff, Ranji, Goodwin, & Duckett, 2012; Rich & Ro, 2002; Sobralske, 2006). Compared to non-Hispanic white men, Hispanic men are three times less likely to have health insurance and two times less likely to have a health care provider (James, et al., 2012). Thirty five percent of Hispanic men do not have a usual place of health care, compared to 17% of non-Hispanic white men (HHS, 2014). Forty percent of Hispanic men did not visit a healthcare provider in the past 12-months, compared to 24% of non-Hispanic white men (HHS, 2014).

Purpose of the Study

Evidence-based PA programs aimed at promoting CV health in older MA males are non-existent. Socioeconomic challenges, the tendency to disregard their health needs, participation in high-risk behaviors, and adoption of unhealthy lifestyles place men at higher risk for chronic disease (Courtenay, 2011; James, Salganicoff, Ranji, Goodwin, & Duckett, 2012). Engaging in PA can reduce the risk of chronic disease, disability, functional limitations, and premature mortality (AHA, 2007); therefore, it is imperative that we develop gender, culture, and age-specific PA programs that may promote CV health and reduce the risk of chronic disease in this underserved and vulnerable population.

The purpose of this study was to explore the cultural, social, environmental, and gender factors influencing PA in older MA males. Results from this preliminary research will provide insight as to how older MA men feel about their general health, masculinity, and PA. This qualitative data is the first step in a program of study aimed at developing evidence-based PA interventions to address CVD and health disparities among older MA males.

Specific Aims

The specific aims of this phenomenological study were as follows: 1) to explore the cultural, social, environmental, and gender factors influencing PA in older MA males; 2) to describe the older MA male's perception of general health, masculinity, and PA; 3) to assess the relationship between PA and acculturation; and 4) to illustrate the essence of the older MA male's experience in promoting health.

CHAPTER 2

BACKGROUND LITERATURE

Little attention has been given to researching the cultural and social determinants of health in older MA men. The lack of evidence is linked to missed information resulting from Hispanics being examined as a whole. Persistent barriers to identifying health disparities are the lack of data on certain populations (CDC, 2013; Gold, 2014). The IOM *Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement* report (2009) states that insufficient data on race, ethnicity, and language decreases the opportunity to appropriately address health disparities. The Agency for Healthcare Research and Quality (AHRQ) (2013) agrees that there is limited national data on Hispanic subgroups. In fact, Shultz et al. (2005) reported missing data on the MA population in a city that is predominantly MA.

Classifying Hispanic men into subgroups according to race, ethnicity, sociodemographic factors, and nativity may provide a valuable insight into the challenges faced by each subgroup (Aguirre-Molina, Borrell, & Vega, W, 2010). Further classifying Hispanic male subgroups by age may facilitate a better understanding of how perspectives on health, masculinity, social and cultural factors may change as a man ages (UNFPA, 2012). Because of the limited amount of information on older MA men, it was necessary to extrapolate knowledge from studies examining Hispanic adults, older Hispanic adults, Hispanic men, and men in general.

Literature searches were conducted in CINAHL, PubMed, PsycInfo, and Google Scholar to locate studies in the English language from 2007 – 2015. Reference lists of relevant studies were also reviewed and included based on content. Excluded were

editorials and opinion manuscripts. Studies were selected according to the following criteria: (a) participants: older Hispanics adults ≥ 65 years, Hispanic adults ≥ 18 years, Hispanic men ≥ 18 years, and all men ≥ 18 years; (b) study purpose: aimed at advancing the understanding of men's health disparities, and identifying the cultural and social determinants of health in men; and (c) outcomes: health status, knowledge, beliefs, perceptions, attitudes, and behaviors. Search terms included Hispanic, Latino, MA, culture, men, male, masculinity, gender, behaviors, beliefs, perceptions, social structure, older adult, aging, health disparities, PA, and social determinants of health.

Using the identified terms, 18 articles were selected. There were no studies found specific to older MA men. Data on older MA men was extrapolated from three studies on older MA adults of both genders, two studies on Mexican American men of varying ages, and two studies on Latino men of varying ages. Data was also pulled from four studies involving Hispanics of both genders at varying ages, one study that examined older adults of varying ethnicities, and six studies that involved men in general. One study was a randomized control trial (RCT). The remaining studies were descriptive designs (seven qualitative, nine quantitative, and one mixed methods).

Masculinity and Health Promotion

Men's morbidity and higher mortality rates have been linked to masculinity, gender roles, and patterns of socialization (Aguirre-Molina, et al., 2010; Hunter et al., 2007; Joseph, Kaplan, & Pasick, 2007; Linnell & James, 2010; Peak et al., 2010; Rich & Ro, 2002; Sobralske, 2006; Sobralske, 2006a; Waldron, 1995). Among Hispanic men, Peak et al. (2010) & Sobralske (2006) found a strong cultural bias to circumventing health issues until there was no other option. Sobralske (2006) & Sobralske (2006a) also

found that the MA culture has "definite expectations about the role men play and how they should think and act" (p. 160 & p. 133, respectively). Male Hispanic participants described being a man as not complaining and fulfilling the cultural expectations of being a father, son, brother, husband, and worker (i.e., providing for and protecting the family) (Sobralske, 2006; Sobralske, 2006a).

Machismo, a set of attitudes and identities associated with the Hispanic concept of manliness, impacts a man's health promotion decisions (Sobralske, 2006). The concept appears to be a normal and natural part of the Hispanic male's life. Men are expected to exhibit behaviors that are considered masculine. A man's behaviors and beliefs are a reflection of how he sees himself in society (Sobralske, 2006).

Three additional studies found that participants considered it a weakness to look after themselves. In order for most Hispanic males to be masculine, they must be unconcerned about their well-being and place little value on health knowledge (Linnell & James, 2010; Noone & Stephens, 2008; Sobralske, 2006).

In Linnell & James' 2010 study, the word 'health' was perceived as a female word. Similarly, Noone & Stephens (2008) found that their male participants position women as 'regular-users' of health care. Regular-users were defined as ones who visit with a doctor frequently, and for reasons that are insignificant in nature (Noone & Stephens, 2008). Interestingly, Ailinger found that Hispanic males perceived themselves as healthier than females (1989).

These studies provide evidence that ideals of masculinity reduce men's engagement in health care seeking, health maintenance, and preventative care, and

therefore contribute to poor health. Improving men's health will require tapping into these notions of masculinity and correcting men's misperceptions (Courtenay, 2011).

Barriers and motivators to health promotion. Barriers to health promotion behaviors are related to masculinity, machismo, fear of poor outcomes, lack of accessible health care promotion information, lack of Spanish-speaking health care providers, health behaviors of their spouse, education, and lack of cultural sensitivity (Aguirre-Molina, et al., 2010; Marquez, & McAuley, 2006; Peak, Gast, & Ahlstrom, 2010; Rich & Ro, 2002; Sobralske, 2006). Joseph, et al. (2007) and Linnell & James (2010) identified health care access, gender, and fears as barriers and challenges to health care discussions with men. Fear of prognosis and outcome was a significant influence on leaving symptoms until they had fully developed (Linnell & James, 2010; Noone & Stephens, 2008). Participants stated that a 'wake-up' call was what they acted upon (Linnell & James, 2010).

Perkins, Cortez, & Hazuda (2006) found that older MA males felt disempowered when dealing with the health care system. These feelings were due to a lack in knowledge of the system, and a feeling that the system controls treatment, as compared to the patient (Perkins et al., 2006). Similarly, Hunter, Fernandez, Lacy-Martinez, Dunne-Sosa, & Coe (2007) found that learning about screening guidelines, men's health, and available resources would be influential in MA males seeking preventative care.

Motivators for health promotion behaviors included influences from their spouse, family, and health care providers, who share cultural beliefs and language (Sobralske, 2006). Peak, Gast, & Ahlstrom found that the ability to trust the health care system would be helped if providers spoke Spanish (2010). In Sobralske's study, faith, prayer, and

ethnic-based healthcare providers were identified as motivators in health promotion behaviors (2006).

Women (e.g., wives, mothers, grandmothers, daughters, sisters, and aunts) were found to be significant in men's health (Joseph, et al., 2007; Linnell & James, 2010; Sobralske, 2006). A female participant in the Joseph, et al. (2007) study reported being an "enforcer [of health], or they will just not do it" (p. 506). Yet another female in the Sobralske (2006) study felt that "men have a lot of pride and don't just go to the doctor... men have to be really sick" (p. 162).

Elder, et al. (2013) & Peak, et al. (2010) found that a man's age and marital status was a positive predictor for confidence in knowing when to seek health care. In the Peak et al., (2010) study, participants reported making health care decisions with their wives; however, Sobralske (2006) & Sobralske (2006a) found that MA men relied on their spouses to make the health care decisions and act as caretakers. Similarly, Hunter et al., found that wives or partners were the motivating factor to seeking preventive care (2007).

Studies have also found that ethnically dense neighborhoods result in physical health benefits among older MA men (Gerst, Miranda, Eschbach, Sheffield, Peek, & Markides, 2011; Aguirre-Molina, et al., 2010). Gerst et al. (2011) suggests that this phenomenon may reflect cultural differences in gender roles within the older MA population. The life-space of older MA women is within the home, whereas MA men are "of the street" and more likely to be more integrated into the neighborhoods (Gerst, et al., 2011). In another study conducted with older MAs, researchers found a link between neighborhood context and health outcomes by identifying a "barrio advantage" against increasing frailty in older MAs (Aranda, Ray, Al Snih, Ottenbacher, & Markides, 2011).

Eamranond, Davis, Phillips, and Wee, (2009) found that Hispanics were more inclined to discuss exercise and diet modifications if they had a Spanish-speaking care provider.

Lack of Physical Activity Interventions for Older MA Males

Studies promoting PA among older MA males are non-existent. A literature search on PA interventions specific to older MA males leads to studies on the older MA population as a whole, with a high percentage of participants being females (Ottenbacher, A., Snih, Karmarkar, Lee, Samper—Ternent, Kumar, Bindawas, Markides, & Ottenbacher, K, 2012). PA interventions involving older men in general are also extremely limited (Almeida, et al., 2014; Hawkins, Foster-Schubert, Chubak, Sorenson, Ulrich, Stancyzk, Plymate, Stanford, White, Potter, & McTiernan, 2008; Hooker, Harmon, Burroughs, Rheaume, & Wilcox, 2011), outdated (Cunningham, Rechnitzer, Howard, & Donner, 1987; DeBusk, Stenestrand, Sheehan, & Haskell, 1989; Rubenstein, Josephson, Trueblood, Loy, Harker, Pietruszka, & Robbins, 2000), and often require data extraction from studies that include younger men (Hunt, McCann, Gray, Mutrie, & Wyke, 2013; Newton, Hakkinen, Hakkinen, McCormick, Volek, & Kraemer, 2002).

Barriers and motivators to PA. Barriers to PA among Hispanics included health, chronic conditions, bad weather, difficulty getting to an exercise location, transportation, personal safety, schedule conflicts, program costs, vision and hearing impairments, lack of social support, motivation, understanding benefits of PA, child care, time, and energy (Bautista, Reininger, Gay, Barroso, & McCormick, 2011; Belza, Walwick, Shiu-Thornton, Schwartz, Taylor, & Logerfo, 2004; Marquez & McAuley, 2006). Specific barriers to PA as described by Hispanic males included lack of time, energy, interest, self-discipline, support systems, equipment, knowledge, poor weather,

health, and concern for personal safety (Bautista, Reininger, Gay, Barroso, & McCormick, 2011). Motivators to PA among the Hispanic population included acculturation, neighborhood environments, health (poor and good), chronic conditions, faith, and social support (Bungum, Thompson-Robinson, Moonie, & Lounsbery, 2011; Marquez & McAuley, 2006; Mier, Ory, Zhan, Wang & Burdine, 2007). The lack of evidence-based PA interventions to reduce the risk of chronic disease among older MA men is alarming. The development of an age and gender-tailored, culturally relevant PA intervention could potentially benefit many older MA men. The proposed research has the ability to inform future work while reducing the risk of chronic disease in an understudied vulnerable population.

Promoting PA in older adults. PA has a positive influence on the quality of life and overall health of older adults (Hui & Rubenstein, 2006). The HHS suggests that older adults follow the current PA recommendations with consideration to their current level of fitness (2008). Older adults finding it difficult to meet the current PA recommendations should participate in PA as their conditions allow (HHS, 2008). Lack of PA and poor diet are contributors to heart disease and diagnosed more often among those over 42 years of age, as compared to those 41 years of age or younger (Palmquist, 2011). Current evidence supports PA as treatment for older adults with chronic disease and disability (ACSM, 2009).

In an 11-year longitudinal study of 12,201 older Australian men, researchers found that older men who met the PA recommendations not only had a greater chance than their counterparts of surviving 10-13 years free of depression and cognitive and functional impairment, but were also more likely to live an additional 10-13 years

(Almeida, Khan, Hankey, Yeap, Golledge, & Flicker, 2014). In fact, older men have a similar ability to younger men in increasing muscle power through resistance training (Newton, et al., 2002). This not only supports the possibility of reducing the risk of functional decline and chronic disease among older men through regular PA, but also speaks to the importance of reminding older men that it is never too late to become active and experience the benefits associated with PA.

Theoretical Framework

The social ecology model for health promotion. One approach to exploring the cultural, social, environmental, and gender factors that may influence PA in older MA males is through the Social Ecology Model for Health Promotion (SEMHP). Ecology refers to the interrelationship between an organism and their environment (Sallis, Owen, & Fisher, 2008). Ecological science has been used to develop models that examine behavior at multiple levels of influence (biological, psychological, social, cultural, organizational, community, physical environment, and policy) (Sallis, et al., 2008).

The core principles of ecological models propose that: 1) specific health behaviors have various influences, and those influences interact across multiple levels; 2) ecological models should be behavior specific, and should identify the most significant influences at each level; and 3) interventions guided by the principles of an ecological model should consider all levels of influence in order to be most effective (see Figure 1 for an example of the ecological perspective) (Sallis, et al., 2008; Stokols, 1992).

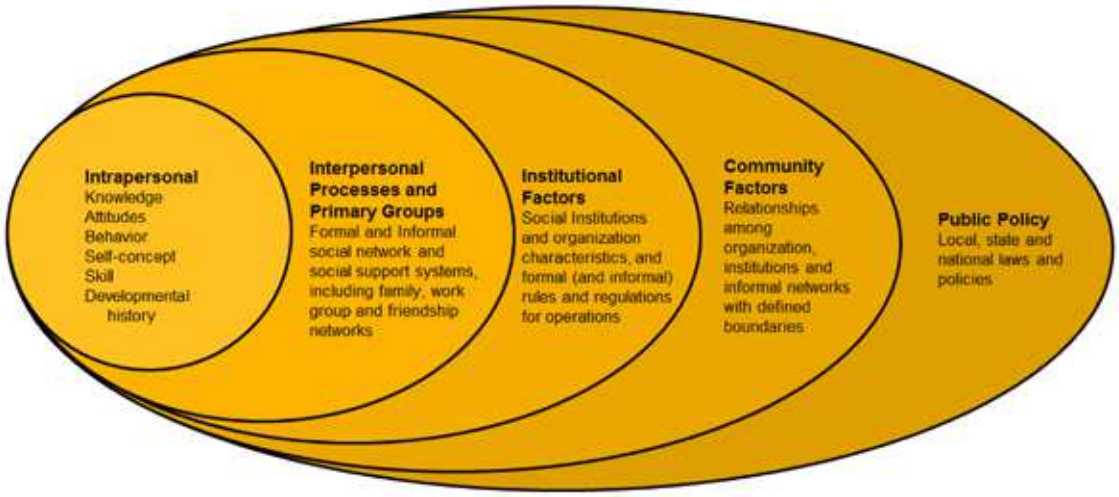

Figure 1. Ecological perspective. McLeroy, Bibeau, Steckler, & Glanz (1988).

Specific to the SEMHP are four core assumptions: 1) in addition to personal qualities, health behaviors are influenced by physical and social environments; 2) environments consist of multiple dimensions; 3) interactions between individuals and environments occur at varying levels of aggregation; and 4) individuals influence their settings, and altered settings influence health behaviors (Sallis, et al., 2008; Stokols, 1992). The SEMHP has drawn several of its concepts from systems theory (Best, Stokols, Green, Leischow, Holmes, & Buchholz, 2003). Systems theory suggests analyzing objects in terms of its parts (Bevir, 2010). The SEMHP promotes well-being through an understanding of relationships between individuals and diverse environments, rather than focusing solely on biological, environmental, or behavioral factors (Best et al, 2003).

Rationale for using the SEMHP. Health behaviors and environments are complex. The rationale for using the SEMHP is its perspective. The SEMHP views health promotion broadly, is characteristically interdisciplinary in its approach, and draws on the fields of public health, medicine, urban planning, environmental design, public policy, and the behavioral and social sciences (Best et al., 2003; Stokols, 1992; Stokols, 1996). Ecological analysis of well-being suggests multilevel assessment of the interplay between personal attributes and environmental factors (Stokols, 1992a; Stokols, 1996). Examining well-being at multiple levels prevents researchers from focusing in on a single aspect of influence by providing a thorough picture of the relations between various levels of influence. This approach to examining well-being is significant when designing interventions. Considering interventions at multiple levels may increase the possibility of behavior change within various contexts (Best et al., 2003). Interventions are said to be most effective when they change the individual, the environment (i.e., social and built), and policies (Sallis, Floyd, Rodriguez, & Saelens, 2012).

Qualitative inquiry and the SEMHP. The SEMHP not only provided the theoretical foundation for examining the cultural, social, environmental, and gender factors which may influence PA in older MA males, but will also guide the future development of an intervention promoting PA among this understudied underserved population. Key informant questions for this study were designed to ascertain individual, familial, societal, and environmental spheres of influence related to PA, and are embedded with the philosophical assumptions of qualitative inquiry (ontology, epistemology, axiology, and methodology) (Creswell, 2013).

Ontological issues relate to the nature of reality, and researchers conducting qualitative inquiry support the idea of multiple realities (Creswell, 2013). The ontology of qualitative inquiry is aligned with the assumptions of the SEMHP in that the model suggests that environments consist of multiple dimensions that interplay between personal attributes and environmental factors (Stokols, 1992a; Stokols, 1996). The SEMHP supports a multilayered environment that influences the health of individuals differently depending on the individual's practices and beliefs (Golden & Earp, 2012). Examining the multiple realities associated with culture, gender constructs, social and environmental contexts provided an insight to the multiple levels of influence on PA among older MA males.

The epistemological assumption of qualitative inquiry suggests gaining knowledge through closeness with participants (Creswell, 2013). Researchers attempt to decrease the distance between themselves and the participants (Creswell, 2013). The core assumptions of the SEMHP suggest the development of "strategies to promote personal and collective well-being" (Stokols, 1992, p. 7). Both set of assumptions appear to imply a connection and familiarity with study participants. The key informant questions were developed to familiarize oneself with the views on general health, masculinity, activity, PA preferences, PA and health, PA barriers and facilitators, and PA programming among older MA males.

The axiological assumption of qualitative inquiry suggests that researchers position themselves within the study (Creswell, 2013). Implementing this assumption requires the researcher to make their values and biases known (Creswell, 2013). This may be done by actively reporting values and biases within the text of their description or

interpretation of the findings (Creswell, 2013). Lastly, methodology or the procedures of qualitative inquiry are "inductive (from the ground up), emerging, and shaped by the researcher's experience in collecting and analyzing the data" (Creswell, 2013, p. 22). Research questions may take a different direction during the study in order to reflect and better understand the research problem (Creswell, 2013).

The philosophical assumptions of qualitative inquiry are embedded with interpretive frameworks (postpositivism, social constructivism, transformative/postmodern, pragmatism, and critical, race, feminist, queer, and disabilities) (Creswell, 2013). Philosophical assumptions take on different meanings depending on the selected interpretive framework (Creswell, 2013). Postpositivists take a scientific approach to qualitative inquiry (Creswell & Miller; 2000; Creswell, 2013). They consider multiple perspectives, rather than a single reality, and advocate for rigorous methods of qualitative data collection and analysis (Creswell, 2013).

Strengths and limitations of the SEMP. Social ecology embodies a broad multidisciplinary perspective on the relationship between an individual and their environment (Stokols, 2000). Through social ecology, health is examined in relation to circumstances of daily living (Stokols, 2000). Ecological analyses provide a thorough understanding of the ways in which individual and environmental factors affect well-being (Stokols, 2000). By examining multi-levels of influence, opportunities emerge for integrating health promotion interventions at various levels (Stokols, 1992). Multifaceted interventions that feature individual and environmental components are more likely to be successful in promoting health than interventions with a narrower scope (Stokols, 1992).

However, the Social Ecology Model for Health Promotion reflects certain limitations (Stokols, 1996). Since ecological studies consist of multidisciplinary perspectives, explanations of health phenomenon can be extensive and complicated (Stokols, 2000). Professionals addressing immediate health concerns may find the framework much too broad to use (Stokols, 2000). Similarly, developing health promotion interventions based on the model will require knowledge from several disciplines and collaboration from various experts within the community (Stokols, 1996). This can be expensive, complex, and require large amounts of time and resources (Stokols, 1996). Because of these reasons, health promotion programs based on the model may become unmanageable and unfeasible to implement (Stokols, 1996).

The SEMHP and PA. Studies supported by the SEMHP that exam influences of PA behavior among older MA men do not exist. However, it is of importance to note that this framework has been proven effective in: 1) promoting PA in vulnerable populations, 2) used by various disciplines to explain numerous health problems, and 3) served as a basis for designing policy, therapeutic, and educational interventions (Bull, Eakin, Reeves, & Riley, 2006; Hermann, Jackson, Miracle, Parker, & Robertson, 2010; Martinez, Arredondo, Roesch, Patrick, Ayala, & Elder, 2011; Stokols, 2000).

In a study evaluating the relationship between social and community level supports and PA among low income Hispanics with multiple chronic conditions, researchers found the use of multi-level supports associated with meeting the 2008 Physical Activity Guidelines for Americans (Bull, et al., 2006). Eakin, et al. (2006) describe multi-level supports as social (i.e., personal resources, family, and friends), organizational (i.e., nurses and health care team), and environmental (i.e., workplace,

neighborhood, community organizations, and media) and suggest that the more support systems a person has, the stronger the relationship to PA. These scientists support the use of socioecological models among low income minorities as an approach for enhancing social and community level support to influence behavior change (Bull, et al., 2006).

Martinez, Arredondo, Roesch, Patrick, Ayala, & Elder (2011) conducted a study in San Diego, CA with Mexican-origin adults. This team examined the socio-ecological correlates (i.e., individual, social, and environmental) of nonleisure-time walking (NLTW) and found that NLTW differed by gender and acculturation (Martinez, et al., 2011). Adherence to the 2008 Physical Activity Guidelines for Americans was positively associated with being female and negatively related with being more acculturated (Martinez, et al., 2011).

Acculturation

Developed in the 20th century by melting pot theorists, the acculturation construct consists of three stages: contact, accommodation, and assimilation (Zambrana, 2010). Acculturation scales seek to examine the cultural interactions of new immigrant populations arriving in the United States (Zambrana, 2010). Specific to this dissertation study, the Acculturation Scale for Mexican Americans-II (ARSMA-II) (Appendix G or H) focused on measuring the maintenance of culture of origin, from adoption of host culture (Zambrana, 2010). The value of measuring acculturation using the ARSMA-II in the older MA male population is related to the impact acculturation and assimilation may have on health promotion behaviors. Studies examining acculturation and health behaviors (e.g., physical activity) in older MA males are nonexistent.

In a study examining Latino young men, health promotion, and acculturation, Guarnero (2013) found that "Los Americanos put too much emphasis on going to see the physician for reasons that may not be important" (p. 798). Another participant in the Guarnero study stated, "Latinos ignore the fact that they don't do a lot of exercise; a lot of us are immigrants here. Yet in our countries, we ate frijoles fried in *manteca* [lard] but then we go out and work in the fields and work it off" (p. 799). Cultural heritage was found to be a key influence in health promotion behaviors (Guarnero, 2013). Many of the men in the Guarnero (2013) study traveled back and forth from their mother country; therefore, various factors affected their socialization. Their experiences of acculturation were fluid, not fixed, and were described as a give and take that involved both cultures.

Masel, Rudkin, and Peek (2006) found significant associations between health behaviors and acculturation in the older adult MA population. As English language and Anglo-Americans contact subscale scores increased, participants were more likely to be current or former smokers and drinkers (Masel, et al., 2006). Interestingly, the same study found that PA among older MAs was linked to the use of the English language and an association with Anglo-Americans (Masel, et al., 2006). Similarly, Berrigan, Dodd, Troiano, Reeve, & Ballard-Barbash (2005) found that lack of PA was greater in MAs who primarily spoke Spanish. Crespo, Smit, Carter-Pokras, & Anderson (2001) also found that MAs "who were less acculturated (i.e., Spanish speakers) were more likely to be inactive during leisure time than more acculturated MAs" (p. 1255).

Ghaddar, Brown, Pagan, & Diaz (2010) also found an association between health behaviors and acculturation. Populations living in border communities (e.g., United States-Mexico) demonstrated a decrease in healthy dietary behaviors, while increasing

awareness of other healthy behaviors. Specific to older MA immigrants, Gonzales, Ceballos, Tarraf, West, Bowen, & Vega (2009) found that the longer an immigrant lived in the United States, the better their functional health. Associated factors included access to health care and wealth (Gonzales, et al., 2009). Gonzales, et al. suggest that older MA immigrants have had time to build economic assets; therefore, may be better equipped to changing health care needs (2009).

Filling the Research Gap

There is still much we do not understand about the cultural and social determinants of health in older MA men. In order to identify problems, target resources, and design interventions, reliable data must be collected on this underserved population (AHRQ, 2013). Analysis of health disparities in older MA men must begin by understanding the association among the cultural and social determinants of health. Researchers must look towards how they will change health inequalities by tracing the pathways by which various social factors contribute to the development of health disparities and then translating that knowledge into action (IOM, 2012; Marmot & Wilkinson, 2006).

This dissertation study and its findings will contribute to the advancement of the science by: 1) providing rich behavioral understandings that may support the development of strategies for promoting PA behaviors at multiple levels among older MA males; 2) identifying factors that may support sustainability of a PA program aimed at promoting CV health in older MA males; 3) addressing a major gap in the understanding of multiple levels of influence on PA among older MA males; and 4)

empirically testing the principles of the SEMHP in an understudied vulnerable population.

CHAPTER 3

METHODOLOGY

Phenomenology Philosophy and Historical Roots

Phenomenology deduces individual experiences of a phenomenon to a description of its universal essence (Creswell, 2013). The approach draws on the work of Edmund Husserl (1859 – 1938), Martin Heidegger (1889 – 1976), and Merleau Ponty (1908 – 1961). Husserl considered experience the fundamental source of knowledge and meaning (Racher & Robinson, 2002). Heidegger proposed that humans and the world are co-constructed – the world constructs humans, and humans construct the world through lived experiences (Racher & Robinson, 2002). Ponty believed "reflection was necessary to bring awareness of the world to reality" (Racher & Robinson, 2002, p. 473).

Phenomenology refers to conscious knowledge, the art of defining what the individual discerns, identifies, and feels while being mindful of one's experience (Moustakas, 1994). The reality of the cultural, social, environmental, and gender factors influencing PA in older MA men was best revealed by discovering the meanings and essences of these factors as they exist to these men. Ideation, the phenomenological process of transforming individual experiences into essential insights, provided a view of what was real and what was assumed to be real factors influencing PA in older MA males (Moustakas, 1994). The essence of the experiences of being an older MA male in social, environmental, and gender contexts will be crucial in the development of PA interventions for this understudied population.

Study design. There are two approaches to phenomenology: hermeneutic and transcendental (Creswell, 2013). Clark Moustakas transcendental phenomenology focuses less on the interpretations of the researcher and more on describing the experiences of the individual (Creswell, 2013). The conceptual framework of transcendental phenomenology consists of two concepts: intentionality and intuition (Moustakas, 1994). Intentionality refers to the act of being conscious (Moustakas, 1994). Knowledge of intentionality involves being present within and to that around us (Moustakas, 1994). Intentionality requires recognition of self and world as inseparable elements of meaning (Moustakas, 1994). Intentionality is composed of a *noema* (the phenomenon) and *noesis* (meaning) (Moustakas, 1994). For each noema there is a noesis, and their relationship establishes the intentionality of consciousness (Moustakas, 1994). Intuition is the 'natural attitude'. It is a starting point in obtaining knowledge of human experience (Moustakas, 1994). 'The self' is an intuitive-thinking being who doubts, understands, affirms, denies, senses, and imagines, and through the intuitive-reflective process everything becomes clear (Moustakas, 1994).

The core processes of obtaining knowledge through the qualitative methodology of transcendental phenomenology consist of *Epoche, Transcendental-Phenomenological Reduction*, and *Imaginative Variation* (Moustakas, 1994). Epoche is an essential first step and "requires a new way of looking at things" (Moustakas, 1994, p. 33). All is set aside and phenomena are newly reconsidered (Moustakas, 1994). Transcendental-phenomenological reduction implies moving beyond routine and perceiving everything freshly, while being directed towards the source of meaning of lived experiences (Moustakas, 1994). Imaginative variation aims at grasping the structural essence of

experience (Moustakas, 1994). It consists of bestowing an image of the conditions that bring about an experience and uniting oneself with it (Moustakas, 1994). Moustakas suggests gathering the structural essences of the imaginative variation and integrating them with the textural essences of transcendental-phenomenological reduction in order to synthesize meanings and essences of the phenomenon being investigated (Moustakas, 1994).

Transcendental phenomenology. Moustakas' transcendental phenomenology provided the systematic approach to data analysis, the construction of the textual and structural descriptions of the studied phenomenon, and guided the identification of the essence of health as experienced by older MA males. Moustakas' method is a modification of the van Kaam's method of analysis and is aligned with a postpositivist's view, which advocates for rigorous methods of qualitative data collection and analysis (Creswell, 2013).

Sample. Random sampling was not appropriate to this qualitative study; therefore, participants were purposefully selected. Fourteen older MA males were recruited. Crouch & McKenzie (2006) suggest a small number of participants (i.e., less than 20) are sufficient for obtaining valid in-depth data in interview-based qualitative research. In a similar study, conducted by Guest, Bunce, & Johnson (2006), saturation was reported to occur between the sixth and 12th interview.

Rationale for inclusion and exclusion. The inclusion criteria was: 1) males ≥ 65 years, 2) self-identified as MA's, 3) willingness to participate in a one hour audiotaped one-on-one interview, 4) community dwelling, and 5) ambulatory (i.e., able to walk without assistance). Variable levels of acculturation, health status, language preference,

and PA were accepted; however, in order to increase the variability of the study participants and investigate the effects of language on the contextual factors influencing PA, inclusion was stratified to seven monolingual older MA males between the ages of 65 – 99 years and seven bilingual older MA males between the ages of 65 – 99 years. Exclusion criteria was: 1) males under the age of 65 years, 2) Hispanic males who identified as non-MA, 3) those with cognitive impairment, resulting in an inability to understand questions and/or communicate clearly, 4) non-community dwelling, and 5) non-ambulatory.

Recruitment and retention. Potential participants were identified through local community service committees (e.g., Pueblo High School Alumni Foundation), which the PI volunteer's in, and by word-of-mouth. Recruitment scripts in English and Spanish were used to explain the research to potential participants (Appendix B or C). When an older MA male expressed interest in the study, the PI asked the potential participant three inclusion questions regarding age, ethnicity, and interest in the study. The three inclusion questions included: 1) How old are you? 2) Are you of Mexican descent? 3) Would you be interested in spending an hour with me sometime later this week sharing your feelings and thoughts about health, masculinity, and PA? If the older MA male met the inclusion criteria, then the potential participant was scheduled for an interview. At that time, the potential participant was consented (Appendix D or E) and enrolled in the study. Once each of the categories in the inclusion group was filled, the inclusion group was closed to accrual. Recruitment continued until both inclusion groups were filled. Contact information was also exchanged with the participant during this time.

Measures. The participant demographic variables were collected prior to the interview using the *Demographic Questionnaire* (Appendix F or G). The demographic questionnaire is a self-report 13-item scale that captures the age, household living status, marital status, education, language, work status, and income of the participant. This information was gathered to further describe the study sample.

Information about acculturation was measured using the *Acculturation Scale for Mexican Americans-II* (ARSMA-II) (Appendix F or G). The ARSMA-II is a 30-item Likert type scale that measures acculturation along three factors: language, ethnic identity, and ethnic interaction (Cuellar, Arnold, & Maldonado, 1995). The measure is divided into two subscales: an Anglo Orientation Subscale (AOS) consisting of 13 items (2, 4, 7, 9, 10, 13, 15, 16, 19, 23, 25, 27, and 30) and the Mexican Orientation Subscale (MOS) containing 17-items (1, 3, 5, 6, 8, 11, 12, 14, 17, 18, 20, 21, 22, 24, 26, 28, and 29) (Cuellar, Arnold, & Maldonado, 1995). Both subscales were found to have good internal reliabilities with Cronbach's alpha's of .86 and .88 for the AOS and MOS, respectively (Cuellar, Arnold, & Maldonado, 1995).

The current PA levels of the participants were measured using the self-administered version of the *International Physical Activity Questionnaire Short Form* (IPAQ-SF) (Appendix F or G). The seven-item IPAQ-SF measures PA during the participants last seven days. The IPAQ is a standardized measure that was created to assess PA and inactivity worldwide (Craig, Marshall, Sjostrom, Bauman, Booth, Ainsworth, Pratt, Ekelund, Yngve, Sallis, & Oja, 2003). Reliability for the IPAQ-SF has been reported as acceptable, with 75% of the correlation coefficients above 0.65 and ranging from 0.88 to 0.32 (Craig, et al., 2003, p. 1385). Concurrent validity between the

IPAQ long and short forms also showed reasonable agreement, with the pooled *p* reported at 0.67 (Craig, et al., 2003, p. 1385). Tomioka, Iwamoto, Saeki, & Okamoto (2011) found the criterion validity of the IPAQ-SF to be adequate and useful for examining PA in older adults.

Data collection. On interview day, each participant was provided privacy in a room designated by a supporting site (i.e., libraries). Participants were presented with a verbal overview of the study including potential benefits and risks, reminded of the time commitment, asked for permission to audiotape the interview, and provided a copy of the informed consent (Appendix D or E). A *Study Protocol* was designed and implemented for the PIs' use to ensure consistency and reliability of procedures throughout the study (Appendix H). All study procedures were reviewed and approved by the Arizona State University Institutional Review Board (ASU IRB) (Appendix A).

One-on-one interviews. The long interview is the typical method through which data is collected in a phenomenological investigation (Moustakas, 1994). The audiotaped one-on-one interviews were conducted using the *Key Informant Questions* (Appendix F or G). These questions provided an opportunity for the older MA male to share their thoughts and feelings on general health, masculinity, and PA. The key informant questions for this study involved eight major areas: general health, masculinity (i.e., characteristics of a man), general activity, PA preferences, PA and health, PA barriers and facilitators, PA programming, and additional thoughts (Hooker, 2007).

Interview Guidelines (Appendix H) were developed and followed to ensure uniformity in data collection; however, following the methodology of transcendental phenomenology, if the participant shared the full story of his experience of the bracketed

question, the interview question was altered, varied, or not used at all so that a comprehensive account of the older MA male's experience could be collected (Moustakas, 1994, p. 114). In addition, if the participant did not understand a specific question, the PI used follow-up prompts to clarify the meaning and elicit a meaningful response. The interviews typically lasted 60 to 75 minutes, with breaks being taken whenever the participant needed them.

The one-on one interviews continued until all of the categories in the inclusion groups were filled, and no longer added new information. Data saturation was determined during data analysis when interviews no longer added to the findings (Patton, 2002). Collaboration with advisors guaranteed that an adequate sample was interviewed.

Data management. All data were secured in two different areas: a thumb drive and computer hard drive that was password protected and secured in the PI's office. Participant identification codes were placed on all study materials to protect their identity. After all potential publications are written, the data will be properly destroyed.

Data analysis. The audiotaped interviews were transcribed verbatim in their corresponding language. Spanish transcripts were then translated to English and verified for accuracy by the PI and a Spanish translator. Data analysis was conducted using NVivo for Mac software, version 10.2.1, and began with horizonalizing the data (Moustakas, 1994). All data was approached as being equal in value and read by the PI and advisors in order to obtain a general sense of the material. General thoughts about the data were written in the margins of the transcripts.

The PI and advisors read transcripts again, one-by-one and line-by-line. Relevant words, sentences, and/or phrases (i.e., words and ideas repeated in several places or

recognized from the review of the literature) were identified. Horizons (i.e., meaning units) were then identified and labeled as *major horizons*, *unique horizons*, and *leftovers* (Creswell, 2009; Moustakas, 1994). Codes were developed by abbreviating the horizons. These codes were then highlighted on the corresponding area of the transcript. During meetings with advisors, horizons and codes were reviewed and agreed upon before a final code was assigned.

Once the codes were agreed upon, they were conceptualized into themes based on processes, perspectives, contexts, relationships, and social structures. Themes were then labeled with textural (i.e., nature and meaning) and structural descriptions (i.e., factors accounting for the experience) (Moustakas, 1994). Structural descriptions are "the 'how' that speaks to conditions that illuminate the 'what' (texture) of experience. *How (structure) did the experience of the phenomenon come to what (texture) it is*" (Moustakas, 1994, p. 98)? Connectedness between the themes was reflected upon using the SEMHP theoretical framework. Triangulation was attained by having advisors trained in qualitative research review the identified themes and descriptions.

The final step in analysis was the integration of the textural and structural descriptions into a descriptive statement of the essence of the phenomenon (Moustakas, 1994). Synthesis of the textural-structural descriptions represents the essence of the phenomenon at this current place and time (Moustakas, 1994).

The demographic questionnaire, ARMSA-II, and IPAQ-SF were analyzed to describe the participants. The demographic questionnaire was analyzed using *IBM SPSS Statistics Version 23 for Macintosh*. The ARSMA-II was analyzed by following the *Cutting Scores for Determining Acculturation Levels* as written by Cuellar, Arnold, &

Maldonado (1995). The IPAQ-SF was analyzed using the *Guidelines for Data Processing and Analysis of the IPAQ Short Form* (IPAQ Committee, 2004).

Addressing Issues of Rigor

Bracketing. Central to the rigor of phenomenological inquiry, bracketing is a method used to decrease the potential negative effects of unfound preconceptions associated to the research (Laverty, 2003; Tufford & Newman, 2010). Bracketing protects researchers from skewing interpretations and results in a study that may include emotionally challenging materials (Tufford & Newman, 2010). More importantly, bracketing facilitates a deeper level of reflection in the researchers as they develop and implement the research (Tufford & Newman, 2010).

In transcendental phenomenology, bracketing occurs during phenomenological reduction (Moustakas, 1994). Phenomenological reduction starts with bracketing the research topic or question (Moustakas, 1994). However, Tufford & Newman report that bracketing may occur at various phases of the research (2010). Some researchers support developing awareness to preconceptions at the beginning and throughout the study (Tufford & Newman, 2010). While others advocate bracketing only during the analysis phase (Tufford & Newman, 2010).

Method of bracketing. A reflexive journal was maintained throughout the development and implementation of this study. Reflexive journaling encourages researchers to examine personal assumptions, goals, experiences, and values (Ortlipp, 2008). The aim of reflexive journaling is to make note of how these notions may influence the research topic (Ortlipp, 2008; Tufford & Newman, 2010). Being that the experiences that lead to the selection of this dissertation topic were of a personal and

emotional nature, reflexive journaling was a means of engaging and managing emotions and presuppositions (Tufford & Newman, 2010). Journaling, the selected method for bracketing, addressed rigor and was aligned with Moustakas methodology. Maintaining a journal also allowed the research process to proceed in a neat and linear fashion (Ortlipp, 2008).

Dependability and auditability. In qualitative inquiry the concepts of dependability and auditability, instead of reliability, are suggested as the criterion for quality in qualitative studies (Ryan-Nicholls & Will, 2009). A study is considered auditable when an audit trail (i.e., documenting procedures) can be followed and result in similar conclusions (Creswell, 2009; Ryan-Nicholls & Will, 2009). Therefore, within qualitative research, dependability and auditability are key components while: 1) developing the research question and study design (ensures congruency), 2) collecting data (suggests the use of protocols), and 3) conducting analysis (coding-checks) (Miles & Huberman, 1994). Accepted as a good reliability assessment, coding-check*s* is a process that involves the coding of the same data set by two researchers in order to discuss challenges, meanings, and fittingness (Miles & Huberman, 1994). Research advisors participated in the coding-checks of this dissertation study.

Triangulation. Triangulation relies on various ways of knowing (e.g., observations, interviews, and focus groups) as a procedure for ensuring reliability in qualitative studies (Creswell & Miller, 2010; Miles & Huberman, 1994). Triangulation gathers and reveals various perspectives rather than a specific truth (Ambert, et al., 1995; Patton, 2002b). The process of triangulation involves only the researcher's lens and is a system of sorting all data from all sources for common themes or categories (Creswell &

Miller, 2010). Ryan-Nicholls & Will (2009) described triangulation as a difficult task because data collected by various methods result in different forms; however, expected outcomes of triangulation includes corroboration and consistency across various data, which increases the reliability of the study (Miles & Huberman, 1994).

Focus Group. Study credibility was also addressed through member checking (Creswell, 2009). Following data analysis, the identified themes and essence statement were presented to five study participants who agreed to participate in a focus group. This focus group provided an opportunity to confirm or adjust the identified themes and essence statements.

CHAPTER 4

RESULTS

Introduction

The purpose of this study was to explore the cultural, social, environmental, and gender factors influencing PA in older MA males. One-on-one interviews were conducted with fourteen older MA males. The focus group consisted of five older MA male participants. Demographics, acculturation, and PA levels were also assessed on each of the participants.

Descriptive Statistics

Participant characteristics. Study participants (n = 14) ranged in age from 65 to 80 years, with a mean age of 71.2 years (SD = 4.5 years). Ninety-two percent of the males reported being married. Seventy-eight percent reported living only with their spouse and 14% reported living with other family members. Seventy-eight percent reported an annual household income of more than $25,000. Thirty-five percent reported they were college graduates and 14% reported a junior high school level education (i.e., grades seven and eight). Seventy-eight percent of the participants reported speaking and reading mostly English at home. Eight-five percent reported being retired. Demographic information on study participants is summarized in Table One.

Table One.
Participant Demographic Data (n = 14)

Demographic Variable	Mean [*SD*] or %	Range or Frequency
Older MA male's age (years)	71.2 [4.5]	65-80
Number of people in household	2.2 [.89]	1-5
Household		
Lived alone	7.1	1
Lived with wife or partner	78.6	11
Lived with children	0	0
Lived with grandchildren	0	0
Lived with friends	0	0
Lived with other family members	14.3	2
Marital Status		
Married	92.9	13
Never married	0	0
Separated	0	0
Divorced	0	0
Widowed	7.1	1
Education Level		
Never attended school	0	0
Elementary school (K through 6)	0	0
Junior high (grades 7 and 8)	14.3	2
Some high school	0	0
High school graduate	21.4	3
GED	0	0
Some college/vocational training	21.4	3
Trade school/vocational training graduate	7.1	1
College graduate	7.1	1
Graduate school	28.6	4
Language Spoke Mostly at Home		
English	78.6	11
Spanish	21.4	3
Language Read Mostly at Home		
English	78.6	3
Spanish	21.4	3
Paying Job		
Yes	14.3	2
No	0	0
Retired	85.7	12

Table One, continued.

Demographic Variable	Mean [*SD*] or %	Range or Frequency
Household Income Per Year		
More than $25,000	78.6	11
$20,000 - $25,000	14.3	2
$15,000 - $20,000	0	0
$10,000 - $15,000	7.1	1
Less than $10,000	0	0

ARSMA-II. Tables Two and Three illustrate the ARSMA-II item means and standard deviations for the sample (n = 14). Item mean scores reflect the following options: 1 = not at all, 2 = very little or not very often, 3 = moderately, 4 = much or very often, and 5 = extremely often or almost always. The lowest item mean score was item 27, and found on the AOS. This item was about how much the participant liked to identify himself as an Anglo American (M = 2.0; SD = 1.3). The highest mean item score was also found on the AOS. Item 19 asked the participants to rate their contact with the USA (M = 4.64; SD = .63).

Table Two.
American Orientation Scale Item Means and Standard Deviations (n = 14)

Item	Mean	*SD*
2. I speak English.	4.2	.72
4. I associate with Anglos.	3.5	.94
7. I enjoy listening to English language music.	4.2	.61
9. I enjoy English language TV.	4.0	.91
10. I enjoy English language movies.	4.0	.91
13. I enjoy reading (e.g. books) in English.	4.2	.89
15. I write (e.g. letters) in English.	4.3	.84
16. My thinking is done in the English language.	4.3	.63
19. My contact with USA has been?	4.6	.63
23. My friends, while I was growing up, were of Anglo origin.	3.1	.86
25. My friends now are of Anglo origin.	3.5	.85
27. I like to identify myself as an Anglo American.	2.0	1.3
30. I like to identify myself as an American.	4.5	.65

Table Three.
Mexican Orientation Scale Item Means and Standard Deviations (n = 14)

Item	Mean	*SD*
1. I speak Spanish.	3.7	.99
3. I enjoy speaking Spanish.	3.9	1.2
5. I associate with Mexicans and/or Mexican Americans.	4.2	.69
6. I enjoy listening to Spanish language music.	4.3	.74
8. I enjoy Spanish language TV.	2.7	1.3
11. I enjoy Spanish language movies.	2.7	1.3
12. I enjoy reading in Spanish.	2.4	1.1
14. I write in Spanish.	2.2	1.1
17. My thinking is done in the Spanish language.	2.9	1.2
18. My contact with Mexico has been?	2.5	.76
20. My father identifies/identified himself as Mexicano.	3.7	1.3
21. My mother identifies/identified herself as Mexicana.	3.7	1.2
22. My friends, while growing up, were of Mexican origin.	4.1	.65
24. My family cooks Mexican Food.	4.3	.63
26. My friends now are of Mexican origin.	3.7	.69
28. I like to identify myself as Mexican American.	4.0	1.1
29. I like to identify myself as Mexican.	2.6	1.4

Each participant was included into one of the ARSMA-II acculturative categories based on an acculturation score (i.e., MOS mean subtracted from the AOS mean). The following acculturation levels are suggested by Cuellar et al. (1995): Level I = very Mexican oriented (mean $<$ -1.33); Level II = Mexican oriented to approximately balanced bicultural (mean $\geq$ -1.33 and $\leq$ -.07); Level III = slightly Anglo oriented bicultural (mean $>$ -.07 and $<$ 1.19); Level IV = strongly Anglo oriented (mean $\geq$ 1.19 and $<$ 2.45); and Level V = very assimilated or Anglicized (mean $>$ 2.45). Acculturation levels and the

number of participants falling into each category were as follows: Level I, *n* = 2; Level II, *n*= 6; Level III, *n*= 6; Level IV, *n*= 0; and Level V, *n*= 0. Forty-two percent of the participants reported being Mexican oriented to approximately balanced bicultural, and forty-two percent of the participants reported strongly Anglo oriented.

IPAQ-SF. The April 2004 revision to the IPAQ-SF scoring protocol proposes classifying physical activity according to the three levels: inactive, minimally active, and health enhancing physical activity (HEPA) (IPAQ, 2004). A participant was considered inactive if they reported no activity or some activity, but not enough activity to meet the minimally active and HEPA categories. Spending three or more days a week doing vigorous activity of at least 20-minutes per day or, five or more days a week of moderate-intensity activity or walking of at least 30-minutes per day, or doing five or more days of any combination of walking, moderate-intensity, or vigorous intensity activities that achieves at least 600 MET-min/week placed the participant in the minimally active category (IPAQ, 2004). Participants reporting vigorous-intensity activity on at least three days and accumulating at least 1500 MET-minutes/week, or seven or more days of any combination of walking, moderate-intensity, or vigorous intensity activities achieving a minimum of at least 3000 MET-minutes/week were considered HEPA active (IPAQ, 2004).

One MET is described as the energy spent while sitting and resting quietly. It is equal to 3.5mL/kg/minute of VO_2 Max (i.e., volume of oxygen consumed while exercising at your maximum capacity) (Oyeyemi, A.L., Oyeyemi, A.Y., Adegoke, Oyetoke, Aliyu, H.N., Aliyu, S.U., & Rufai, 2011). MET-minutes/week were calculated for each of the participants according to the following MET levels: walking 3.3 MET's,

moderate intensity 4.0 MET's, and vigorous intensity 8.0 MET's (IPAQ, 2004). A continuous score was determined for each participant by multiplying MET levels by minutes of activity per day by sessions per week (i.e., MET level x minutes of activity x sessions per week). A total MET-min/week was determined for each participant by adding the continuous scores for all three MET levels (IPAQ, 2004). This total MET-min/week score was used to determine if a participant was minimally active or HEPA active.

Physical activity levels and the number of participants falling into each category were as follows: inactive, *n*=2, minimally active, *n*=9, and HEPA active, *n*= 3. The inactive level represents those participants who did not meet the criteria for categories two or three. Fourteen percent of the participants reported being insufficiently active. Sixty-four percent reported being minimally active, which indicates sufficient activity (IPAQ, 2004). Sufficiently active participants achieve "the minimum level of activity recommended for adults in current public health recommendations" (IPAQ, 2004, p. 3). Twenty-one percent of participants reported being HEPA active. These participants exceed the minimum public health PA recommendations, and are participating in sufficient amounts of activity for a healthy lifestyle (IPAQ, 2004).

Interview Findings

Using Moustakas' modified van Kaam version of analysis of phenomenological data and the SEMHP, six themes emerged which reflected the older MA male's perception of health, masculinity, and physical activity: a) Retirement promotes self-care behaviors, b) Women, health care providers, and the Internet are important in promoting health, c) Aging changes physical activity, d) I take care of myself, e) Physical activity is

a personal choice and lifestyle, and f) I learn and make adjustments as needed. The themes resulted from data that helped address the study's four specific aims.

Retirement promotes self-care behaviors. This theme resulted from data that helped address specific aim one: factors influencing PA in older MA men. The four core assumptions of the SEMHP were used to examine these factors. The participants described various levels of influence that were related to health and PA. The invariant constituents or major horizons that provided the living descriptions of retirement included:

> "I am retired!"
>
> "It's a new world for me right now, being recently retired. I really jumped into the physical activity, and I think over the last month and a half I have loss maybe ten pounds and I am feeling good. Right now, I am focusing on me, and mentally decompressing from 40 years of work. In 2000, I was working on programs that were funded for millions of dollars. It was stressful. I had 130 people in this community program and I had to meet with them every other week. Everybody together. It was exciting. It was real exciting, but stressful."
>
> "I think now that I am retired, I have more time and energy to do exercise. I am healthier now that I am retired! When I worked, I ate more and I had extra weight. I have lost a lot of weight since I retired. I feel better like this."

In addition to spending their time engaging in PA, many of the retired participants described volunteering with various local organizations and community service projects.

> "I also do a lot of community service. This is very strong in my life. A lot of the people that live through the sixties give a lot of themselves. Most of these people have a strong sense of community. I am not sure if the young people today do. I am talking of the really young. Do they have that as strong as we have it? I think that's why people like my friends and me do so much in our community. I have friends who have come back home after retirement, from other parts of the country, so that they can serve the communities they grew up in. Many of us went to the same schools as kids. It's a great feeling to be together with them again. We are serving our communities together. Maybe the younger ones have this too. I am not sure."

Unique horizons. Although most the participants reported being retired (n = 12), two participants reported being employed fulltime. The following is their perspectives on physical activity:

> "If you work with a pick and dig holes all day, then that's exercise. I think after that you are exhausted, and you don't need to do more. They are okay. They did it. Anything that you have to move fast, you are doing it. But the majority of jobs, you don't. You sit! Especially, those who have degrees. Being behind a computer is not exercise. Your body is not working. It's mentally fatiguing, but not physically. It's like a safety valve. Exercise helps you relieve all that stuff."
>
> "I am always exercising. If you climb a ladder, you are exercising. If you are walking outside, you are exercising. If you're lifting wood, you're exercising.

Everything that you do is an exercise. People think exercise that they have to go live in a gym. They don't have to go live in a gym."

One participant described the experience of watching his brother go from being employed to retirement.

"I have a brother that I am trying to go see a doctor, a cardiologist, and because there is something not right, and he is starting to walk a little different. He is not much older than me. He walks different and acts different. Just a year or two ago, he was still working, now all of a sudden he retired and went down hill. He has really gone down hill."

Composite textural description. The participants described retirement as an opportunity to engage in self-care. Those participants, who were recently retired, described retirement as a time to de-stress from decades of service. While others, who have been retired for many years, described rejuvenation and wellness through new health behaviors. Participants who continued to be employed indicated labor at the work-site as sufficient PA, stating that climbing ladders, digging holes, and pushing wheelbarrows is "productive exercise" that results in an end product (i.e., a building or wall). Many of the participants believed that a man will receive health benefits with this type of PA.

Composite structural description. PA and health have various levels of influence. Many of the participants described their work years as a time when they "didn't think about health". Many of them described themselves as "hard-workers" who "went to work and took care of their commitments." A few of the participants believed they were "strong" during their work years and "felt good all of the time." Several of the

participants revealed they didn't engage in PA and self-care "as much as they would have liked to" when they were employed fulltime.

Textural-structural synthesis. Retirement has resulted in new health behaviors for many of the participants in this study. They recalled their work years as being a time for focusing on family responsibilities and not on self-care. They described their work years as a time when they felt good and rarely needed to see a health care provider. This sense of wellness was described as being related to youth and strength. Retirement was expressed as a time for new beginnings and involves self-care, increased family time, and service to their communities.

Women, health care providers, and the Internet are important in promoting health. The invariant constituents or major horizons that provided the living descriptions of this theme involved the participants' wives, doctors, and the Internet. This theme resulted from data that helped address specific aim one and two: 1) factors influencing PA in older MA males, and 2) perceptions of general health, masculinity, and PA. The following major horizons were identified when the participants were asked to describe where they gathered information about their health.

Women. Several participants reported that they gained knowledge about their health from talking with their wives.

"My wife is important in my health and health decisions."

"She is my constant companion."

"I think women are more concerned and interested in people seeing a doctor, whenever necessary, or even when not necessary. They also help us keep appointments. Women have always done health more than men. It's always been

like this. They do way more things when it comes to health. My wife is a believer that if something is wrong, go to the doctor. You know sometimes you may have something wrong for a while, but until it really hits us, then it's time to go to the doctor's. That's another thing, through our culture, we have been used to doing things this way. If you have pain, it's going to go away. Just hang out. Sometimes it does, and sometimes it doesn't. I think there is still a lot of us that we don't go to the doctor until man, you got to go to the doctor."

"I used to avoid going to see the doctor. I didn't feel like I had to go see the doctor and I think one of the reasons I changed was my wife. She stayed on me to get my physical and see my doctor. She prodded me to go. My hesitation was based on the fact that I felt good and I thought I was in pretty good shape. Little did I realize that it's important that you get your physical and see your doctors on a regular basis."

However, one participant reported being hesitant in talking to his wife about his health. He expressed concern over worrying her, and possibly negatively affecting her health.

"Once in a while. It seems like I talk about my health to my wife, and she feels like she hurts more. It's more painful for her. I kind of want to do it alone."

Wives were also described as being motivators for participation in future PA programs that focus on promoting CV health in older MA males.

"I would say that even creating programs with the wives. They have been your partner for life. You depend on each other. You know each other and each other's

desires. I think it may be more successful. Not for every couple, but for us it would. They all have different likes, but it could work."

"You need to include men and women. The women can encourage their husbands."

Many of the participants described their wives as being healthy. They described her as someone who practiced what she preached, lived a healthy lifestyle, had a good diet, was physically healthy, was mentally healthy, worked daily towards health, was spiritual, was calm, exercised daily, had a positive attitude, and was a constant support and education to her family and husband. One participant stated that he and his wife do most of their PA together.

"My wife and I love walking together. She thinks sometimes I go to fast because she loves to go through the neighborhoods and see the houses. She loves to see the decorations in the homes. She is into that. As you can tell, she loves to decorate. We go walking, for example, and we will walk through the neighborhood to see how they did their landscaping. Even when we travel. We lived in San Diego for a long time. We would always do that. She loved to go in the evenings because we lived in Coronado and you could walk all of Coronado and the lights would be turned on so you could see inside to see how they are decorating."

A few of the participants indicated that their wives maintained their doctor appointments. The wives were also credited for helping several of the older MA men maintain a healthy diet.

> "Her diet has influenced my diet. I have diabetes type two. When I found that out back in 1995, I had to change my ways also in terms of eating and it has been a struggle for me, but she has always been there telling me what I can and cannot do. She is a vegetarian basically. She will eat chicken sometimes. She is not always a strict vegetarian, but that is what she leans towards. This morning I had a hard-boiled egg with a Greek yogurt, tomatoes, and walnuts. After a while you start to realize that you can change your habits, because traditionally I go for the big flavors like Mexican flavors, because that is the way I was raised."

Health care providers. Several of the participants reported a good relationship with their doctors. Doctors were reported to be a highly trusted source for health information (*n*=8). When asked to comment on their relationships with their doctors, some of the participants stated:

> "I trust him."
>
> "I have been with her for many years."
>
> "I have good discussions with him."
>
> "I am comfortable with him."
>
> "He motivates me."
>
> "He calls me, not his staff."
>
> "He is current on research and technology."
>
> "He gives out his cellphone number to his patients."

When describing the components for a future PA program for older MA males, a few participants mentioned that doctors could be motivators for participation in PA.

> "The program is probably going to have to be something coming from a doctor. If the doctor said, you have to do this, or this is going to happen to you. 'Cause you know how we are. Hispanics we are going to do, what we want to do, no matter what. We are set on our ways. If push came to shove, and the doctor says you have to or else, you might start thinking about it. Some times some guys are still knuckleheads and they won't do it."

> "If you have the doctor tell them they have to exercise, they will! Some people think they are going to live forever. The thought of illness and disease encourages people to be active. But if you don't like to exercise, you are not going to exercise. You're not! Unless somebody is working with you. A coach. A doctor. It makes you realize that it's not all that difficult. In the long run it will be worthwhile for their health. It is a challenge. Some of my friends have no desire. Heck no! If the doctor said they were going to have a heart attack, it may change their thinking."

Internet. Many of the participants also stated they gathered their health information from an online source (*n* =8). Two participants stated that although they gather a lot of health information online, they always consult their doctor before implementing a remedy. One participant added that if he found something of interest online regarding a new medication, procedure, or exercise, he would share it with his doctor to gain his/her perspective. Another participant described pamphlets as being helpful when gathering information about health.

"I prefer ones that are quick and to the point. Nothing lengthy."

Unique horizons. In addition to their doctors, wives, and the Internet, the participants also felt that their daughter (i.e., naturopathic doctor), sister-in-law (i.e., health insurance agent), brother-in-law (i.e., physician), niece, pharmacist, mother, physical therapist, friends (i.e., both female and male), and brothers were credible sources for information on health. One participant also took pride in being able to share his knowledge of health with others.

> "Hispanic men, they don't like to discuss what they have wrong, but I am different. I found that when I got my diseases, I wanted to let people know so I can help them out. I may know something they don't know, and maybe they can get some knowledge from me."

Composite textural description. Wives, health care providers, and the Internet are integral factors in encouraging this population to engage in health promoting behaviors such as PA. Many of the participants and their wives engage in PA together. Wives are credited for providing healthy meals and maintaining health care appointments for the family. Physicians are a trusted source for health information and are motivators for participation in PA.

Composite structural description. Motivators to health promoting behaviors such as PA were reported to come from knowledge that was gained mostly through discussions with their wives and doctors. The participants also referred to the Internet for information regarding health and wellness. Most of the participants' wives were described as health promoters and considered a vital component to their health care

decision-making. Physicians were always referred to before adopting and implementing health information gathered off of the Internet.

Textural-structural synthesis. The participants in this study refer to their wives, physician, and Internet for information on health and wellness. These sources were described as motivators to engaging in PA. These findings should be considered when developing future PA interventions for older MA males.

Aging changes physical activity. Many of the participants reported that things that encourage or discourage them to be physically active change with age. This theme resulted from data that helped address specific aim two: 2) perceptions of general health, masculinity, and PA. The invariant constituents or major horizons that provided the living descriptions of this theme included:

> "It's the thought of getting old and thinking of the things I may not be able to do anymore."
>
> "I have less energy now."
>
> "I have to take breaks more often."
>
> "My body is breaking down as I get old."
>
> "As I aged, I couldn't run anymore. It made me feel older. But then because I knew that physically my leg wouldn't allow it."
>
> "You know I don't compete with anybody. But I am very competitive. I never say I am going to run more or lift more than somebody else. I am not that person. I am not like that. But, I am real disciplined, in that I thank God that I don't have any weight problems. But if I did, I think of would address it. I think. I don't know. I just keep a strong mentality. I think as I

get older, and I can't do something then I accept it. For example, last year I went to walk Tumamoc Hill and the first time it was okay. But then I got a little tired. So, for me that was a challenge. So, I guess I could say I am more competitive with myself, and my own goals, then I am with other people."

"Not being physically active concerns me. Or being dependent on anybody to do anything physical for me. You don't think about it, but when you do, it scares me. Because I can see that in my Mom. She is 91. My family is pretty healthy. So that would be my greatest fear. Not being to be able to do any physical activity."

When participants were asked to describe someone who they considered healthy, youth was not mentioned. Table Four provides a list of words used by the participants to describe a healthy person.

Table Four.
Healthy Person Descriptors

No medicines (*n*=2)	Does for others (*n*=3)
No smoking (*n*=1)	Is a positive influence (*n*=2)
No drinking (*n*=1)	Places family first (*n*=3)
Good diet (*n*=2)	Trustworthy (*n*=1)
Good weight (*n*=2)	Good judgment (*n*=1)
Exercises (*n*=3)	Mature thinker (*n*=1)
Positive attitude (*n*=3)	Common sense (*n*=1)
Thinks young (*n*=1)	Leader (*n*=1)
Redirects stress (*n*=2)	Communicator (*n*=1)
Prays (*n*=3)	Community involved (*n*=3)
Walks with no help (*n*=3)	Strong mental health (*n*=3)
Calm (*n*=1)	Open-minded (*n*=1)
Enjoys music (*n*=2)	Illnesses are controlled (*n*=1)
Enjoys life (*n*=3)	Physically fit (*n*=2)
Active (*n*=3)	Everything in moderation (*n*=1)
Social (*n*=3)	Educates others (*n*=2)
Industrious (*n*=1)	Educates himself (*n*=2)
Hard-working (*n*=3)	Self-motivated (*n*=2)

Three of the participants felt that being able to walk without assistance was the sign of a healthy person. One of the participates elaborated by stating that he believed being able to walk without help was the result of exercise. Two other participants described exercise as "my medicine" and believed "self-care is medicine."

> "When you are not feeling well, you can bring health back up with eating well and exercise."

Unique horizons. One of the participants felt that a person living with chronic illness could also be described as healthy.

> "Somebody that's healthy is somebody that if they have health issues that has a way to control whatever that illness is. I think if you're informed about issues that you have, you can do things to moderate them, to alleviate them, and to cure

them. Ignorance of things will kill you. But there's opportunities if you catch things in time, or if you are given information to change how you live could keep you healthy and active in the world."

A couple of the participants also felt that health could not be judged solely by the person's participation in PA or their physical appearance.

"You can't be classified as healthy just by the individual's activity."

"You can't tell by looking at someone, unless you see them struggling."

Two participants were very passionate when describing their concept of health and a person's physical appearance.

"When I see 'strengthingly' [sic] active, to me it's like a show-off. It's not to them to look good, it's to show other people that, 'Here I am. I do this. I am a body builder.' It's just a show. It's just a show."

"I have a nephew that he came over here. He used to come over here. He would be tapping his biceps and he'd be saying, 'Look man, look.' I proved to him that it wasn't how big and how strong, or how they look. I turned around and dragged him outside. I said, 'Okay!' He asked, 'Is there anything I can do around here, Tio?' I told him yes, you just volunteered yourself into being the weakling here. I had some blocks out here, and I said, 'We have to take these blocks down to the bottom over there, and we need to stack them properly'. He says, 'Oh, good. Okay.' Me and him started up, and he said, 'How are we going to carry these?' I said, 'Okay, grab one in each hand and carry them down there.' He did one round. The second round, he asked me for a dolly. Which was the wrong thing to ask from me! Me doing all this work by myself. I know when he asked me for a

dolly, I said, ‘You are welcome to the dolly.’ I said, ‘Here it is.’ He loaded it up and he thought he was going to carry it. He went half way and he goes, ‘Oh Tio, I think I am dying! I am having a heart attack.’ I turned around and said, ‘Look, don't cry to me. Go inside. Cry to your Tia. I don't like to hear big men cry.’ Right? He came in here and said to my wife, ‘Oh Tia, I am dying.’ That is the way I proved to him that he could look big and everything, but it's how you use your body. But he won't think differently as he ages. He will always be the same. Machismo. It doesn't change as you age. That's why I say. It's there and built into your mind. It don't matter what anybody says or what anybody does, to you, to show that person, to try to get away from that, it will never get away. It will always be there. Big bodies, look good. But when it comes to strength and moving stuff around, and they give up. That body strength is no good. They could look good, like I said, they can be body builders and everything, when it comes to doing the work, if that strength that they have cannot be used on the work force, it's no good. It's all show!”

“Those body builders look ridiculous to me. A physically active person would be someone like in my build. Sometimes you got guys that are another 50-75 pounds heavier than I am, and they are just as active as any body else. Let me make a point here. My brother, he worked for the city of Tucson. He was about my built and skinnier. He worked for the sanitation department. I always remembered this, when I see the body builders. Sometimes they used to bring in these, muscle dudes, big body builders to show them how to pick up garbage cans. He said he saw these big guys trying to pick up 55-gallon drums full of crap and they

couldn't pick it up. He said, if I could move it with my foot, I can pick it up and dump it. He picked it up and dumped it. Those big guys were just starring with their mouths open. This is the way you do it! You don't have to be muscle bound like you are to do it. Just because you are big muscle bound, it doesn't mean anything. Its just show."

Table Five provides a list of words used by the participants to describe their images of a physically active person.

Table Five.
Active Person Descriptors

Carries themselves differently (*n*=3)	Working man (*n*=3)
Comes in all shapes and forms (*n*=4)	Physically attractive (*n*=1)
You can see it on their face (*n*=2)	Has knowledge on health (*n*=1)
Has vast interests (*n*=1)	Outgoing (*n*=2)
Is a diverse person (*n*=1)	My family (*n*=1)
Not sick looking (*n*=2)	Trim (*n*=3)
Not wasted away (*n*=2)	Not overweight (*n*=4)
Talkative (*n=2*)	Lean muscle (*n*=3)
Social (*n*=2)	Think young (*n*=1)
Likes people (*n*=2)	Big muscles not needed (*n=3*)
Enjoys life (*n*=4)	Looks good (*n*=2)
Lean (*n*=3)	Mobile (*n*=3)
Happy (*n*=6)	Medium sized (*n*=3)
Smiles (*n*=6)	Well-built (*n*=2)
Has a better life	Rock climber (*n*=1)
Stay young (*n*=3)	Strong (*n*=2)
Not too thin (*n*=3)	Mentally strong (*n*=2)
Not too heavy (*n*=3)	

While gathering the descriptors of a physically active person, a couple of the older men shared their thoughts on images of illness.

"You can see everything in their face. Their head low and sad eyes."

"A sick person doesn't speak much. They spend their life locked up in their illnesses. An active person is talkative, social. They want to be around others. They enjoy life. They want to get involved and stay involved with things."

"A sick person can barely walk."

Unique horizons. Two of the participants who reported being inactive in the IPAQ-SF had strong opinions about PA.

"In my situation, I am diabetic and I am supposed to watch what I eat and exercise. But on the exercise, it's just an excuse that I use, probably. It's my legs. I have neuropathy. But there's exercises, for example, in the pool that I can exercise, but I don't. For some reason, I am not into it. It doesn't interest me at all. I know an individual who used to ride a bike to work and now he has hip problems, because of the peddling. He used to bike miles and miles, back and forth. And people running... As a mater of fact, I was reading a book, Jim Fixx, his name is. He was a cross-country runner. Long distance runner. He died of a heart attack. So you're wondering, what's going on? So I maintain my health by watching my diet, but not full bore. If I crave something, I'll eat it. I don't care. I'll eat it. That's me. But, I'm trying to maintain, take my medications, when I am supposed to take them. Sometimes I don't because I feel good. I feel good. My well-being. I feel good, period. And sometimes I take them and sometimes I don't. But I try to keep schedule."

When describing an active person, moderation (as defined by the participants) of food and drink (i.e., alcohol) was also emphasized by two of the participants.

> "The fanatics look a certain way and think a certain way. They go way over board. You can tell those guys a million miles away. Those health nuts. They have their routine, and they live and breathe that, and us that are not really in that category, we do it today, we don't do it tomorrow. We do it the next day, and then maybe not again until next month or year. We aren't supposed to eat that, but we eat it today and not tomorrow. It's one of those things. To be really in really really good health, you have to be in that fanatic state. But then you have those fanatics and they drop dead of a heart attack. So what did it get you? You deprive yourself of the good stuff all those years, and you still drop dead. It has its advantages and disadvantages. An advantage is that you MIGHT live longer a week or two weeks longer. Who knows? The disadvantage is that you did not get to enjoy a lot of the good stuff. For example, here's a big bowl of ice cream. I wish I could eat it, but I already had so-and-so this morning, so I can't have this. Come on! Really? Or let me just get a little spoonful of it. Let me taste it. How much taste can you get out of one spoon? That's BS. Eat it. Enjoy it. Life is too damn short. You understand what I am saying? You have to eat three scoops to get the taste! Like I said, there are health fanatics that drop dead while they are running! Drop dead of a heart attack. That guy who wrote books on how to run and he drops dead."

Composite textural description. Discussion on the concept of health and images of a physically active person invoked reflection for the participants. Health was not always described as being free from illness, rather it was the individuals' ability to obtain knowledge of the disease process and moderate its affects. Walking without help and being able to continue engaging in PA were of most concern for the participants. Factors associated with aging that discouraged PA were decreased energy and aging body systems (i.e., musculoskeletal). Encouragement to engage in PA was found by accepting physical changes related to aging and creating new goals.

Composite structural description. The participants described physical changes secondary to aging. They expressed concern for these physical changes. Many described having significantly less energy. The participants also shared moments when they could "no longer run" or felt their "body was breaking down". The fear of getting old, not be able to do the things they used to, and having to possibly depend on others was encouragement to remain physically active.

Textural-structural synthesis. Not being physically active was reported as a major concern for the participants in this study. They reflected on their younger years when their bodies were stronger and their endurance was endless. A healthy individual was defined in various ways, and did not exclude those living with chronic conditions. The participants described being able to walk and care for oneself was the result of regular PA.

I take care of myself. The invariant constituents or major horizons that provided highlights for the development of this theme were:

"I don't have a problem seeing a doctor."

"I will go to the doctor. I have no issues with that. I am a man and I go see my doctor. If I feel bad, I go. I have always been that way. I need my health. If it was a workday, I would ask to be excused from work."

"Because you are the breadwinner. Because you are the caretaker. Because you are responsible. You owe it to yourself and to your family to take care of yourself. I have always maintained my health. I go to my appointments and I take care of myself. I deal with my pains right away. I was encouraged to call the doctor because I was married to a nurse. She would tell me to call the doctor. That's what the doctors are there for."

"Am I not a man because I go to the doctor? That's ridiculous! If I don't feel good, I go to the doctor. Who is going to take care of me? I am, and I know my doctor knows what I need. He knows what to do. Yes, masculinity can get in the way of some men, but not me. I know some men who don't care for their health and their bodies, but I do. I go see my doctor when I need to. He tells me if I am sick, not sick, and what I need to do. My masculinity has never gotten in my way of seeing my doctor. If I am sick, I go! Those times when I have felt sick, which have been very few, I tell my wife and then we go see my doctor."

A typical man. When the participants were asked to describe a person that they considered manly or a typical man, six out of 14 participants mentioned their fathers.

> "I never thought of this. My Dad. My Dad worked until he was 84-years, and he was a good man. He had his six kids. I was the last one. But, he was a real honest guy. I think the charity part I learned from both him and my mom. They were missionaries and we worked with everyone. I learned that and in fact back in the day where there was no one stop center, or community center, people always came to our house. Our house was the center point when people needed help. We were the only ones who had a phone, right their in South Tucson, a lot of times when guys were in the military they were getting ready to go overseas, they couldn't call their parents so they called our house and we would go and tell their parents. My Dad never smoked. He never drank. In all the years that I knew him, I only heard him say one bad word. He was putting in one of those old steel windows and it fell and crushed his finger and he said, 'Shit!' He told me and my brother, 'I am so sorry. I shouldn't have used that word.' I was able to see and able to learn from that kind of stuff. So I look at my Dad and he was fit, and then when he died he had an enlarged heart. But you know the doctor said it just happened like in the last year of his life. He was never sick. He was really smart."
>
> "Well, my father. He lived to be 101. He was very active and he had a good diet. He was a man because of the way I saw him act around other people. I learned to be a man from him."
>
> "That's a hard one. I guess in a way, my Dad. I still think of him a lot. He has passed, but I would consider him a man. Just his attitude about life. It was pretty

much the attitude that I have taken myself in our everyday life. In everything that we do. I brought it with me, so to speak. I kept a piece of him. There's a saying he used to have is ‘never forget where you came from.’ I kept that. I've watched him. The work he did. He always had the family first, if anything. And I tried to keep that, when I can.”

Table Six provides a list of words used by the participants to describe a person that they consider manly or a typical man.

Table Six.
Manly Descriptors

Father (*n*=6)	Giver (*n*=1)
Active (*n*=1)	Never smoked (*n*=1)
Good diet (*n*=1)	Never drank (*n*=1)
Good manners (*n*=1)	Never cursed (*n*=1)
Educator (*n*=1)	Fit (*n*=1)
Strong (physically/mentally) (*n*=1)	Smart (*n*=1)
Maintained traditions (*n*=1)	Patient (*n*=1)
Instilled culture (*n*=1)	Reserved (*n*=1)
Hard worker (*n*=1)	Humble (*n*=1)
Family first (*n*=3)	Calm (*n*=1)
Honest (*n*=1)	Positive attitude (*n*=1)
Involved in community (*n*=1)	Persistent (*n*=1)
Confident (*n*=1)	Helper to wife (*n*=1)
Military (*n*=1)	Macho (*n*=1)
Dominant (*n*=1)	Slim (*n*=1)
Sacrifices (*n*=1)	Communicator (*n*=1)
Father figure (*n*=1)	Emotional (*n*=1)
King (*n*=1)	Respectful to wife (*n*=1)
Responsible (*n*=1)	Friendly (*n*=2)
Son (*n*=2)	Educated (*n*=1)
Hard working (*n*=1)	An older man (*n*=1)
Athletic (*n*=1)	Brother (*n*=5)
Good provider (*n*=1)	Tough (*n*=1)
Exercises (*n*=1)	Strong willed (*n*=1)
Ahead of the curve (*n*=1)	Police officer (*n*=1)
Open-minded (*n*=1)	Young (*n*=1)
Machismo (*n*=1)	Shows love and concern (*n*=1)
Godfather (*n*=1)	Loves people (*n*=1)
Role model (*n*=1)	

Machismo does not exist for me. The participants were asked to describe how the idea of manhood influences a man's life. A few of the older MA men described manhood as a concept indicative of individuality and uniqueness.

"I think it has a lot to do with their own self-definition of what manhood is. I don't think it follows any traditional practice, or for me it doesn't."

"We make our own definition of how we are going to live everyday, and that changes constantly. It isn't static."

"I think manhood is very individual."

The participants also reported various levels of influence as they aged and developed their ideas of manhood.

"How one views the world."

"How one views themself within the world."

"How one interacts with the different elements in the world."

"Our family, nuclear and extended."

"We learn from the struggles. As we go along, we get stronger."

"We learn from the loves in our lives."

"We learn from politics."

Machismo. Many of the participants related manhood to the concept of machismo. Behaviors that were perceived by the older MA men as machismo were observed in various social settings (e.g., work site and social gatherings).

"I was never exposed to the machismo that may be seen in the traditional Mexican household. My Dad got home early. He cooked. Mom got home early. She cooked. A lot depends on the parents. Maybe through age, young people will gain

more wisdom. It's teamwork that will make a marriage work. You can't expect the other person to do the work. As an administrator in high school, I saw this machismo behavior a lot. Some men didn't take responsibility for raising the kids. These men thought it was the wife's responsibility. Maybe it was because they were out working. You hear this a lot in suspension hearings. If the kid was fortunate enough to have the parents there. It's the mom who was doing most of the talking. Not the Dad."

"When I see macho behaviors, I don't pay it any attention. I don't want to give that any energy."

"I think there are some guys that really get hung up on machismo. I never been hung up on that."

"When machismo comes around they feel like they are the ones in control. Everything in the house. Everything around them. Try to push it to other people. You don't do that. I don't agree with that."

"And I think for my generation there's consequences of that. For example, the idea of manhood, in the Vietnam War era, that's where I grew up. It was a transition point that that sense of being a macho and defending your country, led to disproportionate deaths for Latino males. We were like 20% of the casualties in Vietnam. African-Americans were another 20%. We were half the casualties at that point. We must have been like 10-12% of the population of the country. So there are consequences for that kind of macho, kind of idea. So, the other part of it is to resist that war or that thinking and so you had for example Mohamed Ali that was a role model for me that he had a consciousness of not doing that. He was a

boxer. He was not less masculine. But I think a big part of being masculine is being conscious, and to be thoughtful, and to have the courage to act on what you believe. And then you have César Chavez. He wasn't a big, muscular, physical person. He was courageous, and he was a great male."

"I think I am at a loss there because it wasn't so much because we were Mexican that we were raised the way we were. Because it was an expectation that as a man you are expected to do certain things. I never looked at it as what a Mexican or Anglo does. One good example, when I do watch a Telenovela. I can't relate to those men. I can't relate to the drinkers. The womanizers. The hair on the chest. I am American and don't really identify as Mexican-American. I can't relate to the image that is projected on the screen on TV. I can't relate to that image of the Mexican man."

All of the participants agreed that manhood influence's a man's life. The participants described manhood as a concept that is related to strength, hard work, and responsibility.

"If you are a man, you are considered to be somewhat strong."

"Manhood makes you work harder because you have to. You have responsibilities."

"I worked hard because I wanted to be known as the best worker."

"You came home tired because you gave it your all. It didn't matter what you did because you gave it your all because you were not going to let it be said that you failed. You didn't fail as a man."

Unique horizons. One of the participants described manhood as being a positive and negative influence in a man's life.

> "It could be both, a positive and negative influence. I'd say the negative is eventually, it's going to get to you health wise. The consuming of the alcohol and beer and smoking and all that will eventually get to you. Of course I can't tell you much about my brothers machismo, because I wasn't there with them. But from the overall picture, it was one of those things where all the Hispanics have that they wouldn't do any type of female work. They would get ready to eat, and they would have to get served. The positive part of it would be the camaraderie, but after a while, if you don't grow up inside in your head. Camaraderie is not going to be there all the time for you. So you gotta start thinking about what's ahead for you. Either socially, economically, or health wise. It clicked for me when I had my daughter. I had to change or my wife was going to throw me outside! Everything made sense for me at that point. From my point of view, I thought about those things, but other guys think about it and don't make any changes. Some guys never grow and they are still doing it. How are they still alive? How the hell can they do it still? At 60, 70, and 80 years old they are still downing them, like if they were still 20 years old. I don't get it."

Composite textural description. The experience of being an older MA man is expressed as being responsible for your wellness. It is described as a duty to self and others. Healthy behaviors included regular exercise, monitoring diet, regular doctor and dental visits, and acknowledging acute and chronic illnesses.

Manhood and machismo were expressed as two very different concepts. Machismo was described as practices and behaviors that are not becoming of a man. The participants acknowledged the existence and consequences of the behaviors related to the concept, but did not self-identify with the notion.

Composite structural description. Manhood was described as being observed and learned mostly through the participants' fathers and brothers. Although the idea of manhood was expressed as a self-created definition that is developed with age and experience, the participants linked hard work, family, and respect for women as integral components of manhood.

The participants indicated that machismo is present in the Mexican-American culture, and is observed and learned from older MA male family members and friends. Several of the older MA men reported that they did not witness machismo in their fathers, but that they observed it in some of their peers and brothers.

Textural-structural synthesis. The participants expressed individual definitions of manhood, which did not include any behaviors that are said to be linked to the concept of machismo. They expressed a sense of pride and commitment when it came to making choices that positively affected their health. Lastly, they observed and learned manhood through their fathers and brothers.

Physical activity is a personal choice and lifestyle. This theme resulted from data that helped address specific aim three: the relationship between PA and acculturation. Major horizons for this theme included:

> "I discovered early in life that being a role model is very important and being the first born there are certain responsibilities that come along with being a first-born.

From taking care of your house, to taking care of your children. I had to do the best. I had to be the best. I was pushed to be the best. I was pushed and I pushed myself. I think also think my parents had high expectations. I was going to go to college. That was planted in my mind by my grandparents. So I knew there were no other options. You are going to go to school and that was it. I don't think that's atypical. I think it's typical. I think that parents set the standards and path. You know my mom never graduated from high school. Dad just graduated from high school. There was a lot of pride as well in accomplishing what I have been able to accomplish. Like having my college degree. I acculturated. I don't see that as being an issue. Never completely assimilated although obviously I am assimilated. As you are growing up the challenges you face… It was never about you being Mexican that made me do things this way. You're a man! You got to do it this way. It wasn't about your ethnicity. It was about being a man."

"In the U.S., the Chicano movement did a lot to enlighten people to struggles and being aware of the strategies in which you need to do to over come different burdens."

"For me, it [Chicano movement] redefined the role of the man within the Mexican family."

"You go home one day and realize that this is different now. We are Americans."

Manhood and ethnicity. The participants were asked to describe how manhood for a MA male differed as compared to a male of a different ethnicity. Six of the men believed there was a difference between Anglo men and MA men.

> "We take care of ourselves better. They eat whatever they want. There is a lot of fast food. We eat at the house with our families."
>
> "I think there are cultural differences, and I think minority males navigate the world differently than Anglo males. I think economically there are some things that play into that. Just in terms of employment, and you look at the disproportionate employment rates for Mexican Americans, for African Americans, for the minority population in general. And if manhood is defined by your occupation, or what you do, it's a different way of achieving success. Because if your not able to support your family, if you are not able to do for your children. I mean that's a different way of looking at success. I think it plays out, and right now for example the unemployment rate is 6%, in general. But if you look into minority populations, it's probably double that. If you look at young Mexican American males and females, it's a harder road to rebound from. You have to have some kind of avenue, like education."
>
> "The biggest one I can think of is the whole notion of familia. I think that's a big one. I kind of sometimes look at some of my Anglo friends and they don't have a sense of that. They don't get together on holidays. They don't go out for picnics in the desert and things like that."
>
> "I'd say so, yes. It is different for an Anglo. But how to pinpoint it, I really don't know how to pinpoint it. It may greatly have to do with our Mexican American

culture and traditions. Our Mexican thing is you know, from my point of view, I flare up too quick. I think the Anglo is, not everybody, but majority seem to be calmer in their attitude or disposition. Some times, my attitude don't add up. Ask my boss!"

"Mexican males seem to dominate more than any other ethnicity. They want to dominate the family. That domination is what makes them feel like a man. It's that machismo, and that's really not necessary for life."

"It differs. Culture has something to do with it. Mexican American culture and Mexican culture has always been that you're tough and you got to do things and you got to take care of business. That's the way it is. There is no room for failure. There is no room for giving up. You got to do it."

"Yes, there is a difference. It's typical macho for us. Typical man is the Hispanic man that thinks they are machos. But now it is changing. I think men are realizing that they don't want to be like their uncle or cousin. The way they treat their Tia. They way they treat women, in general. And now that you have all this, domestic abuse. It's turning out. Where before it was subdue. Nobody talked about it. There is more awareness, and hopefully it's helping."

Unique horizons. Four of the older MA men indicated there was no difference between men. This group believed that "a man is a man."

"There is no difference. I think we try to say we are different. A man is a man."

"I think men are the same. They might have different foods that they might eat, but normally they are the same."

"All men are the same. It doesn't matter where you come from."

"When we talk, we all like the same things. We talk about our families. We have the same interests."

The four remaining participants believed manhood was an individual notion and not linked to ethnicity.

"I think it depends on the socioeconomic level. I think that's a factor. Because there is a lot of things that we think alike. Men think alike. Not matter if you're White or Mexican. We share ideas. No matter what our philosophy is, we end up in the same conclusion. I think education has a lot to do with this. Education. I know friends that don't have much education, and they have this machismo and to me it doesn't make any sense. But to them, they try to hold on to it. So, I think education is important. I think socioeconomics is important to consider when looking at this. Sometimes, the situation. The family. Many times, I know men that with age, they change. They change."

"I don't think it's the ethnicity necessarily. I think to me that would be very hard because I think that in any culture and ethnicity you are going to have your progressive thinking and your traditional very hard-core thinking, and people get locked into that. If it works for them, I guess it's okay. But to me, it's not. Because it isn't progressive in terms of how you should grow as a human being."

"I don't think you can say that all the Mexican men are this way, super macho. To try and pigeon hole by culture or ethnicity, I don't like that."

Physical activity. The relationship between acculturation and physical activity was captured in the following statements:

> "What you need to understand is that it [PA] is a part of my life, our life. My dad was active, my wife is active, and my children are active. It's always been that way. My children and grandchildren are all active. It has nothing to do with where my family came from. I guess you can say it is a way of life."
>
> "It's kind of hard to get the Hispanic man interested in anything. I don't know why that is. It's kind of hard to get them involved in their own health. I don't know if it's mistrust. I don't know what it is. It's interesting. I have never been able to pinpoint it, or have anybody tell me why. I don't think it's linked to culture. I don't know. It's just not Mexican men though, but older men, in general. We are just very mistrusting, in many ways. Once you get over that hump, then they are fine. You have to develop a trust. That's the key. When I supervised men that was my biggest challenge, to develop a trust between the workers. You knew they had gotten over that bump when they introduced you to their immediate family. I don't even know if it's linked to masculinity. Maybe it's because they were messed up when they were younger, or taken advantage of throughout their lives. But they are still mistrusting in many ways, outside of the family. But they are not receptive of outsiders. So they hold everything inside and don't share themselves or their families. I think this is true with all men. It doesn't have to be Hispanics. I think it's true with men in any culture. Once they can get over that hump, they can be more open to learning about their health and being active."

Composite textural description. As mentioned earlier in this chapter, forty-two percent of the participants reported being Mexican oriented to approximately balanced bicultural, and forty-two percent of the participants reported strongly Anglo oriented. The participants did not reveal any highlights or experiences in PA that were related to acculturation. The participants described PA as a personal choice and lifestyle that was not necessarily linked to the Mexican or American culture.

Composite structural description. Although the participants didn't indicate a link between PA and acculturation, some of them believed that manhood differed between Anglo men and MA men. Differences were said to be noted in diet choices, sense of family, opportunity, and disposition. The participants believe that machismo is a MA concept and not seen in Anglo men. However, some of the older MA men felt that "a man is a man" with shared ideas and interests.

Textural-structural synthesis. The older MA men did not feel there was any connection between PA and acculturation; however, many of them described notable differences between Anglo and MA men. Still others were firm on the notion that "a man is a man." PA was expressed as a personal choice and lifestyle.

An integral factor of the experience of engaging in PA is the belief that the individual is ultimately responsible for making time to engage in PA. Although the participants expressed the importance of encouraging healthy behaviors among other men (e.g., friends, brothers, sons), the participants believed that the man must be the one who makes the choice to be active.

Learning and making adjustments. This theme resulted from data that helped address specific aim four: the older MA male's experience in promoting health. Half of the older MA male participants described a 'wake-up call' (i.e., diagnosis of chronic condition) as a motivator towards healthier lifestyle choices (e.g., PA and diet). The invariant constituents or major horizons included:

> "I got diagnosed with diabetes two and that made me change. It was a big awakening. I didn't realize it and I got medication and of course with the kind of lifestyle I had, I got high blood pressure and high cholesterol. But then, I decided I've gotta make a change. I've gotta make a change and I did!"
>
> "I came across Silver Sneakers through necessity. When they told me that I had to have a stent, and then you have rehab after that, and that's what started me out. They told me about the program. After the stent, they told me you have to start rehab, and I did. I started going over there on River Rd., where Pima Heart is. I started going to their gym there. They had an exercise program, and that's where I started and I have been going ever since."
>
> "I was motivated because I was fat and because my family has diabetes. It may be different for them. I knew I had to do something, so I started walking. I used to feel so tired before I lost my weight. I looked bad and felt bad. And now I don't. That's what motivated me. I started walking a little bit. A quarter mile, and then half a mile and then I took off."
>
> "It keeps my blood sugar down, and in check and where it should be. It keeps my weight down, too."

"I realized health was important when I developed hypertension and I started seeing a doctor for it."

"I made the change because I took a long hard look at my life and I realized that I needed to exercise more."

Chronic illness. Nine out of 14 participants reported a chronic illness. The following is a list of conditions that were reported by the cohort: diabetes mellitus type II, hypertension, high cholesterol, kidney failure, knee replacements, prostate cancer, shoulder replacements, back problems, cardiac stent, peripheral neuropathy, hip pain, arthritis, and esophageal cancer.

Maintaining health. When asked to describe how they maintained their health, five participants reported walking as their primary source of exercise. Two participants reported walking outdoors with their wives and dogs. While another two participants preferred walking on an indoor track at their local neighborhood center during the hot Tucson summers. One of the male participants reported walking on a treadmill at home. This has not always been his preferred setting to engage in walking. An unfortunate fall outdoors prompted a change.

"I used to walk for miles outside and my wife said, 'You need to buy a treadmill or you will end up on the other side of the city!' I also fell one time walking outside. She worried about me hurting myself while I was out there. So the treadmill was perfect. She bought it for me. Now I can walk miles and if I fall, I fall at home."

Other types of PA used by the participants in order to maintain health included: volunteer coaching, golf, chores at home (e.g., sweeping, cleaning patio, and yard work), gym, cycling (indoors and outdoors), jogging, elliptical machine, weight lifting, and pool time (i.e., laps and water aerobics). The participants described other methods for maintaining health. Table Seven provides a list of words used by the participants to describe how they maintain their health.

Table Seven.
Maintaining Health

Walking (*n*=5)	Think young (*n*=1)
Staying busy (*n*=3)	See dentist regularly (*n*=2)
Staying active (*n*=6)	See cardiologist regularly (*n*=1)
Doing chores (*n*=3)	Enjoy life (*n*=3)
Watching diet (*n*=8)	Read (*n*=1)
Exercise (*n*=7)	Listen to my wife (*n*=1)
Workout (*n*=7)	Music (*n*=2)
Jog (*n*=1)	Don't drink (*n*=1)
Cycle (*n*=3)	Don't smoke (*n*=1)
Weight lift (*n*=1)	Take my medications (*n*=4)
Pool time (*n*=1)	Sleep (*n*=2)
See doctor regularly (*n*=6)	Naps, as needed (*n*=1)
Socialize (*n*=3)	Everything in moderation (*n*=1)
Pray (*n*=2)	Have pets (*n*=1)
Good genes (*n*=1)	Spend time with family (*n*=3)
Keep mind busy (*n*=2)	Avoid stress (*n*=1)
Volunteer (*n*=4)	Remaining calm (*n*=1)
Golf (*n*=1)	Maintain good weight (*n*=3)

Differences between PA and exercise. When asked to describe the difference between the concept of exercise and PA, three of the men reported there was no difference between the two words.

"There is no difference between the two words, exercise and physical activity. I think the main thing is activity. Stay active."

There was no discernable difference between the two concepts while reviewing the transcripts and horizons. One participant reported that he was not sure of any difference between the two words: exercise and PA.

"I think with exercise, you sweat more."

Physical activity was described by a couple of participants as being a "little more casual, like a leisure bike ride." It was further described as an "activity where one stops and then goes. A stop and go kind of thing." Exercise was expressed as pleasure, health, spinning, cycling, walking, sit-ups, gym time, weight lifting, elliptical, a personal choice, dancing, and running. However, both concepts (i.e., PA and exercise) were described as including cycling, working (i.e., job), and dancing.

Five of the male participants described exercise as strenuous and required effort.

"It makes you sweat more."

"Your heart rate is up a little more."

"There is a price for health, and effort is the currency, is the money for it."

"Interventions for life, so you just don't melt away."

Three of the men stated that exercise was a structured activity that "involves a definite set of exercises." It was further said that when you exercise, "you have a certain set of exercises that you are going to do. You have a start and an end in exercise."

Unique horizons. A couple of the participants described work (i.e., job), construction (at home or on a job), and building and maintaining a home as a form of exercise.

> "Doing things that make you get down on your knees. You are picking up things. You're twisting and different ways, using muscles that you normally don't use."
>
> "I use to love to work on cars. Now, I can't do it because they are all electronic. I used to take out motors and work on them. Love to do that. You are bent down, under a car, and then, construction and building. That is definitely a form of exercise. I call it a useful exercise. You are producing a product. When you are doing the gym, lifting, swimming, and running you're exercising for your body only, and maybe some for your mind and maybe losing a few pounds, but you aren't working your mind at the same time like when you are building and working. I think when you are completing a task and exercising you get better rewards. Even when you are pulling weeds, you think about it, and what the yard is going to look like. You plan it and when it's all done, you get better rewards, a nice yard. You get good exercise out of it, too."
>
> "If you work with a pick and dig holes all day, then that's exercise. I think after that you are exhausted, and you don't need to do more. They are okay. They did it. Anything that you have to move fast, you are doing it. But the majority of jobs, you don't. You sit! Especially, those who have degrees. Being behind a computer is not exercise. Your body is not working. It's mentally fatiguing, but not physically. It's like a safety valve. Exercise helps you relieve all that stuff."

Comparing manhood in younger and older MA males. The participants were asked to describe how manhood for a young MA male differs as compared to an older MA male. Several of the men reflected upon their own lives and shared their stories of aging. Many of the participants described their youth as a time when they didn't think about their health. They recalled being strong and free from illness. They described feeling good all the time and rarely saw a doctor. One participant stated, "I don't think I didn't go to the doctor because I was this macho man. I think it was because I was young. I felt good all the time."

A few of the men described being poor and without health insurance as young MA men.

> "There were times as a young man that I was sick, but I didn't have a doctor."
>
> "Most of it was home remedies that the moms and grandmas would know what to do. If you had a fever, you do this. I remember my grandfather used to say, the fever is the man's best friend. It will always tell you when you have an infection or something wrong. So do not take a fever as a bad thing. It's a warning."

As the participants shared their stories, aging was described as a time for learning and making adjustments. Many of them saw themselves changing and being more accepting of things.

> "I think the experience of becoming a father and a grandfather. You experience different situations and I think you learn. You see things differently, than you did when you were younger. Even now, I am learning. I make adjustments. I know when I am right or wrong. If I am wrong, I am wrong. I try to think back when I

was young, and I didn't think much about manhood. I have always been a person that knew right from wrong."

Composite textural description. Walking was the preferred method of PA for this group of older MA males. When the participants were asked to describe components for a future PA program for older MA males, walking was the most popular suggestion. Dancing with their wives was another form of PA that was highly suggested by the participants.

Composite structural description. Several of the participants described moments in their lives that prompted them to reflect and make changes. Being diagnosed with a chronic illness served as a 'wake-up call' for many of the participants. However, some of the participants stated they remained inactive even after being diagnosed with a chronic disease.

Exercise and PA were not seen as two separate concepts. The participants expressed the importance of "just moving", rather than "getting all technical with definitions." Working at a job and completing household chores and tasks were viewed by some of the participants as exercise.

Textural-structural synthesis. The participants shared a moment in their lives when they knew something had to change. Being diagnosed with a chronic illness motivated several of the participants to adopt healthier lifestyles. Walking outdoors in their neighborhoods, or indoors on a treadmill or track was described as their preferred method of PA.

Essence. Varying factors influence healthy behaviors in this group of older MA males. The participants expressed intrapersonal (i.e., knowledge, attitudes, behavior, and self-concept) and interpersonal influences (i.e., social support systems) to engaging in healthy behaviors, such as PA. Retirement was described as a time to heal and adopt new habits that focus on self-care, family, and community. Wives, physicians, and the Internet were sources of health knowledge and motivators to PA. The participants expressed concern with not being able to walk or care for oneself as they aged. PA was viewed as the primary method of prevention to disability and dependence. Manhood was described as being different and unique to the individual, and did not include behaviors that are related to the concept of machismo. The participants described self-care as a commitment to self and others. Acculturation and PA were not linked in this specific group of older MA males. However, some participants believe there are differences between Anglo and MA men. Other participants believe "a man is a man." The participants also believe it is the responsibility of the individual to make time to engage in PA. PA was described as a choice and a lifestyle. The participants described a moment in their lives when they knew they had to make a change. Unfortunately, the diagnosis of a chronic condition was the motivating factor to starting an exercise or walking program.

Focus Group Findings

A focus group was held with five participants to address the study's credibility. These participants ranged in age from 65 to 72 years old. After the completion of the data analysis, six themes emerged which reflected the older MA male's perception of health, masculinity, and PA: a) Retirement promotes self-care behaviors, b) Women, health care providers, and the Internet are important in promoting health, c) Aging changes physical

activity, d) I take care of myself, e) Physical activity is a personal choice and lifestyle, and f) I learn and make adjustments as needed. The themes and essence statement were presented to the participants in order to confirm or adjust the findings. This was also an opportunity to confirm the components for a future PA program for older MA males.

Themes and essence. The six identified themes were shared with the five focus group participants. Participant #1 of the focus group described feeling very strongly about theme e: *physical activity is a personal choice and lifestyle.* "I think it's real easy to make excuses for not taking care of yourself. Yes, it's a choice." Participant #2 agreed and added, "Once you start working out it becomes part of your life, but you need to take that first step. Internally they haven't had the switch turn on." Participant #3 stated, "It's a lifestyle. It's a mindset."

Participant #4 shared his thoughts on theme d: *I take care of myself*. He stated, "We need to make ourselves a priority when it comes to our health. We need to stay well for our families as we get older." Participant #1 added, "I think that men have been taught that working hard is their only identity. We need to reset our brains. We need to think about the things we love to do, like hiking or golfing and make time to be active." Participant #3 commented, "God made my body, but it's my job to take care of it."

Theme b: *Women, health care providers, and the Internet are important in promoting health* was found to be part of the essence when Participant #1 stated, "It's those discussions you have at home with your wives and family that keep you on track. It's a daily conversation. You share what you have heard or read." Theme f: *I learn and make adjustments as needed* was received with strong approval. Participant #5 stated, "Health is a priority, and I feel that my current good health is the result of exercise."

Participant #2 added, “You become smarter as you get older and you know there are physical limitations. Why push those limitations? So you switch over to something else.” Participant #4 commented, “You don’t stop physical activity, you just do something different.”

Future Programming for Older MA males. Many of the participants during the interviews described walking as a good form of PA for older MA males. The focus group agreed with this recommendation. Neighborhoods with proper lightening and safe sidewalks were their setting of choice; however, the participants felt that a neighborhood center with an indoor track would be the ideal setting for the summer months. The focus group agreed with these findings. Church-based PA interventions were also reported during the interviews. Dance classes or Zumba were described as a fun activity that could be shared with their wives. Strength training was not of interest to many of the participants. Most of the men described that their ideal program would include their wives; however, “hanging out with the guys and working out” was also appealing. The focus group strongly agreed with these findings.

Most of the interview participants felt that an older MA man would be ideal as a spokesperson and leader in the PA intervention; however, the focus group described being open to learning from anyone who has knowledge in PA with older adults. Barriers to PA were described by the participants and reiterated by the focus group as a lack of interest in PA, physical limitations, and safety. When the participants were asked about approaches for overcoming these barriers, one participant stated that the lack of interest in PA was being addressed through this formative study. Physical limitations were described as a barrier that should be addressed with a doctor before starting a PA

program. Most of the participants described, “knowing what they can and cannot do and adjusting.” Safety barriers related to features in their communities involved poor lighting and lack of sidewalks. Overcoming these community barriers were not viewed by the participants as an “easy fix”, and would require support at the community and public policy level.

CHAPTER 5

DISCUSSION

Summary of Findings

The purpose of this phenomenological study was to explore the cultural, social, environmental, and gender factors that may influence PA in older MA males. The analysis of the data resulted in six themes that reflected the study's specific aims.

1. Healthy behavior choices such as engaging in PA are influenced by personal qualities and physical and social environments. Retirement, knowledge, and aging are factors that currently represent influences that encourage and discourage PA in this cohort of older MA males.

2. Manhood is an individual definition that is not necessarily linked to behaviors associated with the concept of machismo. The participants observed and learned manhood through their fathers and brothers. Making choices that positively affect their health is a duty and commitment to self and family.

3. PA and acculturation were not associated in this specific cohort. Meaningful differences were described between Anglo and MA men; however, the notion that "a man is a man" was also expressed. PA was described as a personal choice and lifestyle that is adoptable at any time with proper knowledge.

4. A "wake-up" call (i.e., diagnosis of illness or obesity) initiated self-reflection and adoption of PA and diet into the participants' lives. Their preferred method of PA is walking.

5. Future PA programs should consider involving the participant's wife. Walking programs and dancing were often mentioned and recommended. Church-based or

neighborhood center PA interventions were also suggested. An older MA male was the preferred choice as a spokesperson for the PA intervention; however, any person with knowledge on PA and the older adult would be acceptable.

Discussion

The methodology of this study invited participants to describe their views, feelings, and perceptions on general health, masculinity, and PA. The participants were asked specific questions related to culture, social, environmental, and gender factors that may influence physical activity in older MA males. The transcribed one-on-one interviews and focus group session provided data that may be used to develop an evidence-based PA intervention aimed at addressing CVD and men's health disparities.

Masculinity, life, and health. In this study, the participants were asked to describe how the idea of manhood influences a man's life and health. Many of the men described manhood, life, and health as concepts that grow and change with time. These concepts were described as being different for everyone, and not based on any one particular practice or belief. Peak et al. (2010) reported cultural barriers as obstacles to health (p. 26). These findings were not confirmed in this dissertation study; however, the Peak, et al. (2010) study consisted of Latino men aged 18 to 70 years (mean was 42.8 years), and was not stratified according to race, age, ethnicity, or nativity.

Some of the participants spontaneously mentioned machismo during the interviews; however, it was not identified as a barrier to health promotion behaviors among this study's participants. Similar to this study, Elder, et al. (2013) found that a man's age and marital status was a positive predictor for confidence in health promotion behaviors.

Barriers and motivators to health promotion. As noted in the literature, men's morbidity and higher mortality have been linked to gender, masculinity, and social roles (Aguirre-Molina, et al., 2010; Hunter et al., 2007; Joseph, Kaplan, & Pasick, 2007; Linnell & James, 2010; Peak et al., 2010; Rich & Ro, 2002; Sobralske, 2006; Sobralske, 2006a; Waldron, 1995). The literature also reported that Hispanic males considered it a weakness to look after their health (Linnell et al., 2010; Noone & Stephens, 2008). This was not the case in this study. Many of the participants described health-promoting behaviors as a responsibility that must be addressed regularly. This may be related to the general demographic profile of the participants in this dissertation study. The mean age of this study's participants was 71.2 years (*SD* = 4.5). Income was reported at more than $25,000 for 75% of the participants, and 35% described themselves as college graduates. However, the two participants who reported a junior high school level of education described regular visits to their doctor and daily PA as a priority in their lives.

Most of the participants expressed motivation and support for health promoting behaviors such as PA through regular discussions with their wives and health care providers. These findings were similar to those reported by Joseph, et al. (2007) and Linnell & James (2010). Motivators for health promotion in this group of older MA males were also related to health (i.e., good and bad) and concerns for what may come as they get older. Barriers to health promoting behaviors, such as physical activity, were linked to the physiological results of aging and a perceived lack of energy.

Barriers and motivators to PA. Retirement (i.e., "more free time"), knowledge, aging, support systems, health (good and bad), and neighborhood conditions were factors that influenced PA in this group of older MA males. Similarly, Bautista, Reininger, Gay,

Barroso, & McCormick (2011) found barriers to PA in Hispanic males to include lack of time, energy, interest, self-discipline, support systems, equipment, knowledge, poor weather, health, and concern for personal safety.

Additional studies reported several factors positively related to PA among the Hispanic population. These factors included: acculturation, neighborhood environments, health (poor and good), chronic conditions, faith, and social support (Bungum, Thompson-Robinson, Moonie, & Lounsbery, 2011; Marquez & McAuley, 2006; Mier, Ory, Zhan, Wang & Burdine, 2007). Acculturation was not linked to PA in this dissertation study. As discovered in the analysis, most of the participants self-reported on the ARSMA-II as being Mexican oriented to approximately balanced bicultural (n=6) or strongly Anglo oriented (n=6). This indicates that the participants in this dissertation study are fairly acculturated with limited variability to draw any conclusions between acculturation and PA.

This study found that motivators to PA were associated with well-lit neighborhoods, safe sidewalks, and a 'wake-up call' (i.e., newly diagnosed health condition). The participants' concerns for well-lit neighborhoods and safe sidewalks speak to the need to engage local policy makers, such as city planners, to ensure environments support PA. The "wake-up" call may indicate that health care providers could enhance recruitment of older MA men into a PA programs.

Women as health promoters. This study found that the participants' wives played an integral role in promoting health behaviors (i.e., PA, diet, and health care visits). This interpersonal relationship may be important to consider when developing PA interventions for older MA males. These results regarding women as health promoters

partially support research conducted by Sobralske with MA males (2006a). Sobralske (2006a) found that "wives influence men's health status" (p. 136). A notable difference, however, was found between Sobralske's findings regarding the MA males' health seeking behaviors. Sobralske suggested that MA men seek "health care when their sense of masculinity was threatened or impaired" (2006, p. 159). Interestingly, a large majority of the participants in this dissertation study described seeking health care whenever the need arose. The participants described self-care as a duty to self and others. One explanation for the difference in findings may be related to the age and working status of the participants. The MA males in Sobralske's study ranged in age from 24 – 73 years, with a mean age of 47 years. The mean age of the MA male participants in this dissertation study was 71.2 years (*SD* = 4.5 years) with all but two being retired.

Another explanation could be related to education, level of income, and/or acculturation levels of the participants in the two different studies. The demographic characteristics of the participants in the Sobralske (2006a) study were described as: 1) "the average grade being 12 or its equivalent by completion of a General Equivalency Diploma, 2) five participants born in Texas and three in Mexico, and 3) the number of years they lived in the United States ranged from five to 73 years" (p. 133). In this dissertation study, 35% of the participants graduated from college with 28.6% having earned a master's degree. In addition, all of the older MA men in this study reported being born and raised in the United States of America.

In another study, Peak et al. (2010) found that husbands and wives made health-promoting decisions together. These findings were confirmed in this dissertation study. Many of the participants described a partnership with their spouses. The wives were viewed as an important component to their health decision-making.

Limitations

The limitations to this study warrant discussion. The sample size consisted of 8 bilingual older MA males and 6 monolingual older MA males. Although the monolingual participants described themselves as Spanish-speaking only, during the interviews two of the men attempted to answer the interview questions in English. The two participants described their knowledge of the English language as "poquito" (i.e., small amount). Future research examining PA and acculturation should consider length of stay in the host country.

The estimate of PA levels in this group of older MA males was based on the IPAQ-SF, a self-report. Research has found that self-reporting may result in estimated PA levels "much greater than those obtained from objectively measured data" (Berrigan, et al., 2005, p. 155).

This study was stratified according to language and included older MA males aged 65 years and older. It was noted that the bilingual participants appeared to have a higher level of interest and receptiveness during the interviews. Monolingual participants appeared to have a higher level of caution when responding to the interview questions. This may have been the result of a few of the bilingual participants being familiar with the primary investigator of this study.

Despite these limitations, this study found that older MA males have specific challenges that must be considered when developing evidence-based PA interventions focused on addressing CVD and men health disparities.

Implications for Theory

The SEMHP was the theoretical basis for this study. The model views health promotion broadly through an understanding of relationships between individuals and diverse environments (Best et al., 2003). Using the SEMHP in this study provided a thorough and broader view of the relations between various levels of influence on PA among older MA males.

The SEMHP has highlighted the various influences on healthy behaviors (e.g., PA) among older MA males. Synthesized findings from this study positioned themselves within the commonly used layered structure of the SEMHP. This study identified correlates of PA among the model's multiple levels. Individual and family influences were described as barriers and motivators to PA. Lighting and safe sidewalks was of concern when engaging in neighborhood walks. These findings support the importance of considering multiple components of influence when designing PA interventions among older MA males.

Application of the core principles of the SEMHP during the entire research process brought awareness to the various influences on health behaviors. The identified influences were noted across multiple levels (i.e., intrapersonal, interpersonal, community factors, and public policy) in varying degrees. In this study, the most significant influences were identified in the intrapersonal, interpersonal, and public policy layers of

the model. Although these layers were most significant, all levels of influence should be considered when developing PA interventions.

Implications for Future Research

Evidence-based PA programs aimed at promoting CV health in older MA males are non-existent. This study is the first step in a program of research designed to develop evidence-based PA interventions to address health disparities among older MA men.

Future studies should include the development and pilot testing of an evidence-based PA intervention for older MA males. Development of a PA intervention for older MA males should reflect the findings of this formative study. A walking program or dance class, such as Zumba, "would be fun" and could be led or co-led by an older MA male. The Internet was a preferred source of health knowledge for these particular men; therefore, a PA program may consider using a web-based or other technology-based approach to compliment a face-to-face intervention. The PA intervention should also expand generalizability and involve participants and their wives. It would be worth investigating this interpersonal relationship and how it may promote CV health in both older men and women. Future studies should also include full-scale randomized controlled trials where evidence-based PA programs are tested for acceptability, feasibility, and efficacy.

Another implication that should be considered in future studies is classifying Hispanic men into subgroups according to race, age, ethnicity, socioeconomic status, and nativity. This will increase the opportunity to identify and appropriately address the health disparities experienced by each subgroup (Aguirre-Molina et al., 2010). These findings may be useful in exploring the differences among various groups of men.

Another area to consider is the effect of retirement on health promotion. Many of the participants in this study were retired; however, a couple of the participants reported being employed. Employment was not related to participation in PA; however, some of the participants described retirement as a time to de-stress and focus on self-care. Future studies should investigate the impact of retirement on health promoting behaviors among older MA males.

Conclusion

Fourteen older MA males participated in this one-of-a-kind phenomenological study. Interviews resulted in six themes: a) Retirement promotes self-care behaviors, b) Women, health care providers, and the Internet are important in promoting health, c) Aging changes physical activity, d) I take care of myself, e) Physical activity is a personal choice and lifestyle, and f) I learn and make adjustments as needed. A focus group of five participants addressed the study's credibility.

The results of this study have increased the understanding of health, masculinity, and PA in older MA males; however, the lack of attention that has been given to researching this population is unfortunate and evident in the literature. There is still much that we don't understand about health disparities and social determinants of health in older MA males. In order to identify problems, target resources, and design interventions, reliable data must continue to be gathered. Researchers must look towards initiating change by tracing the pathways by which various factors contribute to the development of health disparities, and then translating that knowledge into action (IOM, 2012; Marmot & Wilkinson, 2006).

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APPENDIX A

HUMAN SUBJECTS DOCUMENT

Steven Hooker
SNHP - Exercise and Wellness 602/496-1727 Steven.Hooker@asu.edu

Dear Steven Hooker:
On 4/28/2015 the ASU IRB reviewed the following protocol:

EXEMPTION GRANTED

Type of Review:	Initial Study
Title:	Barriers & Motivators to Physical Activity in Older Mexican American Men
Investigator:	Steven Hooker
IRB ID:	STUDY00002429
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Attrition Log in Spanish.pdf, Category: Recruitment Materials; • Clarification to Questions for Study 00002429.pdf, Category: Other (to reflect anything not captured above); • Focus Group Consent Spanish.pdf, Category: Consent Form; • HRP-503a, Category: IRB Protocol; • Revised Consent, Category: Consent Form; • Recruitment Script Revised Spanish.pdf, Category: Recruitment Materials; • Interview Consent Revised Spanish.pdf, Category: Consent Form; • Key Informant Questions English.pdf, Category: Recruitment Materials; • Demographic Questionnaire.pdf, Category: Recruitment Materials; • Key Informant Spanish.pdf, Category: Recruitment Materials;
	• REVISED Recruitment Script.pdf, Category: Recruitment Materials; • Focus Group Consent English version, Category: Consent Form; • Translation Certification Form, Category: Consent Form; • Demographic Spanish.pdf, Category: Recruitment Materials; • AcculturationScale-Bilingual.pdf, Category: Recruitment Materials; • Attrition Log.pdf, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 4/28/2015.
In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).
Sincerely,
IRB Administrator
cc: Evangeline Dowling Evangeline Dowling

APPENDIX B

RECRUITMENT MATERIALS ENGLISH VERSIONS

Arizona State University College of Nursing & Health Innovation

Recruitment Script

Barriers & Motivators to Physical Activity in Older Mexican American Men

I am Evangeline Dowling, a graduate student under the direction of Professor Steven P. Hooker in the School of Nutrition and Health Promotion at Arizona State University. I am conducting a research study to explore the cultural, social, environmental, and gender factors which may influence physical activity in older Mexican American men living in Tucson, Arizona.

I am recruiting Mexican American men aged 65 and older to participate in a one hour one-on-one audiotaped interview to answer 22-questions. You will be asked about the health of men, masculinity, and physical activity. All audiotaped interviews will be locked in Evangeline's personal office and the tapes will be erased upon completion of the study.

Your participation in this study is voluntary. If you have any questions concerning the research study, please call Evangeline Dowling at 520-256-2808. May I schedule you to participate in this study?

ID # _____
Date _____

Attrition Log

Barriers & Motivators to Physical Activity in Older Mexican American Men

DATE	REASON(S) FOR LEAVING STUDY
	1. Please check the response(s) that reflects your reasons for leaving the study. Please check all that apply. ____There were too many interview questions. ____The interview took too long. ____There was too much paperwork to read and sign. ____I was too overwhelmed to participate in the study. ____The interview questions made me feel uncomfortable. 2. If your reason(s) for leaving the study is not listed above, please use this space to provide your reason(s) for leaving the study.

APPENDIX C

RECRUITMENT MATERIALS SPANISH VERSIONS

Universidad Estatal de Arizona Colegio de Enfermería e Innovación de Salud

Guion de Reclutamiento

Barreras y Motivaciones Para la Actividad Física en Hombres Mayores México-Americanos

Hola soy Evangeline Dowling, estudiante de posgrado bajo la dirección de el Profesor Steven P. Hooker en la Escuela de Nutrición y Promoción de Salud en la Universidad Estatal de Arizona. Estoy llevando a cabo un estudio para explorar los factores culturales, sociales, del medio ambiente y de genero que puedan influenciar en la actividad física en hombres mayores México-Americanos que viven en Tucson, Arizona.

Estoy reclutando a hombres México-Americanos mayores de 65 años de edad a participar en una entrevista uno a uno, grabada y de una hora para que conteste 22 preguntas. Se le preguntara sobre la salud de los hombres, la masculinidad y la actividad física. Todas las entrevistas grabadas estarán bajo llave en la oficina personal de Evangeline y las cintas de audio serán borradas después del estudio.

Su participación es voluntaria. Si tiene alguna pregunta al respecto sobre el estudio de investigación, por favor llame a Evangeline Dowling al número 520-256-2808. ¿Puedo hacer una cita con usted para participar en el estudio?

ID # _____
Fecha _____

Registro de Abandono de Estudio

Barreras e Incentivos a la Actividad Física en Hombres Mayores México-Americanos

FECHA	RAZONES PARA ABANDONAR EL ESTUDIO
	1. Por favor marque la respuesta(s) que indique la razón de abandonar el estudio. Marque las que correspondan. ____Hubo muchas preguntas en el cuestionario. ____La entrevista duro mucho tiempo. ____Hubo mucho papeleo que leer y firmar. ____Fue abrumador participar en el estudio. ____Las preguntas de la entrevista me hicieron sentir incomodo. 2. Por favor use este espacio si la razón(es) por abandonar el estudio no fue mencionadas anteriormente, utilice el espacio disponible para escribir su razón.

APPENDIX D

SUBJECT INFORMED CONSENT ENGLISH VERSION

Arizona State University Consent Form: Social Behavioral

Title of research study: Barriers and Motivators to Physical Activity in Older Mexican American Men

Investigator: Evangeline M. Dowling

Why am I being invited to take part in a research study?

We invite you to take part in this research study because you have identify yourself as a Mexican American man aged 65 and older.

Why is this research being done?

The purpose of this study is to explore the cultural, social, environmental, and gender factors which may influence physical activity in older Mexican American men living in Tucson, Arizona.

How long will the research last?

We expect that individuals will spend one hour with Evangeline answering the twenty-two interview questions and providing information on demographics and acculturation.

How many people will be studied?

We expect about 12 older Mexican American men will participate in this research study.

What happens if I say yes, I want to be in this research?

Evangeline will schedule a convenient date and time for you to conduct the interview with her. At that time, you will read and sign an informed consent and have all of your questions answered. Once the interview is complete, you will receive a $25 grocery gift card. At this point, you will be asked about participating in a focus group to confirm or adjust the identified themes and statements gathered during your one-on-one interview. Your participation in the focus group is voluntary. You may choose not to participate or to withdraw from the focus group at any time, without any consequences to your overall participation.

What happens if I say yes, but I change my mind later?

You can leave the research at any time. It will not be held against you.

Is there any way being in this study could be bad for me?

The likelihood of experiencing physical and/or psychological risks in this study is very small. A potential physical risk may be getting tired as a result of answering the interview questions. You may feel that some questions will be stressful or upsetting, and you don't have to answer anything you don't want to.

What happens to the information collected for the research?

The results of the study will be presented in a way that participants cannot be identified. Audiotapes and all information about you will be stored in a locked file cabinet in

Evangeline's personal office located at the University Of Arizona College Of Nursing. All computer files generated from this study will be protected with a password.

Who can I talk to?

If you have questions, concerns, or complaints, you may call Evangeline Dowling, the study investigator, at (520) 256-2808, or Dr. Steven Hooker at (602) 827-2280.

This research has been reviewed and approved by the Social Behavioral IRB. You may talk to them at (480) 965-6788 or by email at research.integrity@asu.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

APPENDIX E

SUBJECT INFORMED CONSENT SPANISH VERSION

Universidad Estatal de Arizona, Forma de Consentimiento: Comportamiento Social

Título del estudio: Barreras y motivadores a la actividad física en hombres México-Americanos mayores

Investigador: Evangeline M. Dowling

¿Porque he sido invitado a tomar parte de este estudio de investigación?
Le hemos invitado a formar parte de éste estudio porque usted se ha identificado como un hombre México-Americano mayor de 65 años.

***¿Por qué se está haciendo esta* investigación *El propósito de este estudio es explorar*?**
las y los factores culturales, sociales, ambientales género que pueden influir en la actividad física en los hombres méxico-americanos mayores que viven en Tucson, Arizona.

¿Cuánto tiempo durará la investigación?
Esperamos que las personas van a pasar una hora con Evangeline respondiendo a las veintidós preguntas de la entrevista.

¿Cuántas personas se estudiarán?
Esperamos que participarán unos 12 hombres México-Americanos mayores en este estudio de investigación.

¿Qué pasa si digo que sí, yo quiero estar en esta investigación?
Evangeline programará una fecha y hora conveniente para que usted pueda realizar la entrevista con ella. En ese momento, usted va a leer y firmar un consentimiento informado y tener todas sus preguntas contestadas.

¿Qué pasa si digo que sí, pero cambio de opinión más adelante?
Puede dejar la investigación en cualquier momento. No se llevará a cabo nada en su contra.

¿Hay alguna manera que al estar en este estudio podría ser malo para mí? La probabilidad de experimentar los riesgos físicos y / o psicológicos en este estudio es muy pequeño. Un riesgo potencial físico pudiera ser cansancio como resultado de responder a las preguntas de la entrevista. Usted puede sentir que algunas preguntas serán estresantes o molestas, y usted no tiene que responder a cualquier cosa que usted no desea.

¿Qué sucede con la información recogida por la investigación?
Se hará lo posible para limitar el uso y divulgación de su información personal, incluyendo registros de estudios de investigación, a las personas que tienen una necesidad de revisar esta información. No podemos prometer completa secrecía. Las organizaciones que pueden inspeccionar y copiar su información incluyen el Consejo de la Universidad que revisa la investigación y las agencias federales que quieren asegurarse

de que los investigadores están haciendo su trabajo correctamente y la protegiendo su información y derechos. Esta firma de consentimiento, cintas de audio, y toda la información sobre usted se almacenará en un archivero bajo llave en la oficina personal de Evangeline ubicado en la Universidad de Arizona Colegio de Enfermería. Todos los archivos informáticos generados a partir de este estudio estarán protegidos con una contraseña. Si hay algunos informes o publicaciones sobre este estudio, su nombre no estará en ellos.

¿Con quién puedo hablar?
Si usted tiene preguntas, inquietudes o quejas, puede llamar a Evangeline Dowling, investigadora principal del estudio, al (520) 256 -2808.

Esta investigación ha sido revisada y aprobada por el comportamiento social IRB. Usted puede hablar con ellos al (480) 965-6788 o por correo electrónico a research.integrity@asu.edu si:

- Sus preguntas, inquietudes o quejas no están siendo respondidas por el equipo de investigación.
- No puede contactar al equipo de investigación.
- Si quieres hablar con alguien además del equipo de investigación.
- Tiene preguntas sobre sus derechos como participante de la investigación.
- Usted quiere obtener información o proporcionar información sobre esta investigación.

APPENDIX F

DATA COLLECTION INSTRUMENTS ENGLISH VERSIONS

ID # _____
Date _____

Demographic Questionnaire

Barriers & Motivators to Physical Activity in Older Mexican American Men

This questionnaire asks about you. This information is necessary to learn more about the older Mexican American male population in Tucson, Arizona. The information you share with us will not be used to identify you. All questionnaires will be locked in Evangeline's personal office and destroyed after the study is complete. If you prefer not to answer some or all of these questions, please leave them blank.

1. What is your age in years? _____
2. What is your gender? _____
3. Are you of Mexican descent? _____
4. How many years have you lived in the United States? _____
5. How many people are currently living in your household? _____
6. Who do you currently live with? Please check all that apply.
    - I live alone _____
    - I live with my wife or partner _____
    - I live with my children _____
    - I live with my grandchildren _____
    - I live with my friends _____
    - I live with other family members _____
7. What is your marital status?
    - Married _____
    - Never married _____
    - Separated _____
    - Divorced _____

- Widowed _____

8. What is your level of education?

    - Never attended school _____
    - Elementary school (grades K through 6) _____
    - Junior high (grades 7 and 8) _____
    - Some high school _____
    - High school graduate _____
    - GED _____
    - Some college/vocational training _____
    - Trade school/vocational training graduate _____
    - College graduate _____
    - Graduate school _____

9. What language do you mostly speak at home?

    - English _____
    - Spanish _____

10. What language do you mostly read at home?

    - English _____
    - Spanish _____

11. Do you have a paying job?

    - Yes _____
    - No _____
    - I am retired _____

12. If you work, what type of work do you do?

_____

13. What is your annual family income?

- More than $25,000 _____
- $20,000 - $25,000 _____
- $15,000 - $20,000 _____
- $10,000 - $15,000 _____
- Less than $10,000 _____

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ACCULTURATION / *ACULTURACIÓN*

The following questions are about how much you identify with the Mexican culture and the American culture. Please indicate how often you do each of the following.
Las siguientes preguntas son acerca de cuánto se identifica con la cultura Mexicana y la cultura Americana. Por favor indique con qué frecuencia hace cada una de las siguientes.

	Not at all *Nunca*	**Very little or not very often** *Un poquito o a veces*	**Moderately** *Moderadamente*	**Much or very often** *Mucho o muy frecuente*	**Extremely often or almost always** *Muchísimo o casi todo el tiempo*
1) I speak Spanish *Hablo Español*	1	2	3	4	5
2) I speak English *Hablo Inglés*	1	2	3	4	5
3) I enjoy speaking Spanish *Me gusta hablar en Español*	1	2	3	4	5
4) I associate with Anglos *Me asocio con anglos*	1	2	3	4	5
5) I associate with Mexicans and/or Mexican Americans *Me asocio con Mexicanos o con Mexicano Americanos*	1	2	3	4	5
6) I enjoy listening to Spanish language music *Me gusta la música Mexicana (música en idioma Español)*	1	2	3	4	5
7) I enjoy listening to English language music *Me gusta la música en idioma inglés*	1	2	3	4	5
8) I enjoy Spanish language TV *Me gusta ver programas en la televisión que sean en Español*	1	2	3	4	5
9) I enjoy English language TV *Me gusta ver programas en la televisión que sean en Inglés*	1	2	3	4	5
10) I enjoy English language movies *Me gusta ver películas en Inglés*	1	2	3	4	5
11) I enjoy Spanish language movies *Me gusta ver películas en Español*	1	2	3	4	5
12) I enjoy reading (e.g. books) in Spanish *Me gusta leer (libros) en Español*	1	2	3	4	5
13) I enjoy reading (e.g. books) in English *Me gusta leer (libros) en Inglés*	1	2	3	4	5

	Not at all *Nunca*	**Very little or not very often** *Un poquito o a veces*	**Moderately** *Moderadamente*	**Much or very often** *Mucho o muy frecuente*	**Extremely often or almost always** *Muchísimo o casi todo el tiempo*
14) I write (e.g. letters) in Spanish *Escribo (cartas) en Español*	1	2	3	4	5
15) I write (e.g. letters) in English *Escribo (cartas) en Inglés*	1	2	3	4	5
16) My thinking is done in the English language *Mis pensamientos ocurren en el idioma inglés*	1	2	3	4	5
17) My thinking is done in the Spanish language *Mis pensamientos ocurren en el idioma Español*	1	2	3	4	5
18) My contact with Mexico has been *Mi contacto con México ha sido*	1	2	3	4	5
19) My contact with USA has been *Mi contacto con los Estados Unidos ha sido*	1	2	3	4	5
20) My father identifies/identified himself as 'Mexicano' *Mi padre se identifica (o se identificaba) como Mexicano*	1	2	3	4	5
21) My mother identifies/identified herself as 'Mexicana' *Mi madre se identifica (o se identificaba) como Mexicana*	1	2	3	4	5
22) My friends, while I was growing up, were of Mexican origin *Mis amigos(as) de mi niñez eran de origen Mexicano*	1	2	3	4	5
23) My friends, while I was growing up, were of Anglo origin *Mis amigos(as) de mi niñez eran de origen Anglo Americano*	1	2	3	4	5
24) My family cooks Mexican foods *Mi familia cocina comida Mexicana*	1	2	3	4	5

	Not at all ***Nunca***	**Very little or not very often** ***Un poquito o a veces***	**Moderately** ***Moderadamente***	**Much or very often** ***Mucho o muy frecuente***	**Extremely often or almost always** ***Muchísimo o casi todo el tiempo***
25) My friends now are of Anglo origin *Mis amigos recientes son Anglo Americanos*	1	2	3	4	5
26) My friends now are of Mexican origin *Mis amigos recientes son Mexicanos*	1	2	3	4	5
27) I like to identify myself as an Anglo American *Me gusta identificarme como Anglo Americano(a)*	1	2	3	4	5
28) I like to identify myself as Mexican American *Me gusta identificarme como Mexicano(a) Americano(a) (Estadounidense de origen mexicano)*	1	2	3	4	5
29) I like to identify myself as Mexican *Me gusta identificarme como Mexicano(a)*	1	2	3	4	5
30) I like to identify myself as an American *Me gusta identificarme como Americano(a)*	1	2	3	4	5

INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE (IPAQ)

We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.

Think about all the **vigorous** activities that you did in the **last 7 days**. **Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

1. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, aerobics, or fast bicycling?

   _____ **days per week**

   ☐ No vigorous physical activities → ***Skip to question 3***

2. How much time did you usually spend doing **vigorous** physical activities on one of those days?

   _____ **hours per day**
   _____ **minutes per day**

   ☐ Don't know/Not sure

Think about all the **moderate** activities that you did in the **last 7 days**. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Think only about those physical activities that you did for at least 10 minutes at a time.

3. During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking.

   _____ **days per week**

   ☐ No moderate physical activities → ***Skip to question 5***

4. How much time did you usually spend doing **moderate** physical activities on one of those days?

_____ **hours per day**
_____ **minutes per day**

☐ Don't know/Not sure

Think about the time you spent **walking** in the **last 7 days**. This includes at work and at home, walking to travel from place to place, and any other walking that you have done solely for recreation, sport, exercise, or leisure.

5. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time?

_____ **days per week**

☐ No walking → ***Skip to question 7***

6. How much time did you usually spend **walking** on one of those days?

_____ **hours per day**
_____ **minutes per day**

☐ Don't know/Not sure

The last question is about the time you spent **sitting** on weekdays during the **last 7 days**. Include time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television.

7. During the **last 7 days**, how much time did you spend **sitting** on a **week day**?

_____ **hours per day**
_____ **minutes per day**

☐ Don't know/Not sure

This is the end of the questionnaire, thank you for participating.

ID # _____
Date _____

Key Informant Questions

The purpose of this project is to develop a physical activity program for older Mexican-American males. The information will help us understand how older Mexican-American males feel about their general health, masculinity, and physical activity. The questions in this interview will be provided to older Mexican-American men who are 65-years and older.

General Health

1. Think of someone you consider healthy. Describe that person. What makes that person healthy?
2. How do you maintain your health?
3. Where do you gather your information about health?
    a. Place
    b. Person
    c. Source
4. Who do you talk to about your health?

Masculinity (Characteristics of a Man)

5. Think of someone you consider manly or a typical man. Describe that person. What makes that person manly?
6. How does the idea of manhood influence a man's life? How does manhood differ for a Mexican-American man as compared to a man of a different ethnicity?
    a. How does manhood differ for a young Mexican-American man as compared to an older Mexican-American man?
    b. How is the idea of manhood influenced by the Mexican-American culture or traditions?
    c. How does the idea of manhood influence health?

General Activity

7. Tell me about the types of things you do in your free time. (If they don't have free time, ask what they would like to do if they had free time).
8. What comes to mind when you hear the word "exercise"?
9. What comes to mind when you hear the words "physical activity"?

DEFINE PHYSICAL ACTIVITY FOR PARTICIPANT:
During the rest of the interview, I am going use the word physical activity to mean any activity that you do, including both structured activity (such as a recreational basketball game or exercise class) or unstructured activities (such as riding a bicycle or walking).

Physical Activity Preferences

10. Tell me about your daily activities.
11. What types of physical activities do you like to do?
    a. Why do you like these activities?
    b. How often do you do them?
    c. Where do you do them?
    d. Who do you like to do them with?
12. What types of activities do you dislike or avoid?
    a. Why do you dislike them?
13. How have the physical activities you like or dislike changed as you aged?
14. How do you feel about strength training (i.e. lifting weights and body weight exercises) as a physical activity?

Physical Activity and Health

15. What images come to mind when you think of someone who is physically active?
16. What benefits, if any, does a man get from being physically active?
    a. Health benefits?
    b. How much physical activity do you think a man needs to do to get health benefits?
        i. Times per week?
        ii. Times per session?
        iii. How hard (intensity)?
17. What concerns do you have about being physically active?

Physical Activity Barriers and Facilitators

18. What makes it easy or difficult for you to be physically active?
19. What features of your community make it easy or difficult for you to be physically active?
    a. How could these barriers be removed?
        i. Crime, safety?
        ii. Traffic?
        iii. Lack of access or convenience to parks, trails, places to be active?
        iv. Sidewalks?
        v. Programs offered?
        vi. Climate?
        vii. Transportation services?
20. How do family members or friends help or get in the way of you being physically active?
    a. What do family members or friends say or do that help or gets in the way of you being physically active?
    b. What do others say to you about "taking it easy" or resting now that you are older?
21. How do the things that encourage or discourage you to be physically active change with age?

Physical Activity Programming

22. Imagine that you have been asked to help plan a program to get Mexican-American men 65-years and older to be physically active. Describe the program you would put together.
    a. What physical activities would you recommend they do?
    b. Where would you plan to do these physical activities?
    c. Where would you find community support for these physical activities?
        i. Church?
        ii. Worksite?
        iii. Barber Shop?
        iv. Senior Center? (e.g., El Pueblo Neighborhood Center)
        v. Social Organizations (i.e. Alumni Club)
        vi. Other?
    d. How would you market this program to older men?
    e. Who would you suggest as a spokesperson or role model for this program?
    f. What would you say to a friend to get him to join the program?
    g. How could they make it fun for older men to be active?
    h. How could they make it popular for older men to be active?
    i. How would you overcome some of the barriers we discussed earlier?

Any Other Thoughts

23. Is there anything else you would like to add to this discussion? If so, please share.

APPENDIX G

DATA COLLECTION INSTRUMENTS SPANISH VERSIONS

ID # _____
Fecha _____

Cuestionario Demográfico

Barreras e Incentivos a la Actividad Física en Hombres Mayores México-Americanos

Este cuestionario es sobre usted. Esta información es necesaria para aprender mas acerca de la población mayor de hombres México-Americanos de Tucson, Arizona. La información que usted comparta con nosotros no será utilizada para identificarlo. Todos los cuestionarios estarán bajo llave en la oficina personal de Evangeline y serán destruidas al terminar el estudio. Si prefiere no contestar algunas o todas las preguntas de este cuestionario, por favor dejarlas en blanco.

1. Cuantos años tiene? _____
2. Cual es su genero sexual? _____
3. Es usted de ascendencia Mexicana? _____
4. Cuantos años tiene viviendo en los Estados Unidos? _____
5. Actualmente cuantas personas viven en su casa? _____
6. Actualmente con quien vive? Por favor, marque lo que corresponda.
    - Vivo solo _____
    - Vivo con mi esposa o compañera _____
    - Vivo con mis hijos _____
    - Vivo con mis nietos _____
    - Vivo con mis amigos _____
    - Vivo con otros miembros de mi familia _____
7. Cual es su estado civil?
    - Casado _____
    - Nunca he sido casado _____
    - Separado _____

- Divorciado _____
- Viudo _____

8. Cual es su nivel de educación?
    - Nunca fui a la escuela _____
    - Escuela Primaria (de Kínder a 6to) _____
    - Secundaria (grados 7 y 8) _____
    - Algo de preparatoria _____
    - Graduado de preparatoria _____
    - GED _____
    - Algo de colegio/educación vocacional _____
    - Graduado de escuela comercial/entrenamiento vocacional _____
    - Graduado de Universidad _____
    - Posgrado _____
9. Cual idioma habla primordialmente en casa?
    - Ingles _____
    - Español _____
10. Cual idioma lee primordialmente en casa?
    - Ingles _____
    - Español _____
11. Tienes un trabajo que paga?
    - Si _____
    - No _____

- Estoy retirado _____

12. Si trabaja, que tipo de trabajo hace usted?

    _____

13. Cual es el ingreso anual de su familia?

    - Mas de $25,000 _____
    - $20,000 - $25,000 _____
    - $15,000 - $20,000 _____
    - $10,000 - $15,000 _____
    - Menos de $10,000 _____

REFERENCES

McEwen, M.M & Murdaugh, C. (2012). Demographic data form. *University of Arizona College of Nursing, Family Diabetes Study.*

United States Census Bureau. (2014). State and county quick facts. Retrieved from http://quickfacts.census.gov/qfd/states/04/0477000.html

ACCULTURATION / *ACULTURACIÓN*

The following questions are about how much you identify with the Mexican culture and the American culture. Please indicate how often you do each of the following.
Las siguientes preguntas son acerca de cuánto se identifica con la cultura Mexicana y la cultura Americana. Por favor indique con qué frecuencia hace cada una de las siguientes.

	Not at all *Nunca*	**Very little or not very often** *Un poquito o a veces*	**Moderately** *Moderadamente*	**Much or very often** *Mucho o muy frecuente*	**Extremely often or almost always** *Muchísimo o casi todo el tiempo*
1) I speak Spanish *Hablo Español*	1	2	3	4	5
2) I speak English *Hablo Inglés*	1	2	3	4	5
3) I enjoy speaking Spanish *Me gusta hablar en Español*	1	2	3	4	5
4) I associate with Anglos *Me asocio con anglos*	1	2	3	4	5
5) I associate with Mexicans and/or Mexican Americans *Me asocio con Mexicanos o con Mexicano Americanos*	1	2	3	4	5
6) I enjoy listening to Spanish language music *Me gusta la música Mexicana (música en idioma Español)*	1	2	3	4	5
7) I enjoy listening to English language music *Me gusta la música en idioma inglés*	1	2	3	4	5
8) I enjoy Spanish language TV *Me gusta ver programas en la televisión que sean en Español*	1	2	3	4	5
9) I enjoy English language TV *Me gusta ver programas en la televisión que sean en Inglés*	1	2	3	4	5
10) I enjoy English language movies *Me gusta ver películas en Inglés*	1	2	3	4	5
11) I enjoy Spanish language movies *Me gusta ver películas en Español*	1	2	3	4	5
12) I enjoy reading (e.g. books) in Spanish *Me gusta leer (libros) en Español*	1	2	3	4	5
13) I enjoy reading (e.g. books) in English *Me gusta leer (libros) en Inglés*	1	2	3	4	5

	Not at all *Nunca*	**Very little or not very often** *Un poquito o a veces*	**Moderately** *Moderadamente*	**Much or very often** *Mucho o muy frecuente*	**Extremely often or almost always** *Muchísimo o casi todo el tiempo*
14) I write (e.g. letters) in Spanish *Escribo (cartas) en Español*	1	2	3	4	5
15) I write (e.g. letters) in English *Escribo (cartas) en Inglés*	1	2	3	4	5
16) My thinking is done in the English language *Mis pensamientos ocurren en el idioma inglés*	1	2	3	4	5
17) My thinking is done in the Spanish language *Mis pensamientos ocurren en el idioma Español*	1	2	3	4	5
18) My contact with Mexico has been *Mi contacto con México ha sido*	1	2	3	4	5
19) My contact with USA has been *Mi contacto con los Estados Unidos ha sido*	1	2	3	4	5
20) My father identifies/identified himself as 'Mexicano' *Mi padre se identifica (o se identificaba) como Mexicano*	1	2	3	4	5
21) My mother identifies/identified herself as 'Mexicana' *Mi madre se identifica (o se identificaba) como Mexicana*	1	2	3	4	5
22) My friends, while I was growing up, were of Mexican origin *Mis amigos(as) de mi niñez eran de origen Mexicano*	1	2	3	4	5
23) My friends, while I was growing up, were of Anglo origin *Mis amigos(as) de mi niñez eran de origen Anglo Americano*	1	2	3	4	5
24) My family cooks Mexican foods *Mi familia cocina comida Mexicana*	1	2	3	4	5
25) My friends now are of Anglo origin *Mis amigos recientes son Anglo Americanos*	1	2	3	4	5

	Not at all *Nunca*	**Very little or not very often** *Un poquito o a veces*	**Moderately** *Moderadamente*	**Much or very often** *Mucho o muy frecuente*	**Extremely often or almost always** *Muchísimo o casi todo el tiempo*
26) My friends now are of Mexican origin *Mis amigos recientes son Mexicanos*	1	2	3	4	5
27) I like to identify myself as an Anglo American *Me gusta identificarme como Anglo Americano(a)*	1	2	3	4	5
28) I like to identify myself as Mexican American *Me gusta identificarme como Mexicano(a) Americano(a) (Estadounidense de origen mexicano)*	1	2	3	4	5
29) I like to identify myself as Mexican *Me gusta identificarme como Mexicano(a)*	1	2	3	4	5
30) I like to identify myself as an American *Me gusta identificarme como Americano(a)*	1	2	3	4	5

CUESTIONARIO INTERNACIONAL DE ACTIVIDAD FÍSICA

Estamos interesados en saber acerca de la clase de actividad física que la gente hace como parte de su vida diaria. Las preguntas se referirán acerca del tiempo que usted utilizó siendo físicamente activo(a) en los **últimos 7 días**. Por favor responda cada pregunta aún si usted no se considera una persona activa. Por favor piense en aquellas actividades que usted hace como parte del trabajo, en el jardín y en la casa, para ir de un sitio a otro, y en su tiempo libre de descanso, ejercicio o deporte.

Piense acerca de todas aquellas actividades **vigorosas** que usted realizó en los **últimos 7 días**. Actividades **vigorosas** son las que requieren un esfuerzo físico fuerte y le hacen respirar mucho más fuerte que lo normal. Piense *solamente* en esas actividades que usted hizo por lo menos 10 minutos continuos.

1. Durante los **últimos 7 días**, ¿Cuántos días realizó usted actividades físicas **vigorosas** como levantar objetos pesados, excavar, aeróbicos, o pedalear rápido en bicicleta?

   _____ **días por semana**

   ☐ Ninguna actividad física vigorosa → ***Pase a la pregunta 3***

2. ¿Cuánto tiempo en total usualmente le tomó realizar actividades físicas **vigorosas** en uno de esos días que las realizó?

   _____ **horas por día**
   _____ **minutos por día**

   ☐ No sabe/No está seguro(a)

Piense acerca de todas aquellas actividades **moderadas** que usted realizo en los **últimos 7 días** Actividades **moderadas** son aquellas que requieren un esfuerzo físico moderado y le hace respirar algo más fuerte que lo normal. Piense *solamente* en esas actividades que usted hizo por lo menos 10 minutos continuos.

3. Durante los **últimos 7 días**, ¿Cuántos días hizo usted actividades físicas **moderadas** tal como cargar objetos livianos, pedalear en bicicleta a paso regular, o jugar dobles de tenis? No incluya caminatas.

   _____ **días por semana**

   ☐ Ninguna actividad física moderada → ***Pase a la pregunta 5***

4. Usualmente, ¿Cuánto tiempo dedica usted en uno de esos días haciendo actividades físicas **moderadas**?

_____ **horas por día**
_____ **minutos por día**

☐ No sabe/No está seguro(a)

Piense acerca del tiempo que usted dedicó a caminar en los **últimos 7 días**. Esto incluye trabajo en la casa, caminatas para ir de un sitio a otro, o cualquier otra caminata que usted hizo únicamente por recreación, deporte, ejercicio, o placer.

5. Durante los **últimos 7 días**, ¿Cuántos días caminó usted por al menos 10 minutos continuos?

_____ **días por semana**

☐ No caminó → ***Pase a la pregunta 7***

6. Usualmente, ¿Cuánto tiempo gastó usted en uno de esos días **caminando**?

_____ **horas por día**
_____ **minutos por día**

☐ No sabe/No está seguro(a)

La última pregunta se refiere al tiempo que usted permaneció **sentado(a)** en la semana en los **últimos 7 días**. Incluya el tiempo sentado(a) en el trabajo, la casa, estudiando, y en su tiempo libre. Esto puede incluir tiempo sentado(a) en un escritorio, visitando amigos(as), leyendo o permanecer sentado(a) o acostado(a) mirando televisión.

7. Durante los **últimos 7 días**, ¿Cuánto tiempo permaneció **sentado(a)** en un **día en la semana**?

_____ **horas por día**
_____ **minutos por día**

☐ No sabe/No está seguro(a)

Este es el final del cuestionario, gracias por su participación.

ID # _____
Fecha _____

Preguntas Claves al Informante

El propósito de este proyecto es desarrollar un programa de actividad física para hombres México-Americanos mayores. La información nos ayudara a entender el sentir de los hombres México-Americanos en su salud en general, su masculinidad y su actividad fiscal. Las preguntas de esta entrevista se harán a hombres México-Americanos mayores de 65 años de edad.

Salud en General

1. Piense en una persona que usted considere saludable. Describa a esa persona. ¿Que hace que esa persona este saludable?
2. ¿Como se mantiene usted saludable?
3. ¿Donde obtiene usted información de salud?
    a. Lugar
    b. Persona
    c. Origen
4. ¿Con quien habla usted sobre su salud?

Masculinidad (Características de un Hombre)

5. Piense en alguien que usted considere varonil o un típico hombre. Describa a esa persona. ¿Que hace a esa persona ser varonil?
6. ¿De que manera la idea de la masculinidad tiene influencia en la vida de un hombre? ¿De que manera la masculinidad en un hombre México-Americano es diferente comparado con un hombre de otro origen étnico?
    a. ¿De que manera la masculinidad de un joven México-Americano es diferente comparado con un hombre México-Americano mayor?
    b. ¿De que manera la idea de la masculinidad es influenciada por la cultura o tradiciones México-Americanas?
    c. ¿La idea de masculinidad como influye en la salud?

Actividad General

7. Háblame de las cosas que haces en tu tiempo libre. (Si no tienen tiempo libre, pregunta que les gustaría hacer si tuvieran tiempo libre).
8. ¿Que es lo primero que se te viene a la mente cuando escuchas la palabra "ejercicio"?
9. ¿Que es lo primero que se te viene a la mente cuando escuchas las palabras "actividad física"?

DEFINE ACTIVIDAD FISICA AL PARTICIPANTE:
Durante el resto de la entrevista, voy a utilizar la palabra actividad física que significa cualquier actividad que usted haga, incluyendo ambas actividades estructuradas (tal y como baloncesto recreacional o clases de ejercicio) o actividades no estructuradas (tal y como andar en bicicleta o caminando).
Preferencias de Actividad Física

10. Háblame de tus actividades diarias.
11. ¿Que tipo de actividades físicas te gusta hacer?
    a. ¿Por que te gustan estas actividades?
    b. ¿Con que frecuencia las llevas a cabo?
    c. ¿Donde las llevas a cabo?
    d. ¿Con quien te gusta hacer estas actividades?
12. ¿Que tipo de actividades no te gustan o las tratas de evitar?
    a. ¿Por que no te gustan?
13. ¿De que manera han cambiado las actividades físicas que te gustan o no te gustan conforme cumples mas edad?
14. ¿Como te sientes acerca de en entrenamiento de fuerza? (es decir, levantamiento de pesas y ejercicios de peso corporal) como actividad física?

Actividad Física y Salud

15. ¿Que imágenes te vienen a la mente cundo piensas en alguien que es físicamente active?
16. ¿Que beneficios obtienen los hombres, si es que los hay, de ser activos físicamente?
    c. ¿Beneficios de salud?
    d. ¿Que tanta actividad física crees que necesite un hombre para obtener beneficios saludables?
        i. ¿Veces por semana?
        ii. ¿Veces por sesión?
        iii. ¿Que tan difícil (intensidad)?
17. ¿Que preocupaciones tienes sobre estar llevando a cabo actividad física?

Barreras de la Actividad Física y Facilitadores

18. ¿Que hace que sea fácil o difícil para usted estar físicamente activo[?
19. ¿Que características de su comunidad hacen que sea difícil o fácil para usted llevar a cabo actividad física?
    a. ¿Como podrían ser retiradas estas barreras?
        i. ¿Crimen, Seguridad?
        ii. ¿Trafico?
        iii. ¿Fala de acceso o comodidad a los parques, rutas, lugares para hacer actividades?
        iv. ¿Banquetas?
        v. ¿Programas de actividad física disponibles?
        vi. ¿Clima?
        vii. ¿Servicios de transporte?

20. ¿Cómo le ayudan o le estorban sus familiares y amigos en estar físicamente activo?
    a. ¿Que hacen o dicen sus familiares y amigos que le impide o le ayudan a estar físicamente activo?

b. ¿Que le dicen otras personas sobre el "tomar las cosas con calma" o "el descansar mas" ahora que tiene mas edad?

21. ¿Como es que las cosas que te alientan y te desalientan para llevar a cabo la actividad física ha cambiado con la edad?

Programación de Actividad Física

22. Imagínate que te han pedido que ayudes a planear un programa para hacer que hombres México-Americanos mayores de 65 años de edad inicien actividades físicas. Describe el programa que te gustaría desarrollar.

    a. ¿Que tipo de actividades físicas recomendarías que llevaran a cabo?
    b. ¿Donde planearías llevara a cabo estas actividades?
    c. ¿Donde encontrarías apoyo comunitario para llevara a cabo estas actividades?
        i. ¿Iglesia?
        ii. ¿Lugar de Trabajo?
        iii. ¿La Barbería?
        iv. ¿Centro para personas mayores? (por ejemplo, El Pueblo Neighborhood Center)
        v. ¿Organizaciones Sociales (tal y como un club de Ex Alumnos)
        vi. ¿Otro?
    d. ¿Como promocionarías este programa para hombres mayores?
    e. ¿A quien recomendarías como vocero o ejemplo a seguir para este programa?
    f. ¿Que le dirías a un amigo para que se uniera al programa?
    g. ¿Que harías para que hombres mayores se divirtieran durante la actividad física?
    h. ¿Que se puede hacer para que la actividad física se vuelva popular en hombres mayores?
    i. ¿Como puedes superar algunas de las barreras que discutimos anteriormente?

Cualquier Otra Idea

23. ¿Hay algo mas que te gustaría añadir a la discusión? Si es así, por favor comparte tu idea.

APPENDIX H

STUDY PROTOCOL & INTERVIEW GUIDELINES

Study Protocol

Barriers & Motivators to Physical Activity in Older Mexican American Men

___Review consent with participant.

___Confirm that participant understands the study. "Before we go on, I need to make sure you understand the study. Do you have any questions about what we will be doing today?"

___Obtain signed consent from participant.

___Review consent to make sure participant has signed in the appropriate areas.

___Provide a copy of the consent to the participant.

___Have the participant complete the demographic questionnaire, IPAQ, and Acculturation measures.

___Review the demographic questionnaire, IPAQ, and Acculturation measures to make sure that the participant has completed all of the questions.

___Write the participant's ID# and date on demographic questionnaire, IPAQ, and Acculturation measures.

___Remind the participant that interview will be audio recorded.

___Advise the participant that the audio recording will be locked in my personal home office and destroyed once the study is complete.

___Remind the participant that the one-on-one interview will take an hour to complete and that they may take a short break if needed.

___Start the audio recording and begin by stating the participant's ID# and date.

___Read the key informant questions to the participant as outlined in the data collection instrument.

___After the interview, gather all of the data collection materials.

___Ensure that the participants ID# and date are on all of the data collection materials.

___Lock all off the data collection materials in a filing cabinet in my personal office.

Interview Guidelines

- After each question ask yourself, 1) has the question been answered adequately, 2) do I understand what the participant has said, and 3) did I get all the information I need?
- If the participant does not understand a question, repeat the question slowly and clearly.
- Provide the participant time to think about the question. Do not change or alter the interview questions. Information must be gathered in a uniform manner from all participants. All participants must be asked the same questions in the same manner.
- Do not leave a question unanswered. If a participant does not know what the meaning of a word is, remain neutral, and leave the definition to the participant; state, "Whatever ____ means to you" or "However you use the term____."
- Advise participant that there is no right or wrong answers; state, "I am interested in your thoughts."
- Silent probe if you need additional information or if the participant answered in a way that does not fit the question. Always repeat the question slowly and clearly. Pause and wait.
- Be aware of my own emotions and body language. Respond to answers with "Uh-huh", rather than "Good", "Oh really", and "You're kidding".
- Do not accept a "don't know" answer without silent probing. If still no response, say "So what do you think?" or "I just want your opinion".

- Avoid “depends” answers. Respond by saying, “On the whole...”, “In general...”, “If you had to choose...”, and “Which way do you lean...”
- For clarity use: “What do you mean?” “Would you please be more specific?” “Would you please say more?” “Would you please explain?”
- Be cognizant of the one-hour interview time frame, and redirect participants if they go off topic and/or spend too much time repeating the same answer to a question. Use words such as, “So that I don’t take any more of your time, let’s go to the next question.”
- If needed, allow participant to take a break to stretch and use the bathroom.
- If participant cannot complete the interview due to time constraints or fatigue, reschedule for a later time.
- If an interview question stimulates feelings for the participant and they become upset with their health, health care, or are angry in general, accept all opinions and state, “All of your opinions are important to me”, “I can benefit from your experience and knowledge”, and “I understand your frustration.” Let the participant vent and listen. Redirect when you feel it is appropriate.
- Never tell a participant what you think about the topic in question.
- If the participant wants a copy of the interview questions to fill out and return, tell them that it is not possible and assure participants that you are collecting every word they say.

REFERENCES

McEwen, M.M & Murdaugh, C. (2013). Interviewer training manual. *University of Arizona College of Nursing, Family Diabetes Study.*